

# **CAPE HATTERAS NATIONAL SEASHORE OFF-ROAD VEHICLE MANAGEMENT PLAN FINAL ENVIRONMENTAL IMPACT STATEMENT**

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## GLOSSARY

**Abundance**—An ecological concept referring to the relative representation of a species in a particular ecosystem. It is usually measured as the large number of individuals found per sample. How species abundances are distributed within an ecosystem is referred to as relative species abundances.

**Accretion**—The process where coastal sediments return to the visible portion of the beach following storm erosion.

**Action**—Any federal activity including, but not limited to, acquiring, managing, and disposing of federal lands and facilities; facilitating human occupation or visitation; providing federally undertaken, financed, or assisted construction and improvements; and conducting federal activities and programs affecting land use, including, but not limited to, water and related land resources planning, and regulating and licensing activities.

**Adaptive management**—A system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or to re-evaluate the outcomes. Adaptive management recognizes that knowledge about natural resource systems is sometimes uncertain and is the preferred method of management in these cases (source: Departmental Manual 516 DM 4.16).

**Adult**—An organism that is fully grown or developed and capable of sexual reproduction.

**Affected Environment**—Existing natural, cultural, and social conditions of an area that are subject to change, both directly and indirectly, as a result of a proposed human action.

**Alternate (ORV) route**—A route that uses another ramp or an existing interdunal route or NC-12 to provide ORV access to an area by serving as a detour around a closed area.

**Alternative, No-Action**—An alternative that maintains established trends or management direction.

**Anecdotal**—Based on or consisting of reports or observations of usually unscientific observers.

**Appropriate use**—A use that is suitable, proper, or fitting for a particular park, or to a particular location within a park.

**Archeological resource**—Any material remains or physical evidence of past human life or activities which are of archeological interest, including the record of the effects of human activities on the environment. An archeological resource is capable of revealing scientific or humanistic information through archeological research.

**Arthropod**—An invertebrate that has an exoskeleton (external skeleton), a segmented body, and jointed attachments called appendages.

**Anthropogenic**—Resulting from the influence or actions of human beings.

**Artificial lighting**—Light sources produced by humans.

**Backshore**—The part of an ocean beach between the spring high water level and the primary dune line.

**Benthic**—The bottom, or relating to the bottom of the ocean or other body of water.

**Berm**—As used in this document refers to remnants of the man-made dune or dune ridge originally constructed in the 1930s by the Civilian Conservation Corps and the Works Progress Administration. NPS actively maintained this dune ridge until the early 1970s when NPS ended the dune stabilization policy after scientists concluded that the man-made berms constructed since the 1930s had actually served to foreshorten the seashore's beaches and dramatically altered both the ecological and the topographical characteristics of the Outer Banks (NPS 2007f). "Berm" includes the man-made dune or dune ridge constructed to protect state highway NC-12 and interior sections of the island from ocean flooding and overwash during storms.

**Best management practices**—Practices that apply the most current means and technologies available to not only comply with mandatory environmental regulations, but also maintain a superior level of environmental performance. See also, "sustainable practices/principles."

**Biosphere Reserves**—Found in different countries across all the regions of the world. Biosphere reserves are protected areas that are meant to demonstrate a balanced relationship between man and nature.

**Bird nesting**—The act of building a structure by a bird for laying eggs and sheltering its young.

**Bivalves**—A shell consisting of two rounded plates called *valves* joined at one edge by a flexible ligament called the *hinge*. The shell is typically bilaterally symmetrical, with the hinge lying in the sagittal plane.

**Breeding activity**—See Breeding behavior.

**Breeding areas**—Those areas that support the full suite of avian breeding activities including, courtship, territorial defense, copulation, scraping and nest building, egg laying and incubation, chick rearing and associated foraging.

**Breeding behavior**—Shorebird behavior that includes, but is not limited to, courtship, mating, scraping, confirmed scrapes, and other breeding or nest-building activities. The terms breeding behavior and breeding activity are used synonymously.

**Breeding habitat**—Habitat(s) that host the birds during territorial displaying, courtship and mating, scraping, nesting, incubation, brooding and chick foraging.

**Breeding Shorebird and Seabeach Amaranth SMA**—Area of suitable breeding habitat that has had multiple nests of individuals and/or multiple species of protected shorebirds, or concentrations of seabeach amaranth specimens, in more than 1 (i.e., 2 or more) of the past 5 years and is managed to minimize human disturbance during the breeding season. Focal species for Breeding Shorebird SMAs include piping plover, Wilson's plover, American oystercatcher, least tern, common tern, gull-billed tern, and black skimmer; however, there will be ongoing evaluation of the breeding shorebird species addressed by this plan, as part of the periodic review process.

**Brood**—The offspring, as of an animal or a bird, that are the result of one breeding season.

**Buffer**—A protective area or distance surrounding a sensitive resource that limits visitor access.

**Bypass**—A temporary route established by the park in accordance with the bypass criteria to provide ORV access during short periods of time.

**Camouflaged**—A method of cryptic or concealing coloration that allows an otherwise visible organism or object to remain indiscernible from the surrounding environment through deception.

**Canid**—The biological family of carnivorous and omnivorous mammals that includes the wolves, foxes, jackals, coyotes, and the domestic dog.

**Carrying capacity**—The maximum population of a particular species that a particular region can support without hindering future generations' ability to maintain the same population. A visitor, or user, carrying capacity is the type and level of use that can be accommodated while sustaining the desired resource and visitor experience conditions.

**Civic engagement**—Continuous, dynamic conversation with the public on many levels that reinforces the commitment of both the National Park Service and the public to the preservation of heritage resources, both cultural and natural, and strengthens public understanding of the full meaning and contemporary relevance of these resources. The foundation of civic engagement is a commitment to building and sustaining relationships with neighbors and communities of interest.

**Closure**—An area delineated by posts with string between them (symbolic fencing), prohibiting vehicle and/or pedestrian access.

**Coastal High Hazard Area (V Zone)**—The Special Flood Hazard Area that extends from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action. The area is designated on the FIRM as Zone VE.

**Cobble substrates**—A substrate where the majority of the material is between 2.5 and 10 inches in diameter.

**Compaction**—The process by which a sediment progressively loses its porosity due to the effects of loading. This forms part of the process of lithification. When a layer of sediment is originally deposited, it contains an open framework of particles with the pore space being usually filled with water. As more sediment is deposited above the layer, the effect of the increased loading is to increase the particle-to-particle stresses resulting in porosity reduction primarily through a more efficient packing of the particles and to a lesser extent through elastic compression and pressure solution.

**Compendium**—The Superintendent's Compendium is a document, updated yearly, that provides a list the special designations, closures, public use limits, permit requirements and other restrictions under the discretionary authority of the Superintendent within a park unit, as provided for in 36 CFR § 1.7 (b).

**Consensus**—Unanimous or general agreement; and secondly group solidarity of belief or sentiment. Within the context of the Cape Hatteras National Seashore Negotiated Rulemaking Advisory Committee, the Committee defined "consensus" as unanimous concurrence of the principals (members), or in the absence of the principal, his or her alternate. Members may also "abstain" or "stand aside" and not offer their consent, but refrain from blocking agreement and will thus also refrain from future negative comment or action on the consensus. Abstaining/standing aside members shall not be counted in determining if consensus has been reached.

**Consent Decree**—A judicial decree that sanctions a voluntary agreement between parties in dispute.

**Conserve**—To protect from loss or harm; preserve. Historically, the terms conserve, protect, and preserve have come collectively to embody the fundamental purpose of the NPS—preserving, protecting and conserving the national park system.

**Contemporaneous**—The historical timeframe that are immediately relevant to the present and is a certain perspective of modern history.

**Corridor** see **ORV Corridor; Pedestrian Corridor**

**Council on Environmental Quality (CEQ)**—Established by Congress within the Executive Office of the President with passage of the *National Environmental Policy Act of 1969*. CEQ coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives.

**Crawl**—Tracks and other signs left on a beach by a sea turtle (FWC 2002).

**Cultural resource**—An aspect of a cultural system that is valued by or significantly representative of a culture, or that contains significant information about a culture. A cultural resource may be a tangible entity or a cultural practice. Tangible cultural resources are categorized as districts, sites, buildings, structures, and objects for the National Register of Historic Places, and as archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources for NPS management purposes.

**Cumulative impacts**—Under NEPA regulations, the incremental environmental impact or effect of an action together with the effects of past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions (40 CFR 1508.7).

**Dearth**—A lack, shortage or scarcity.

**Decapods**—Invertebrate animals of the order Crustacea which have five pairs of legs and includes the shrimps, lobsters, crabs, etc.

**Decibel (dBA)**—A unit of measure of sound intensity.

**Denudation**—A geologic term that indicates the process by which the removal of material, through means of erosion and weathering, leads to a reduction of elevation and relief in landforms and landscapes. Exogenic processes, including the action of water, ice, and wind, predominantly involve denudation. Denudation can involve the removal of both solid particles and dissolved material. Both mechanical and chemical weathering occurs in relation to geomorphological landforms. At present the most significant processes leading to denudation include deforestation (including slash-and-burn practices of local peoples), overgrazing and certain forms of intensive farming which lead to large scale erosion. This phenomenon takes place generally by regional uplift by tectonic movement.

**Derogation**—See “impairment.”

**Desiccation**—The state of extreme dryness, or the process of extreme drying.

**Desired future conditions**—A park’s natural and cultural resource conditions that the NPS aspires to achieve and maintain over time, and the conditions necessary for visitors to understand, enjoy, and appreciate those resources. These conditions are identified through a park’s planning process.

**Detritus**—A *non*-living particulate organic material (as opposed to dissolved organic material). It typically includes the bodies or fragments of dead organisms as well as fecal material. Detritus is typically colonized by communities of microorganisms which act to decompose (or remineralize) the material.

**Dredging**—An excavation activity or operation usually carried out at least partly underwater, in shallow seas or fresh water areas with the purpose of gathering up bottom sediments and disposing of them at a different location.

**Dune**—A mound or ridge of sand or other loose sediment formed by the wind along the sea coast. The majority of dunes at the Seashore are man-made.

**Ecology**—The interdisciplinary scientific study of the interactions between organisms and the interactions of these organisms with their environment.

**Ecosystem**—A natural unit consisting of all plants, animals and micro-organisms (biotic factors) in an area functioning together with all of the physical (abiotic) factors of the environment, considered as a unit. Ecosystems can be permanent or temporary. An ecosystem is a unit of interdependent organisms which share the same habitat. Ecosystems usually form a number of food webs.

**Emergence**—The way complex systems and patterns arise out of a multiplicity of relatively simple interactions.

**Enabling Legislation**—National Park Service legislation that established a particular unit of the national Park System and set forth the legal parameters by which the respective park may operate.

**Endangered species**—“...any species (including subspecies or qualifying distinct population segment) that is in danger of extinction throughout all or a significant portion of its range (ESA Section 3(6)).” The lead federal agency, U.S. Fish and Wildlife Service, for the listing of a species as endangered is responsible for reviewing the status of the species on a five-year basis.

**Endangered Species Act (ESA) (16 USC 1531 et seq.)**—An act to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved and to provide a program for the conservation of such endangered species and threatened species.

**Environmental assessment (EA)**—An environmental analysis prepared pursuant to the *National Environmental Policy Act* to determine whether a Federal action would significantly affect the environment and thus require a more detailed environmental impact statement (EIS).

**Environmental impact statement (EIS)**—A detailed NEPA analysis document that is prepared, with extensive public involvement, when a proposed action or alternatives have the potential for significant impact on the human environment. An EIS must meet the requirements of NEPA, CEQ, and the directives of the agency responsible for the proposed project or action.

**Ephemeral pools**—Temporary pools of water. They are usually devoid of fish, and thus allow the safe development of natal amphibian and insect species.

**Erosion**—Removal of surface material from the earth’s crust, primarily soil and rock debris, and the transportation of the eroded materials by natural agencies from the point of removal.

**Escarpment**—A transition zone between different physiogeographic provinces that involves a sharp, steep elevation differential, characterized by a cliff or steep slope. Usually *escarpment* is used interchangeably with scarp. A transition from one series of sedimentary rocks to another series of a different age and composition. When sedimentary beds are tilted and exposed to the surface, erosion and weathering may occur differentially based on the composition. Less resistant rocks will erode faster, retreating until the point they are overlain by more resistant rock.

**Essential vehicle**—Vehicles used by the National Park Service, or its agents, to conduct authorized administrative activities, such as resources management, law enforcement or other park operations, related to implementation of this plan or other applicable management plan(s) or permit(s), or as needed to respond to emergency operations involving threats to life, property, or park resources, within areas that are otherwise closed to recreational ORV or visitor use.

**Estuarine**—Referring to the area where a water passage where the tide meets a river current; especially an arm of the sea at the lower end of a river.

**Ethnographic**—A methodological strategy used to provide descriptions of human societies, which as a methodology does not prescribe any particular method (e.g., observation, interview, questionnaire), but instead prescribes the nature of the study (i.e., to describe people through writing). In the biological sciences, this type of study might be called a “field study” or a “case report,” both of which are used as common synonyms for “ethnography.”

**Ethnographic resources**—Objects and places, including sites, structures, landscapes, and natural resources, with traditional cultural meaning and value to associated peoples. Research and consultation with associated people identifies and explains the places and things they find culturally meaningful. Ethnographic resources eligible for the National Register of Historic Places are called traditional cultural properties.

**Exclosure**—An enclosed area for protection or shelter from predatory animals.

**Executive Order**—Official proclamation issued by the President that may set forth policy or direction or establish specific duties for federal agencies in connection with the execution of federal laws and programs.

**Extirpate**—To destroy the whole of; exterminate.

**False crawl**—An aborted nesting attempt (emergence onto a beach by a sea turtle). A more correct term is “non-nesting emergence.”

**Fauna**—All of the animal life of any particular region or time.

**Feral**—An organism that has escaped from domestication and returned, partly or wholly, to a wild state.

**Fledge**—To bring up a young bird (chick) until it is able to fly. A *fledgling* is a young bird whose feathers and wing muscles are sufficiently developed for sustained flight.

**Floodplain**—Any land area susceptible to inundation by floodwaters from any source.

**Flora**—The first meaning, flora of an area or of time period, refers to all plant life occurring in an area or time period, especially the naturally occurring or indigenous plant life. The second meaning refers to a *book or other work* which describes the plant species occurring in an area or time period, with the aim of allowing identification.

**Foreshore**—The area that is exposed to the air at low tide and underwater at high tide (for example, the area between tide marks). This area can include many different types of habitats, including steep rocky cliffs, sandy beaches, or wetlands (e.g., vast mudflats). The area can be a narrow strip, as in Pacific islands that have only a narrow tidal range, or can include many meters of shoreline where shallow beach slope interacts with high tidal excursion.

**Geohazards**—This definition implies that geohazards are widespread phenomena that are related to geological and environmental conditions and involve long-term and/or short-term geological processes. Geohazards can thus be relatively small features, but they can also attain huge dimensions (e.g., submarine or surface landslide) and affect local and regional socio-economy (e.g., tsunamis) to a large extent. In addition, human activities - for example drilling through geohazards like overpressured zones – could result in significant risk, and as such mitigation and prevention are paramount, through improved understanding of geohazards, their preconditions, causes and implications. In other cases, particularly in montane regions, natural processes can cause catalytic events of a complex nature, such as an avalanche hitting a lake causes a debris flow, with consequences potentially hundreds of miles away, or a lahar released by volcanism.

**Germination**—The process in which a seed or spore emerges from a period of dormancy. The most common example of germination is the sprouting of a seedling from a seed of an angiosperm or gymnosperm.

**Hatchlings**—A young bird or turtle that has recently emerged from its egg.

**Historic breeding area**—Areas used within the last 10 breeding seasons.

**Hopper dredging**—A self-propelled dredge having compartments in which the dredged material can be carried and dumped through hoppers.

**Human disturbance**—Any human activity that changes the contemporaneous behavior of one or more individuals of breeding, nesting, foraging, or roosting colonial waterbirds, piping plover, Wilson’s plover, or American oystercatcher. Behaviors indicating disturbance include defensive displays; alarm calls; flushing or leaving a nest or feeding area; and diving or mobbing pedestrians, dogs, or vehicles.

**Hydrology**—The study of the movement, distribution, and quality of water throughout earth, and thus addresses both the hydrologic cycle and water resources.

**Impairment**—An impact that, in the professional judgment of a responsible NPS manager, would harm the integrity of park resources or values and violate the 1916 NPS *Organic Act* mandate that park resources and values remain unimpaired.

**IMPLAN**—An economic impact assessment modeling system that allows the user to build economic models to estimate the impacts of economic changes.

**Incidental take**—Take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a federal agency or applicant (50 CFR 402.02).

**Inlet**—A narrow body of water between islands or leading inland from a larger body of water, often leading to an enclosed body of water, such as a sound, bay, lagoon or marsh. In sea coasts an inlet usually refers to the actual connection between a bay and the ocean and is often called an “entrance” or a recession in the shore of a sea, lake or river. A certain kind of inlet created by glaciation is a fjord, typically but not always in mountainous coastlines and also in montane lakes.

**Interdune blowout**—Refers to the wind-swept, flat areas that lie between primary and secondary coastal dune systems.

**Intertidal**—The area that is exposed to the air at low tide and underwater at high tide (for example, the area between tide marks). This area can include many different types of habitats, including steep rocky cliffs, sandy beaches, or wetlands (e.g., vast mudflats).

**Intertidal zone**—(Also known as the foreshore and sometimes referred to as the littoral zone). The area that is exposed to the air at low tide and underwater at high tide (for example, the area between tide marks). This area can include many different types of habitats, including steep rocky cliffs, sandy beaches, or wetlands (e.g., vast mudflats). The area can be a narrow strip, as in Pacific islands that have only a narrow tidal range, or can include many meters of shoreline where shallow beach slope interacts with high tidal excursion.

**Lightscape management (natural ambient)**—The effective use of good design to appropriately light areas and minimize or eliminate light clutter, the spillover of light into areas where light is not wanted, and light pollution, all of which wastes energy and impacts park visitors, neighbors and resources.

**Logarithmic Scale**—A scale of measurement that uses the logarithm of a physical quantity instead of the quantity itself.

**Misorientation**—Orientation in the wrong direction. For hatchling sea turtles on the beach, travel in any direction other than the general vicinity of the ocean.

**Mitigation**—“Mitigation,” is defined in NPS Director’s Order 12 as a modification of the proposal or alternative that lessens the intensity of its impact on a particular resource. The definition references 40 CFR 1508.20, which states:

1. Avoiding the impact altogether by not taking a certain action or parts of an action.
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
3. Rectifying the impact of repairing, rehabilitating, or restoring the affected environment.
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
5. Compensating for the impact by replacing or providing substitute resources or environments.

The term “mitigation” is used interchangeably in this plan/EIS with other terms, including “mitigation measure,” “mitigation techniques,” and “mitigation strategies.”

**Mobile (precocial)**—A young bird or turtle hatched or born in an advanced state of development and mobility and able to feed itself almost immediately.

**Morphology**—The form, structure and configuration of an organism.<sup>1</sup> This includes aspects of the outward appearance (shape, structure, color, pattern) as well as the form and structure of the internal parts like bones and organs.

**Mudflats**—Coastal wetlands that form when mud is deposited by tides or rivers. They are found in sheltered areas such as bays, bayous, lagoons, and estuaries. Mudflats may be viewed geologically as exposed layers of bay mud, resulting from deposition of estuarine silts, clays and marine animal detritus.

Most of the sediment within a mudflat is within the intertidal zone, and thus the flat is submerged and exposed approximately twice daily.

Mudflats are typically important regions for wildlife, supporting a large population, although levels of biodiversity are not particularly high. They are often of particular importance to migratory birds. The maintenance of mudflats is important in preventing coastal erosion. However, mudflats worldwide are under threat from predicted sea level rises, land claims for development, dredging due to shipping purposes, and chemical pollution.

**NEPA process**—The objective analysis of a proposed action to determine the degree of its impact on the natural, physical, and human environment; alternatives and mitigation that reduce that impact; and the full and candid presentation of the analysis to, and involvement of, the interested and affected public—as required of federal agencies by the *National Environmental Policy Act of 1969*.

**Nesting crawl**—A crawl resulting from a nesting attempt in which eggs were deposited (FWC 2002).

**Nesting habitat**—Habitat(s) that host the birds during nesting including incubation, brooding and chick foraging.

**Nestling**—A bird that is too young to leave its nest.

**Niche**—A habitat supplying all of the necessary factors for a species existence.

**Nocturnal**—An animal behavior characterized by being active during the night and sleeping during the day.

**Nonessential vehicle**—Vehicles used by those not operating in an official agency capacity including all vehicles that do not meet the definition of an “*essential vehicle*.”

**Off-road vehicle (ORV)**—Any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that such term excludes (a) any registered motorboat, (b) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes, and (c) any vehicle whose use contrary to restrictions proposed in this plan is expressly authorized by the Superintendent or the Refuge Manager under a permit, lease, license, or contract.

**Organic Act (NPS)**—The 1916 law (and subsequent amendments) that created the National Park Service and assigned it responsibility to manage the national parks.

**ORV area**—For the purposes of this plan, an *ORV area* is used synonymously with *ORV route* as defined below.

**ORV corridor**—An *ORV corridor* is the actual physical demarcation of the ORV route in the field. The ORV corridor on the ocean beach would be marked by posts seaward of the toe of dune or vegetation line to the high tide line.

**ORV pass-through zone**—An area where an ORV route would be defined to provide access to a specific area. ORV may drive through this zone to reach their destination, but may not stop or disembark passengers within this zone.

**ORV route**—A designated location, typically linear in nature (e.g., from point A to point B), where ORV travel may be authorized by the Superintendent, but which may be temporarily closed to ORV use to protect park resources, provide for visitor safety, or prevent user conflicts.

**Overwash**—Areas where water has run over or crested a berm or other structure that does not flow directly back to the ocean or lake.

**Overwash fan**—A fan-shaped deposit of sand, gravel or cobbles that is deposited from water that has run over or crested a berm or structure that does not flow directly back to the ocean or lake.

**Park**—Any one of the hundreds of areas of land and water administered as part of the national park system. The term is used interchangeably in this document with “unit,” “park unit,” and “park area.” In the context of this plan, “park” is synonymous with “National Seashore” or “Seashore.”

**Pedestrian corridor**—An established/marked area for pedestrian access.

**Periodic review**—A systematic review of data, habitat conditions, and other information to be conducted by NPS every 5 years, after storms or events that Seashore management determines to be a major modification of habitat quantity or quality, or after a significant change in protected species status (e.g., listing or de-listing), in order to evaluate the effectiveness of management actions in making progress toward the accomplishment of stated objectives. Periodic review could result in changes to the management actions in order to improve effectiveness. When desired future conditions for resources are met or exceeded, periodic review and adaptive management may allow for more flexible management of recreational use, provided adverse impacts of such use are effectively managed and wildlife populations remained stable. Where progress is not being made toward the attainment of desired future conditions, periodic review and adaptive management may result in increased restrictions on recreational use.

**Physiographic**—(also known as geosystems or physiography) is one of the three major subfields of geography, as opposed to the cultural or built environment, the domain of human geography. Within the body of physical geography, the Earth is often split either into several spheres or environments, the main spheres being the atmosphere, biosphere, cryosphere, geosphere, hydrosphere, lithosphere and pedosphere. Research in physical geography is often interdisciplinary and uses the systems approach.

**Plumage**—The layer of feathers that cover a bird and the pattern, color, and arrangement of those feathers. The pattern and colors of plumage vary between species and subspecies and can also vary between different age classes, sexes, and season. Within species there can also be a number of different colour morphs. Differences in plumage are used by ornithologists and birdwatchers in order to distinguish between species and collect other species specific information.

**Poaching**—The illegal hunting, fishing, trapping, or eating of wild plants or animals contrary to local and international conservation and wildlife management laws.

**Pollutants**—The introduction of contaminants into an environment that causes instability, disorder, harm or discomfort to the ecosystem (i.e., physical systems or living organisms). Pollution can take the form of chemical substances, or energy, such as noise, heat, or light. Pollutants, the elements of pollution, can be foreign substances or energies, or naturally occurring; when naturally occurring, they are considered contaminants when they exceed natural levels.

**Potential new habitat**—Habitat recently created, usually by storms (e.g., overwash passes, blowouts, etc.).

**Predation**—Describes a biological interaction where a predator (an organism that is hunting) feeds on its prey, (the organism that is attacked). Predators may or may not kill their prey prior to feeding on them, but the act of predation always results in the death of the prey. The other main category of consumption is detritivory, the consumption of dead organic material. It can at times be difficult to separate the two feeding behaviors, for example where parasitic species prey on a host organism and then lay their eggs on it for their offspring to feed on its decaying corpse. The key characteristic of predation however is the predator's direct impact on the prey population. On the other hand, detritivores simply eat what is available and have no direct impact on the “donor” organism(s).

**Predator**—An organism that hunts and feeds on its prey (the organism that is attacked). Predators may or may not kill their prey prior to feeding on them, but the act of predation always results in the death of the prey.

**Prenesting closure**—A kind of resource closure in which an area of suitable habitat is proactively closed to ORVs and pedestrians at the start of the shorebird breeding season to provide undisturbed habitat for bird breeding activities to occur.

**Preserve**—To protect from loss or harm; conserve. Historically, the terms preserve, protect and conserve have come collectively to embody the fundamental purpose of the NPS—preserving, protecting and conserving the national park system.

**Recent breeding areas**—Areas used in the last three breeding seasons.

**Research area**—Area of suitable habitat set aside on a temporary or long-term basis (such as a study site or control plot) as part of a research project authorized by NPS under a research permit.

**Resource closure**—Any area posted as closed to all public entry in order to protect wildlife, such as breeding and foraging shorebirds and bird and turtle nests, or vegetation from human disturbance.

**Riparian**—Relating to or living or located on the bank of a natural watercourse (as a river) or sometimes of a lake or a tidewater.

**Roosting**—A resting state or period of relative inactivity employed by birds to save energy and compensate for the high metabolic rates that occur during the active part of the day. Sleeping birds often use a type of sleep known as vigilant sleep, where periods of rest are interspersed with quick eye-opening ‘peeks,’ allowing them to be sensitive to disturbances and enable rapid escape from threats.

**Route** see **ORV route**

**Salinity**—The saltiness or dissolved salt content of a body of water. It is a general term used to describe the levels of different salts such as sodium chloride, magnesium and calcium sulfates, and bicarbonates.

**Scarified**—To break a seed coat through nicking or abrasion.

**Scrapes**—A place where soil has been scraped away, esp. a shallow hollow formed in the ground by a bird during a courtship display or for nesting.

**Sediment**—Any particulate matter that can be transported by fluid flow, and which eventually is deposited. Sediments are most often transported by water transported by wind) and glaciers. Beach sands and river channel deposits are examples of fluvial transport and deposition, though sediment also often settles out of slow-moving or standing water in lakes and oceans.

**Sheetflow**—Flowing water that is not confined to a channel.

**Socioeconomic**—The study of the relationship between economic activity and social life.

**Soundscape (natural)**— the aggregate of all the natural, nonhuman-caused sounds that occur in parks, together with the physical capacity for transmitting natural sounds.

**Species Management Area (SMA)**—Area of suitable habitat that has had concentrated and recurring use by multiple individuals and/or multiple species of protected shorebirds during the breeding season or nonbreeding season, or concentrations of seabird specimens, in more than one (i.e., two or more) of the past 5 years and is managed to reduce or minimize human disturbance. SMAs are reevaluated and redesignated every 5 years, or after storms or events that Seashore management determines to be a major modification of habitat quantity or quality, as part of the periodic review process.

**Subarctic**—A region in the Northern Hemisphere immediately south of the true Arctic and covering much of Alaska, Canada, southern Greenland, the north of Scandinavia, Siberia, northern Mongolia and the Chinese province of Heilongjiang. Generally, subarctic regions fall between 50°N and 70°N latitude, depending on local climates.

**Substrate**—The earthy material that exists in the bottom of a marine habitat, like dirt, rocks, sand, or gravel.

**Subtropical**—The geographical zone of the Earth immediately north and south of the tropical zone, which is bounded by the Tropic of Cancer and the Tropic of Capricorn, at latitudes 23.5°N and 23.5°S.

**Superintendent**—The senior on-site NPS official in a park. Used interchangeably with “park superintendent,” “park manager,” or “unit manager.”

**Symbolic fencing**—Posts with string tied between them.

**Synonym**—Different words (or sometimes phrases) with identical or very similar meanings. Words that are synonyms are said to be synonymous, and the state of being a synonym is called synonymy.

**Take**—An act that potentially harasses, injures, or kills a protected species (FWC 2002). Take is defined differently depending on the governing legislation (i.e., Title 36 Code of Federal Regulations (CFR), *Endangered Species Act*, *Migratory Bird Treaty Act*).

“Take” as it applies to Title 36 CFR and as stated in 36 CFR 1.4 means to pursue, hunt, harass, harm, shoot, trap, net, capture, collect, kill, wound, or attempt to do any of the above.

“Take” as it applies to the Endangered Species Act and as stated in the Act Section 3.19 means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Harass is defined by Fish and Wildlife Service as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding feeding or sheltering. Harm is further defined by the Fish and Wildlife Service to include significant habitat modification or degradation that results in death to listed species by significantly impairing behavioral patterns such as breeding, feed or sheltering (50 CFR 17.3).

“Take” as it applies to the Migratory Bird Treaty Act and as stated in 50 CFR 10.12, includes pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect. Executive Order 13186 which calls for an MOU that has not been completed by NPS or other land management agencies defines intentional and unintentional take.

**Taxon**—A group of (one or more) organisms, which a taxonomist adjudges to be a unit.

**Telemetry**—A technology that allows remote measurement and reporting of information.

**Thermal**—A column of rising air in the lower altitudes of the earth’s atmosphere. Thermals are created by the uneven heating of the Earth’s surface from solar radiation, and an example of convection. The sun warms the ground, which in turn warms the air directly above it.

**Traditional**—Pertains to recognizable, but not necessarily identical, cultural patterns transmitted by a group across at least two generations. Also applies to sites, structures, objects, landscapes, and natural resources associated with those patterns. Popular synonyms include “ancestral” and “customary.”

**Traditionally associated peoples**—Social/cultural entities such as tribes, communities, and kinship units, as well as park neighbors, traditional residents, and former residents who remain attached to a park area despite having relocated, are “traditionally associated” with a particular park when (1) the entity regards park resources as essential to its development and continued identity as a culturally distinct people; (2) the association has endured for at least two generations (40 years); and (3) the association began prior to establishment of the park.

**Traditional cultural property**—A property associated with cultural practices, beliefs, the sense of purpose, or existence of a living community that is rooted in that community’s history or is important in maintaining its cultural identity and development as an ethnically distinctive people. Traditional cultural properties are ethnographic resources eligible for listing in the National Register of Historic Places.

**Unacceptable impacts**—Impacts that, individually or cumulatively, would

- be inconsistent with a park’s purposes or values, or impede the attainment of a park’s desired future conditions for natural and cultural resources as identified through the park’s planning process, or
- create an unsafe or unhealthful environment for visitors or employees, or
- diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values, or
- unreasonably interfere with
  - park programs or activities, or
  - an appropriate use, or
  - the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park.
  - NPS concessioner or contractor operations or services.

**Vehicle-free area (VFA)** —An area within the Seashore that has not been designated as an ORV route. Nonessential vehicle/ORV use is prohibited in VFAs.

**Viewsheds**—An area of land, water, or other environmental element that is visible to the human eye from a fixed vantage point. The term is used widely in such areas as urban planning, archaeology, and military science. In urban planning, for example, viewsheds tend to be areas of particular scenic or historic value that are deemed worthy of preservation against development or other change. Viewsheds are often spaces that are readily visible from public areas such as from public roadways or public parks. The preservation of viewsheds is frequently a goal in the designation of open space areas, green belts, and community separators.

**Visitor**—Anyone who physically visits a park for recreational, educational or scientific purposes, or who otherwise uses a park's interpretive and educational services, regardless of where such use occurs (e.g., via Internet access, library, etc.).

**Visitor experience**—The perceptions, feelings, and reactions a park visitor has in relationship with the surrounding environment.

**Vulnerable**—A species which is likely to become endangered unless the circumstances threatening its survival and reproduction improve.

**Wetlands**—Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: 1) at least periodically, the land supports predominantly hydrophytes; 2) the substrate is predominantly undrained hydric soil; and 3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year (Classification of Wetlands and Deepwater Habitats of the United States [Cowardin et al. 1979]).

**Wrack line**—Also known as a drift line, it is a line of stranded debris along a beach face marking the point of maximum run-up during a previous high tide.

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# **LITERATURE REVIEW: IMPACTS AND MANAGEMENT OF OFF-ROAD VEHICLES**

**December 2009**

Prepared in support of the  
Cape Hatteras National Seashore  
Off-Road Vehicle Management Plan / Environmental Impact Statement



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## INTRODUCTION

Officially authorized in 1937 along the Outer Banks of North Carolina, Cape Hatteras National Seashore (the Seashore) is the nation's first national seashore. Consisting of more than 30,000 acres distributed along approximately 67 miles of shoreline, the Seashore is part of a dynamic barrier island system.

The Seashore serves as a popular recreation destination with more than 2.1 million visitors in 2008 (NPS 2008e), showing an 8-fold increase in visitation since 1955 (NPS 2007f). Seashore visitors participate in a variety of recreational activities, including beach recreation (sunbathing, swimming, shell collecting, etc.), fishing (surf and boat), hiking, hunting, motorized boating, non-motorized boating (sailing, kayaking, canoeing), nature study, photography, off-road vehicle use (beach driving), shellfishing, sightseeing, watersports (surfing, windsurfing, kiteboarding, etc.), and wildlife viewing. Seashore visitors use ORVs for traveling to and from swimming, fishing, and surfing areas, and for pleasure driving.

Current management practices at the Seashore allow ORV users to drive on the beach seaward of the primary dune line, with a 10 meter backshore areas seaward of the primary dune line protected seasonally. Drivers must use designated ramps to cross between the beach and NC-12 which runs behind the primary dune line. In addition to a multitude of visitor opportunities, the Seashore provides a variety of important habitats created by its dynamic environmental processes, including habitats for the federally-listed piping plover; sea turtles, and one listed plant species, the seabeach amaranth. The Seashore contains ecologically important habitats such as marshes, tidal flats, and riparian areas, and hosts various species of concern such as colonial waterbirds (least terns, common terns, and black skimmers), American oystercatcher, and Wilson's plover, all of which are listed by the North Carolina Wildlife Resources Commission (NCWRC) as species of special concern. In addition, the gull-billed tern, also found at the Seashore, is listed by the NCWRC as threatened.

Historically, beach driving at the Seashore was for the purpose of transportation, and not recreation. The paving of NC-12, the completion of the Bonner Bridge connecting Bodie and Hatteras islands in 1963, and the introduction of the State of North Carolina ferry system to Ocracoke Island facilitated visitor access to the sound and ocean beaches. Improved access, increased population, and the popularity of the SUV have resulted in a dramatic increase in vehicle use on Seashore beaches. Motivated in part by a decline in most beach nesting bird populations on the Seashore since the 1990s, in July 2007 the NPS finalized an Interim Protected Species Management Strategy (Interim Strategy) that was to provide resource protection guidance until the long-term ORV management plan and regulation could be completed.

ORV use has increased substantially on public lands nationwide over the last half-century (The Wilderness Society 2006), including at the Seashore. In response to the widespread and rapidly increasing use of ORVs on public lands “often for legitimate purposes but also in frequent conflict with wise land and resource management practices, environmental values, and other types of recreational activity,” Executive Order 11644, *Use of Off-Road Vehicles on the Public Lands*, was issued in 1972 and amended by Executive Order 11989, *Use of Off-Road Vehicles on The Public Lands* in 1977. These executive orders require federal agencies allowing ORVs to designate specific areas and trails on public lands where the use of ORVs is or is not permitted.

In units of the national park system, including the Seashore, the NPS is required to manage according to the NPS *Organic Act*, through which Congress requires the NPS to preserve park resources “unimpaired for the enjoyment of future generations” (16 USC 1). While the Secretary of the Interior has the authority to allow certain activities in park units, those activities must comply with the *General Authorities Act*, which specifies that activities that lead to the “derogation of the values and purposes” of a park unit should not be allowed (16 USC 1a – 2(h))—language that is mirrored in the *Redwoods Act of 1978* (16

USC 1a-1). This congressional emphasis on uses compliant with park values and purposes is further described in NPS management policies and is vital to policy-based decision-making about land use in national park units.

*NPS Management Policies 2006* includes several guidelines that pertain to monitoring certain uses in park units. Consistent with the Congressional acts, the management policies state that the NPS “must ensure that park uses that are allowed would not cause impairment of, or unacceptable impacts to, park resources and values” (NPS 2006: 1.5). Unacceptable impacts are those that, among other things, “unreasonably interfere with park programs or activities, or an appropriate use, or the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park” (NPS 2006: 1.4.7.1). If unacceptable impacts result from any activity, superintendents are required to “engage in a thoughtful, deliberate process to further manage or constrain the use, or discontinue it” (NPS 2006: 1.5).

While access to public lands improves the experience of ORV users, motorized access to sensitive environments, such as coastal ecosystems, can pose a threat to sensitive species that rely on the beach habitat. Other impacts from motorized access to public lands include adverse effects on water quality, adverse effects on vegetation, impacts to cultural resources, detraction from other visitors’ enjoyment of public lands, and creation of law enforcement issues. ORVs can churn up and damage delicate soils (Proescholdt 2007; Ouren et al. 2007; Webb 1982). Air quality can be negatively affected by exhaust fumes, oil, and dust resulting from ORV use (Taylor n.d.; Proescholdt 2007; Ouren et al. 2007). Loud engines in quiet environments can disturb wildlife and affect visitor enjoyment for those who use parks as places of peace and solace (Proescholdt 2007). Park rangers surveyed during a 1999 study reported incidents where ORV use has destroyed or disturbed cultural resources that parks are bound by law to protect (Bluewater Network 1999). While it is unknown how many coastal park units were included in the study, it can be assumed that such issues also occur in coastal units where ORV traffic is allowed.

This literature review has been prepared to support the development of an ORV management plan at the Seashore. The following sections summarize available information related to the potential effects of ORV use on natural resources, such as wildlife habitat, aesthetics/sound, and vegetation, found in national park units with coastal sand dune ecosystems. Relevant water quality findings are also reported here. In addition, information on the effects of ORV use on socioeconomics and management issues are examined. Because the majority of the area administered as Cape Hatteras National Seashore is best described as a coastal beach environment, with the major issues for resource protection being the protection of threatened and endangered species and the maintenance of coastal wildlife habitat, this literature review focuses on impacts from ORV use in similar coastal environments.

## **Wildlife and Wildlife Habitat**

Numerous studies have detailed the impacts to wildlife of ORV use on public lands. Impacts generally described in these studies include direct mortality, harassment, noise effects, and habitat destruction. Specific risks to wildlife include injury during escape responses and, in severe cases, habitat avoidance and abandonment of young. Radle (2007) found that wildlife generally experience an increase in heart rate, as well as altered metabolism and hormone balance, when introduced to human-made noise. Noise from ORVs can affect the senses of animals that depend on hearing and vibration detection to survive (resulting in inability of wildlife to hear sounds important for mating, avoiding predators, and finding prey) (Berry 1980; Bury 1980; Bluewater Network 1999). ORVs also impact wildlife by destroying or fragmenting habitat. Much of the existing research has dealt specifically with the effects of vegetation damage by visitors and the associated impacts to wildlife habitat values (Monz et al. 2003). This has led some to conclude that the most effective strategies for avoiding habitat disturbance are outright road

removal and the avoidance of new road construction in roadless or sparsely roaded areas (Trombulak and Frissell 2001; Walder n.d.).

Park managers generally agree that intensive ORV use harms wildlife, including endangered species. From July to November of 1999, Bluewater Network conducted a survey of 108 national park units regarding the use of all-terrain vehicles and other ORVs. While the number of surveys conducted at seashore units is not reported, among the issues cited by respondents was the use of ORVs resulting in collisions with and crushing of animals, destruction of habitat, and animals being frightened away from shelter or important habitat (Bluewater Network 1999).

Various studies have examined the effects of ORVs on intertidal invertebrates. Work done on high-energy beaches has suggested that life in the intertidal and supratidal areas may be far more abundant and varied than previously thought (Zaremba et al. 1973), and this life could be affected by ORV use. One study conducted at the Seashore (Landry 2004) documented recovery rates of ghost crab (*Ocypode quadrata*) populations following ORV impacts and high-energy weather events. Beach closures were initiated to study short-term effects and recovery rates. Sediment analysis and beach soil compaction differences in the ghost crab habitat were measured in both untraveled and travelled zones. The study found differences in crab burrow densities between closed and open beaches. Alternative time spans for beach closings varied in their effectiveness for promoting recovery at various beach areas.

Findings from a 1984 study conducted at nearby Cape Lookout (Wolcott and Wolcott 1984) examined impacts of ORV use on mole crabs (*Emerita talpoida*), coquina clams (*Donax variabilis*) and ghost crabs. Results indicated that ghost crabs were completely protected if borrows were at least 5 centimeters (2 inches) deep. The ghost crab creates burrows for shelter from heat and desiccation stress during summer daytime periods. Juveniles produce shallow J-shaped burrows with a mean depth of 160 millimeters (6.3 inches), while adults dig Y-shaped and spiral burrows with mean depths of 361 millimeters (14.2 inches) (Chan et al. 2006). The Wolcott study also found no damage to mole crabs or coquinas; however, crushing of ghost crabs by ORVs occurred during their nighttime feeding on the foreshore<sup>1</sup>. The study recommended establishing a ban on ORV traffic on the foreshore between dusk and dawn to protect this species (Wolcott and Wolcott 1984).

Moss and McPhee (2006) compared ghost crab burrow counts on exposed sandy beaches off the coast of southeast Queensland in areas designated as “open” and “closed” to recreational ORV use and found that beaches where recreational ORV activity was present had significantly lower ghost crab abundance than beaches where ORV use was absent. Similarly, a study on North Stradbroke Island in Australia found crab densities to be significantly lower in areas subject to heavy beach traffic. While crab mortality declined with depth of burrows, burrowing only partially protected crabs. Crabs in shallow burrows of 5 centimeters (1.9 inches) were killed by 10 vehicle passes. While deep-living crabs (which burrowed to depths of least 30 centimeters [11.8 inches]) were not killed by ORVs, this subpopulation represented only half of the total population surveyed (Schlacher et al. 2007).

Schlacher and others (2008) used surf clams (*Donax deltoides*) to investigate damages caused by vehicles to sandy shore invertebrates, and found that in situations where cars traversed soft sand and turned across the beach face, clams had some tolerance against vehicles at low traffic volumes (5 vehicle passes), but more than half of them were killed at higher traffic volumes (75 passes). Van Der Merwe (1991) studied

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<sup>1</sup> Also known as the intertidal zone, the foreshore is defined as that part of the beach between the spring low water mark and the spring high water mark. The upper limits of the intertidal zone are defined by the uppermost wrack line. A wrack line is a line of stranded debris along a beach face marking the point of maximum run-up during a previous high tide, and there may be several on a beach.

the effects of ORVs on four intertidal invertebrate species in South Africa: the gastropod *Bullia rhodostoma*, the bivalves *Donax serra* and *Donax sordidus*, the benthic mysid *Gastrosaccus psammodytes*, and the supralittoral isopod, *Tylos capensis*. All the above-named species except for the benthic mysid showed a high tolerance for vehicular disturbances. The supralittoral isopod demonstrated increasing damage as with more vehicle passes in the less compact sand above the drift line.

In a study of four beaches at Cape Cod and Fire Island National Seashores, Kluft and Ginsberg (2004), used analysis of variance as a statistical metric and found that invertebrates such as the talitrid amphipod (*Talorchestia longicornis*) and the lycosid spider (*Arcotosa littoralis*) were significantly more abundant in the wrackline in vehicle-free areas than in high-traffic zones. On sandy beaches, invertebrates such as gastropods and bivalves could be safe if buried beneath compact sand (which is common when the tide is out). Stephenson (1999), while not specifying particular invertebrate species, cited research that indicated a reduction in both the abundance and number of species of surface and subsurface invertebrates as a result of vehicles on coastal dunes. Crushing by vehicle wheels, destruction of the surface litter layer (where present), and the changes in soil properties and microclimate that accompany track creation, or the overall reduction in plant cover, all contribute to the negative response of these elements of the fauna. Invertebrates associated with the above-ground portions of plants also exhibited reductions in abundance and number of species as a consequence of vehicle impacts to the vegetation and microclimate of dunes (Stephenson 1999).

Bird species are also affected by ORV use on shoreline ecosystems. Historically, many beach-nesting waterbirds have shown population declines along the beaches of the Seashore in response to increased human disturbance, retreating to small soundside islands created from dredge material excavated from navigational channels. By the late 1970s, erosional forces and changes to dredging techniques had whittled away much of these refuges, leaving no choice for the birds but to return to ocean beaches. One such species of special concern is the piping plover (*Charadrius melodus*), which lays speckled eggs that are perfectly camouflaged in the beach sand. A two-year study of piping plovers along the New Jersey shore (Burger 1994) found that plovers forage along the tidal oceanfront, in the dunes, and in backbays, and their relative use of these habitats partially depends upon human presence. While on beaches with few people, plovers can spend 90 percent of time foraging, whereas on beaches with many people they may spend less than 50 percent of their foraging time in direct feeding behaviors (Burger 1994). Results of a logistic regression analysis of the spatial distribution and productivity of piping plover nests in relation to proxy indicators of human disturbance on the barrier islands of Long Island, New York, indicated that for each additional kilometer of road within a 500-meter (1640-foot) radius, the likelihood of the presence of a plover nest decreased by up to 53%. Higher productivity appeared to be only slightly correlated with increasing distance from parking lots, roads, and residential areas. Moreover, no difference in mean productivity was observed among the levels of ORV access (Thomsen 2006).

Among bird species, adverse reactions to human recreational activities have included nest desertion, temporary nest abandonment, and changes in foraging habits (Douglass et al. 1999). Comparing two beach plots open and closed to human traffic along North Carolina's Outer Banks, Collazo and others (1995) found that resting time of shorebirds was reduced by nearly 50 % in areas open to human activity. Although some research indicates predators are the main cause of nest failure of shore-nesting birds, Stephenson (1999) identifies vehicle use as a major cause for reductions in reproductive potential of birds on both coastal dunes and shorelines. Similarly, Melvin and others (1994) described 14 incidents of direct piping plover mortality caused by ORVs in Massachusetts and New York from 1989 through 1993. They estimated the number of one-way vehicle passes per day during the period when mortality occurred, demonstrating that ORV use, even at levels of less than 10 vehicle passes per day, is a threat to unfledged piping plover chicks and adults during brood-rearing periods.

An in-depth study of colonial waterbird reproductive success and population trends along the Atlantic coast, which involved field research at Cape Lookout National Seashore, revealed that American oystercatchers are also at risk in rapidly changing coastal ecosystems. The nest survival rate was calculated to be 0.928 per nest day (213 nests lost during 2,961 nest-days of incubation), with the probability of a clutch surviving to hatching of 0.133 (Davis et al. 2001). A comparison of reproductive success of the American oystercatcher on three river islands in the lower Cape Fear of North Carolina with that of birds nesting on barrier island beach habitat of Cape Lookout National Seashore (McGowan et al. n.d.) revealed that there were 17.6 times more oystercatcher breeding pairs per kilometer on the river island habitat than on the barrier beach habitat. ORV use was directly investigated in this study. The primary cause of nest failure on river islands was flooding, while the primary cause on barrier islands was mammalian predation. In their study of reproductive success of American oystercatchers along the Atlantic coast from Cape Fear to Cape Hatteras National Seashore, Simons and McGowan (2003) also identified predation as the major factor accounting for population decline. Patterson and others (1991) studied piping plovers on Assateague Island, Maryland, in 1986–87 to estimate population size and to identify factors affecting productivity. The study found that predators accounted for most of the known causes of nest losses (91%), with only one nest lost due to direct human destruction and no evidence that suggested recreational disturbance was a factor affecting productivity.

Detailed results of an analysis of eight seasons of reproductive success data at the Seashore found that mammalian predation accounted for 29 % of nest failures (McGowan 2004). The study also found that human disturbance, 24 % of which attributable to ORVs, increased the frequency of trips from the nest during incubation and could contribute to reduced oystercatcher hatching success (McGowan 2004). A recent study by Sabine (2005) involved video monitoring of 32 American oystercatcher nests to document causes of nest failure at Cumberland Island National Seashore, Georgia. Predation was determined to be the primary cause of nest failure. Vehicle disturbances were also simulated by driving immediately below the high water line at approximately 50 meters (164 feet) seaward of nests in order to observe oystercatcher behavioral responses. Although the study found that vehicular activity reduced foraging behavior during brood rearing, results from the disturbance experiment indicated that oystercatchers were more sensitive to pedestrian disturbance than vehicle disturbance during incubation. McGowan and Simons (2006) also suggest that changes in incubation behavior might be one mechanism by which human recreation affects the reproductive success of American oystercatchers. While ATV traffic was positively associated with the rate of trips to and away from the nest, and negatively correlated with percent of time spent incubating, truck and pedestrian traffic had little measured effect on incubation. Stolen (2003) studied the effects of passing vehicles on the foraging behavior of wading birds at the Merritt Island National Wildlife Refuge near Titusville, Florida, and found that foraging wading birds were more likely to be disturbed when vehicles slowed or stopped adjacent to them than when vehicles continued driving by. Experimental disturbance by a vehicle caused a significant depression in the foraging rates of the snowy egret (*Egretta thula*) and the great egret (*Ardea alba*) and non-significant reductions in foraging rates in the tricolored heron (*E. tricolor*). Nineteen percent of the birds flushed after being disturbed. Species reacted differently to disturbance as vehicles approached closer to nests. Tri-colored heron were the most sensitive to flushing; the great egret was intermediately sensitive; and the snowy egret was the least sensitive.

In a study of shorebirds at South Core Banks, South Carolina, Tarr (2008) determined that vehicle disturbance influences shorebird use of ocean beach habitat for roosting during the nonbreeding season. This conclusion was based on the finding that shorebirds were abundant in areas where vehicle abundance was also relatively high, but their distribution among microhabitats was opposite that of vehicles. Vehicles were primarily located on dry sand, while shorebirds were typically found in the swash zone and wet sand microhabitats. When disturbance was introduced, microhabitat use shifted towards the swash zone. This study concluded that vehicle disturbance influences shorebird use of ocean beach habitat for roosting during the nonbreeding season. A study of the results of a ban on beach driving in 2001 on the

South African coastline (Williams et al. 2004) found that in the first breeding season after the ban, there was an increase in breeding pairs for all five species in the study (two waders, two terns and a cormorant). Available data indicated that a 50-meter buffer distance around nests is adequate to prevent harassment of the majority of incubating piping plovers, as stated in the Piping Plover Revised Recovery Plan (USFWS 1996). However, fencing around nests should be expanded in cases where the standard 50-meter (164-foot) radius is inadequate to protect incubating adults or unfledged chicks from harm or disturbance.

Impacts may result from species' inability to adapt to the pace of human development. Loggerhead sea turtles, for instance, face many anthropogenic nesting threats, including beach armoring, beach nourishment, artificial lighting, commercial fishing, beach vehicular driving, and pollution (Nester 2006). Vehicles on the beach could negatively impact sea turtles by running over nests or nesting females, hatchlings, or stranded turtles that have washed ashore. In addition, ruts left by vehicles in the sand may prevent or impede hatchlings from reaching the ocean after they emerge from the nest. Hatchlings impeded by vehicle ruts are at greater risk of death from predation, fatigue, desiccation, and being crushed by vehicles. Sand compaction due to vehicles on the beach may hinder nest construction and hatchling emergence from nests. Driving directly over incubating egg clutches can cause sand compaction, which may decrease hatching success and directly kill pre-emergent hatchlings. Additionally, vehicle traffic on nesting beaches may contribute to erosion, especially during high tides or on narrow beaches where driving is concentrated on the high beach and foredune (USFWS 2008).

Witherington (2003) cites challenges to loggerhead sea turtle (*Caretta caretta*) conservation: uncertainty over the historical abundance of loggerheads so that assessment of status can be made, and the incremental deterioration of suitable loggerhead nesting beaches through development (including coastal armoring and sources of beach lighting) and sea level rise. A 1996 report by the Florida Department of Environmental Protection explains that artificial lighting from a variety of sources on beaches tends to deter sea turtles from emerging from the sea to nest (Witherington and Martin 1996). If sea turtles do nest on lighted beaches, hatchlings can be jeopardized as artificial lighting disrupts a critical nocturnal behavior of hatchlings, which will move toward artificial light sources instead of crawling from their nest to the sea. Artificial lighting has also been found to deter sea turtles from emerging from the water to nest. The increase of false crawls on ORV beaches may cause nesting turtles to expend additional energy. This energy could be put into egg production or growth. To evaluate the effect of driving ORVs on nesting activity, Nester (2006) compared driven and non-driven beaches, data on beach slope, sand compaction, beach width, sand color, sand grain size, moisture content, incubation temperature, and pedestrian activity collected during the 2005 nesting season at Cape Lookout National Seashore, Cape Hatteras National Seashore, and Pea Island Wildlife Refuge, North Carolina. The study found that light intensities presented a significant factor in determining nesting or false crawls. False crawls were more likely on ORV beaches where light intensities from vehicles were found to be greater than those on non-ORV beaches. A resulting decline of 20% in production of female loggerhead turtles was estimated at these locations. Recommendations for mitigating the impacts of artificial lighting on sea turtles included installing timers and monitoring devices to minimize unnecessary lighting (Witherington and Martin 1996).

ORV tracks interfere with the ability of hatchling loggerhead turtles to reach the ocean. By observing newly-hatched loggerhead turtles which were released to the intertidal beaches at Fort Fisher Beach in southeastern North Carolina and Cape Lookout Beach in coastal North Carolina, Hosier and others (1981) determined the effect of ORV tracks on the behavior and rate of sea-approach of these turtles. The extended period of travel required to negotiate suitable paths to the surf, together with the tendency to invert, may increase the susceptibility of loggerhead turtles to stress and predation during transit to the ocean when hatching on ORV-impacted beaches. Tracks in the sand may change the micro-topography as much as 10–15 centimeters (3.9–5.9 inches), which may serve as a significant impediment to the movement of hatchling turtles to the sea. Moreover, vehicle tracks generally run parallel to the beach, and can result in distances of 10–20 meters (33–66 feet) where hatchlings cannot successfully negotiate such

barriers, especially in coarse sands. At Cape San Blas, Florida, near Eglin Air Force Base, Cox and others (1994) examined hatchling tracks and observed four instances of sea turtle hatchlings being disorientated. Vehicle tracks were thought to be a contributing factor at two sites, causing some hatchlings to make a perpendicular diversion of more than 91 meters (300 feet) en route to the sea. Some hatchling tracks ended within vehicle tracks, which suggests that vehicle tracks may lengthen the time of critical exposure to beach predators, particularly ghost crabs.

## **Water Quality**

Many studies have addressed the effects of ORV use on water quality. Most studies have focused primarily on non-coastal desert or forest environments including soil erosion and sedimentation. In these environments, ORVs which travel along, across, or through creeks, rivers, streams and other waterways create turbidity, harm vegetation, destroy habitat for aquatic species and species that use water resources, and cause increased sedimentation and soil erosion that result in impairments to water quality (Bluewater Network 1999). The Texas Chapter of the American Fisheries Society (2002) cites that ORV use could result in erosion, siltation, bank destabilization, and an increased potential for other water quality impacts. The damage to stream bottoms and increased siltation can change stream temperatures, resulting in increased extremes and temperature variability that can be detrimental to fish populations (TCAFS 2002). No studies were found relating to water quality impacts of ORV use on beaches.

## **Soils/Dune Ecosystems**

Several studies of ORV impacts to coastal soils have focused on comparisons of soil characteristics between high-traffic areas versus non-traffic areas. One such study (Hosier and Eaton 1980) compared two barrier beaches in southeastern North Carolina. Less vegetation cover and fewer species were present on both dunes and grassland areas with vehicular traffic. To illustrate this, when quadrants containing vehicle tracks were removed from the analysis, the average vegetative cover of the dunes on the impacted beaches increased to that of the non-impacted beaches. The soil was also more compact where vehicular traffic had been most intense and where, it was suggested, this compaction may have been contributing to increasing salt flats in the area. Similarly, results of experimental testing of ORV impacts to coastal ecosystems of Cape Cod National Seashore between 1974 and 1977 (Leatherman and Godfrey 1979) showed that the ecosystem most resistant to long-term vehicle impact was the intertidal ocean beach, while the most easily damaged were areas protected from the direct ocean waves by barrier dunes or other upland features (such as salt marshes and sand flats). ORV effects are longest lasting farthest from the source of new sand; the areas farthest away from new sand promote optimal growth of grasses. More specifically, the effects of vehicles on dunes depended on the portion of the dune that was impacted. At dune edges, fewer than 100 vehicle passes stopped seaward growth of grass. In the foredune region, a relatively low number of passes (50–200) reduced plant biomass to very low levels. Recovery of the grasses on the dunes varied with the exact location of the vehicle tracks. On the foredunes, where grass growth is lush and rapid due to fresh sand input, the impacted sites were almost completely recovered after three growing seasons. Findings demonstrated that environments that undergo the greatest physical changes, such as the intertidal ocean beach, appear to have the greatest tolerance to vehicle traffic.

Studies on barrier islands have shown that although infrequent travel over dune vegetation had noticeable immediate impacts, permanent damage was ultimately caused by repeated travel over the same tracks (Judd et al. 1989). Impacts of historic ORV use at Gulf Islands National Seashore included denudation of coastal dunes and resulting blowouts and interior flooding, which have flattened the interior island topography; and the creation of trails that contribute to erosion, further narrowing the island (Shabica 1979). In a similar study at Fire Island National Seashore in New York, Anders and Leatherman (1987) found that vehicular passage over the open beach displaces sand seaward and that ORV use levels could

be contributing to the overall erosion rate by delivering large quantities of sand to the swash zone and affecting dune topography. Vehicle traffic resulted in a maximum of 0.75 meters (2.5 feet) of deposition in the zone of actual impact and a slight reduction in the elevation of the foredune. The results of 89 field experiments to examine the effects of ORVs on the beach showed that slope, sand compaction, and the number of vehicle passes in the same track were the principal factors controlling the measured net seaward displacement of sand.

Investigations made between 1973 and 1974 found beach and foredune areas of North Padre Island along the mid-Texas coast to be greatly modified by vehicular traffic (McAtee and Drawe 1981). The primary effects were reduced ground cover and reduced species diversity of vegetation in the foredune areas. As the intensity of human activity increased, dune elevation decreased. Increasing human activity also correlated to higher observed evaporation, soil pH, soil temperature, average wind velocity, atmospheric and soil salinity, and wind-carried sand particles near the ground surface.

Liddle and Grieg-Smith (1975) demonstrated that below 18-centimeter (7-inch) depths, soils became less compacted as a result of vehicle use. But a study of vehicle impacts to sandy beaches on the east coast of Australia (Schlacher and Thompson 2006) found that ORVs corrugated sand as deep as 28 centimeters (11 inches), with the deepest rutting occurring between the foredunes and the drift line. Off-road vehicles in this study were capable of disrupting from 5.8% to 9.4% of the available faunal habitat matrix (the top 30 centimeters [11.8 inches] of the sand which contain the necessary conditions to support the study fauna) in a single day and routinely disturbed the drift line and the base of the foredunes. Belnap (1995) cited several causes of desertification from off-road vehicle use, including soil compaction resulting in decreased water availability to vascular plants through decreased water infiltration. Soil loss can be further accelerated by wind and water erosion and decreased diversity and abundance of soil biota.

## **Vegetation and Invasive Species**

Numerous studies describe the impacts of ORVs on vegetative communities, including both direct and indirect damage to vegetation by vehicle use. Research conducted in the late 1970s at Cape Cod National Seashore on the ecologic and geomorphic effects of ORVs on coastal ecosystems concluded that there is no “carrying capacity” for vehicular impact on coastal ecosystems, and even low-level impacts can result in severe environmental degradation. The most naturally unstable areas, such as the intertidal ocean beach, tend to be the least susceptible to damage due to the rapid pace of natural environmental change and recovery in these areas. Dunes can be quickly devegetated by vehicular passage, resulting in blowouts and sand migration. Of all the ecosystems evaluated, salt marshes and intertidal sand flats are the least tolerant of ORV impacts and should be closed to all vehicle traffic (Leatherman and Godfrey 1979). Similarly results were demonstrated in an experimental testing of ORV traffic on coastal ecosystems of Cape Cod National Seashore between 1974 and 1977 (Godfrey et al. 1978). As detailed in the Soils/Dune Ecosystems section, this study found that even a relatively low number of vehicle passes can reduce plant biomass to very low levels in the foredune area.

At Cape Hatteras National Seashore, potential habitat for the seabeach amaranth includes coastal overwash flats at the accreting ends of the islands and lower foredunes and on ocean beaches above mean high tide (occasionally on sound-side beaches). In its known range, it often grows in the same areas selected for nesting by shorebirds such as plovers, terns, and skimmers. Intensive recreational use, both vehicular and pedestrian, is one factor that threatens the plant’s survival. Its stems are easily broken or crushed by foot traffic and tires, thus, even minor traffic can be detrimental during the growing season (USSWS 1996).

Hosier (1980) cites several cases at the Seashore where vehicle impacts to vegetation have occurred, such as at Oregon and Ocracoke inlets where vehicle traffic has compacted sediments along the unvegetated

portions of the beach and near Ocracoke Inlet. In these areas, sand flat vegetation has been altered by ORV tracks and chronic operation of ORVs has kept natural stabilizing vegetation from invading the flats.

A study of vehicle impacts to coastal dunes at Fire Island National Seashore, in which vegetation was monitored in both an experimental field test and a control before and after experimental vehicle impacts, revealed that low-level ORV use (one pass per week) is severely damaging to natural dune vegetation, and that a steepening of the dune profile occurred in the impacted zones due to higher rates of ORV-related erosion (Anders and Leatherman 1987). Another study of the response of grassy vegetation and soils of coastal sand dunes to varying degrees of vehicle use in Australia found that some species of grassy vegetation demonstrated decline, while others increased under moderate use (Liddle and Grieg-Smith 1975). The researchers also noted that while damage to plant shoots by vehicles was detrimental to plants, soil compaction alone could be beneficial in the sand dune habitat due to roots gaining greater access to higher moisture retaining soils beneath trampled areas. Similarly, results of a study at Cape Cod National Seashore, in which unstabilized and moderately stabilized dune sites were driven at varying levels of intensity, suggested that a single summer season of driving (300–700 passes) on a confined track through grass vegetation can completely destroy the above-ground portions but leave adequate underground roots and rhizomes for a small amount of vegetative regrowth after driving season ends in the late summer and fall (Brodhead and Godfrey 1977).

Three studies reviewed involved direct examination of vehicles to determine if they were potential distributors of exotic plant seeds. Osborn and others (2002) discuss a study that investigated the potential for seed transport into Kakadu National Park in Australia by means of tourist vehicles. The study concluded that vehicles were partially responsible for weed seed dispersal, but the low density of seeds found on the vehicles did not warrant the park taking preventative action. Another study (Rooney 2005) compared soil samples taken from the undercarriage of ORVs to field surveys for seven invasive species in forested areas of Wisconsin. No evidence of actual invasive plant dispersal was noted; however, because invasive plants have seed traits that predispose them to dispersal, the study found that ORVs may occasionally contribute to long-distance dispersal events. This is further supported by a study conducted by the Montana Weed Control Association (Trunkle and Fay 1991), which involved driving a vehicle 40 feet into a vegetated plot and then to various distances from the plot. Afterwards, plant material (including spotted knapweed (*Centaurea stoebe*) seeds) was collected from the undercarriage. At Cape Lookout National Seashore, Hosier (1980) found that deep ORV tracks trapped seeds of sea oats as they were blown across the beach. The captured seeds were then buried and began germination, but the vehicles subsequently churned up the sand and exposed the roots, thus destroying the plants.

Lathrop (1983) found that in arid regions direct vehicle impacts constituted the primary means of vegetative destruction. The study showed that areas beyond the vehicle track width were also affected, although the degree of impact varied with conditions and intensity of vehicle use. The study demonstrated that concentrated current or recent use in localized areas (such as heavy weekend use) created the greatest reduction in vegetative cover. Also in a study of desert environments, Wilshire (1983) found that even a single pass of an ORV could destroy many types of annual and some perennial plants, although hundreds of passes may be required to destroy tough, deep-rooted shrubs.

## **Aesthetics/Sound**

ORV use influences the character of the wild landscape and can result in conflicts between ORV users and other recreational users. With regard to ORV noise-related impacts to park resources, attempts have been made to qualify how visitor experiences in national parks are affected by the addition of mechanical versus natural sound that may come from ORV or other motorized vehicle use such as personal watercraft (PWC). A limited amount of study has been undertaken regarding ORV use and its impacts to

soundscapes in NPS units. Studies related to air tours and PWC are available but not directly relevant to ORV use at Cape Hatteras National Seashore.

Gramann (1999) used many approaches to garner information from visitors about sound in NPS units to formulate a more precise picture of human reactions to sound. Overall, results showed that park users identify natural sounds as more enjoyable than mechanical sounds, but mechanical sounds do not always interfere with the user's experience. Visitor experience and sensitivity to mechanical sound are dependent on visitor expectations, group size, front or backcountry experience, and activity type. For example, a visitor in a group of three or more visiting a park for the first time in the front country and taking pictures may not be as sensitive to mechanical sounds as a lone hiker in the backcountry. People are generally tolerant of certain noise disturbances if they perceive them as necessary (e.g., helicopters conducting fire suppression activities). In this sense, the Gramann study indicated that it is important for sounds to be consistent with the visual setting within which they are heard. Variable noise disturbances may be more readily tolerated depending on the observer's perception of the setting. As a result, from a management perspective, some scenic overlooks and short front country trails may not require as much protection as backcountry locales where preserving the experience of natural sound is paramount to overall visitor experience (Gramann 1999).

## **Archeological Resources**

Whether it is intentional or inadvertent, ORV use has the potential to affect archeological resources on public lands (BLM 2000; Lyneis et al. 1980; Schiffman 2005; Sowl and Poetter 2004; SUWA 2002). Direct impacts result from the damage or destruction that occurs when ORVs drive over and/or near archeological sites. Site integrity, a necessary element for listing a cultural resource on the National Register of Historic Places, is also affected by the visible changes caused by vehicle tracks and erosion (Sowl and Poetter 2004). Studies conducted in the California desert note that ORVs provide access to previously inaccessible, remote areas as ORV users explore new terrain (Lyneis et al. 1980). According to the BLM, this leads to increased visitation to lands previously used only by small numbers of hikers, and increases the intentional and inadvertent damage of archeological resources through surface disturbances (BLM 2000). ORVs have also enabled collectors and pothunters to reach these remote areas, which facilitates greater archeological resource damage from intentional collection and vandalism (BLM 2000; Schiffman 2005; Lyneis et al. 1980; SUWA 2002).

## **Socioeconomics**

ORV-related economic impacts vary by state and region. The large proportion of revenue generated by ORV-related activities was documented in a 2005 report that provides economic impact estimates for a ban on nighttime vehicular access to Fort Fisher State Recreation Area in North Carolina during the spring/summer season. The study, which incorporated electronic vehicle counts and visitor surveys, found that while the baseline number of annual beach vehicle trips (28,884) supported an estimated \$21.6 million in annual regional sales (as well as 382 regional jobs, and 3.7 million in tax revenues), the proposed policy would result in an estimated loss of \$859,590 per year in regional sales, 15 regional jobs (mostly from restaurants, automotive services, lodging and related visitor services), and \$149,334 per year in tax revenues (NCDENR 2005).

A recent report on the economic benefits of hunting, fishing, and wildlife watching in North Carolina found that in 2006, 3.4 million residents and non-residents participated in some form of fish and wildlife-related recreation in North Carolina and spent \$2.62 billion in retail sales, created \$1.26 billion in salaries and wages, and supported 45,224 jobs. The total economic benefit from fish and wildlife-related recreation was estimated at \$4.3 billion (Southwick 2008). For fishing-related activities alone, a national

survey in 2006 found that in North Carolina, there were nearly 1.3 million fishing participants who spent almost 1.2 billion dollars on the sport (USFWS 2006).

## Management Issues

Nationwide, 15 NPS units allow ORV use by the general public. Within these areas, various user groups and ORV manufacturers contend that NPS limits on ORV use unfairly restrict access, establish a precedent for other federal land managers to impose or extend restrictions, and may be economically harmful to gateway communities and industries serving users (Calvert et al. 2007). Conversely, opponents of motorized recreation in NPS units cite damage to the environment and cultural artifacts from ORV use. Conflicts also arise on U.S. Forest Service lands, where uses such as timber harvesting and ORV recreation may affect birdwatching and sightseeing, and can degrade water quality in certain settings (Calvert et al. 2007).

In 1997 the NPS and the National Parks and Conservation Association (NPCA) identified damage from recreational uses as a major concern in coastal units of the NPS (Recksiek 1997). To deal with these issues, Godfrey (1978) explains that while not all shorelines have the same geology or patterns of erosion, some general management recommendations related to ORV use can be applied. These include preventing indiscriminant traffic on dunes and routing traffic around sites of significant dune formation; restricting traffic to intertidal ocean beaches where surveys have shown relatively few marine animal populations are present; not reopening areas that have been closed or have been inaccessible previously; closing off bird and marine turtle nesting sites and important feeding areas; and closing beaches to vehicles during periods of exceptionally high tides (because during high tides vehicles must be driven up the face of dunes, often through nest sites and incipient dune areas).

Operating vehicles on beaches presents special management constraints where loggerhead sea turtles are present. Beach cleaning vehicles, for instance, are common on beaches in southern Florida, and management measures have been established for the use of such vehicles. In order to obtain beach cleaning permits, certain requirements must be met pursuant to Rule 62B-33.005 (11) of the Florida Administrative Code that restricts the timing and nature of beach cleaning. The following permit conditions are included:

- limiting beach cleaning activities to daylight hours only
- limiting cleaning activities to the average high tide mark or debris line and seaward in some areas
- ensuring a daily sea turtle nesting survey has been completed before cleaning activities are conducted
- marking nests for avoidance
- using vehicles with a maximum tire pressure of 10 pounds per square inch and a rake or cleaning apparatus that limits penetration into the surface of the beach to a maximum of 2 inches
- removing accumulated debris from the beach immediately after cleaning has been performed
- avoiding all native, salt tolerant dune vegetation by a minimum of 10 feet (USFWS 2008)

Similarly, the Volusia County, Florida Habitat Conservation Plan (HCP) limits the potential for sea turtle-vehicle interactions through four basic mechanisms: (1) public access is limited to daylight hours and public safety vehicles that operate at night must follow specific guidelines; (2) public driving is limited primarily to those areas where nest densities are lowest; (3) in those areas where public driving is permitted, all driving and parking must occur outside a marked Conservation Zone near the dune, where

the majority of nests are typically deposited; and (4) all nests are conspicuously marked so they can be avoided (USFWS 2008).

Appropriate travel management planning has increased among public agencies and various stakeholder groups in response to continuing ORV use on public lands, particularly BLM lands. Other federal regulatory requirements concerning the protection of resources also provide guidance for travel management plans that may be relevant to management options at the Seashore. However, challenges to crafting and implementing park travel management plans often arise that carry significant implications to the functional management of park resources.

Meyer (2002) prescribes regular maintenance and monitoring of ORV routes, including periodic inspections and condition assessments at 5-year intervals. In addition, Meyer offers several management approaches that can be implemented to curtail trail degradation, some of which may be relevant to seashore environments, including trail rerouting in cases where numerous segments have been degraded by recreational use; seasonal or type-of-use restrictions in instances when specific seasonal uses may be contributing to greater impacts; and outright trail closure as a last resort to protect threatened resources. Traffic volume restrictions or “controlled use” are also suggested as a means to prevent significant resource degradation, although enforcement is needed to implement this management strategy (Meyer 2002).

Christensen and Watson (2006) described challenges resulting from the implementation of the 2006 Bitterroot National Forest ORV management plan, which included maintaining an up-to-date inventory of routes; working with ORV users to reduce impacts and conflicts; and working with all stakeholders to identify appropriate and acceptable ORV opportunities. They also cite lessons learned from the U.S. Forest Service policy and experiences of planners nationwide, which suggest that a collaborative process with a “system-wide, forest-level perspective” is likely to be the most appropriate and successful strategy for developing a widely-supported ORV travel management plan. Moreover, they stress on-going involvement of the public in ORV planning as being crucial for public acceptance of the resulting plans. In an assessment of the efficacy of such a cooperative effort in four counties in North Central Michigan, Nelson and Lynch (2001) conducted stakeholder interviews, surveys of ORV drivers, and investigations of route signage survival. They found that after plan implementation compliance with ORV rules increased as most riders supported the program. By contrast, a study in Utah aimed at creating an inventory of ORV use occurring in 12 high-use or “hotspot” regions of U.S. Forest Service land found that ORV users had taken excessive measures to access closed routes by moving large boulders, removing posts, chain-sawing trees or logs, or purposefully negotiating terrain to create a new trail around management-placed and natural barriers to ORV traffic (Divine and Foti 2004).

Some monitoring efforts have benefitted from the simultaneous observation and data collection of traffic and wildlife made possible by pneumatic road counters and GPS units (USGS 2005). However, Calvert and others (2007) note that monitoring and enforcement may be impeded in some locations (and especially on BLM lands) due to their remoteness, insufficient signs, and inadequate staff and resources, challenges which would also be relevant to the NPS. Adaptive management strategies targeted toward the specific needs of individual parks could provide the most efficacy in resource management. James (2000) argues that a focus on both the component systems of beach environments and interactions among those systems is necessary for improvements in the management, conservation, and overall environmental quality of beaches.

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**Statement of Findings for Floodplains  
for the Proposed  
Off-Road Vehicle Management Plan**

**Cape Hatteras National Seashore  
North Carolina**

Recommended:	<hr/>	<hr/>
	Superintendent, Cape Hatteras National Seashore	Date
Concurred:	<hr/>	<hr/>
	Chief, Water Resources Division	Date
Approved:	<hr/>	<hr/>
	Southeast Regional Director	Date



## INTRODUCTION

Executive Order 11988 (Floodplain Management) requires the National Park Service (NPS) and other federal agencies to evaluate the likely impacts of their actions in floodplains. The objectives of the Executive Order are to avoid, as much as possible, the short- and long-term adverse impacts associated with occupancy, modification, or destruction of floodplains and to avoid indirect support of development and new construction in such areas where there is a practicable alternative. NPS Director's Order #77-2: *Floodplain Management* provides NPS procedures for complying with Executive Order 11988. This Statement of Findings (SOF) for the Cape Hatteras National Seashore Off-Road Vehicle Management Plan/EIS (Plan/EIS) has been prepared in accordance with the guidelines in NPS Director's Order #77-2. The Plan/EIS states that the purpose of taking action is to develop regulations and procedures that carefully manage ORV use/access in the Seashore to protect and preserve natural and cultural resources and natural processes, to provide a variety of visitor use experiences while minimizing conflicts among various users, and to promote the safety of all visitors.

## DESCRIPTION OF THE PROPOSED ACTION

Alternative F is identified as the NPS preferred alternative in the Plan/EIS and has been revised based on public and agency comments on the draft plan/EIS. Alternative F would provide a variety of opportunities for ORV and pedestrian access, but often with controls or restrictions in place to limit impacts on sensitive resources. Interdunal road and ramp access for ORVs would be improved, and more pedestrian access would be provided through substantial additions to parking capacity at various key locations that lend themselves to walking on the beach. Implementation of alternative F would involve the construction of 4 new ORV access ramps, the relocation of 2 existing ORV ramps, installation of 2 new interdunal roads (i.e., ORV routes), establishment of pedestrian trails on Bodie and Ocracoke islands, and the installation of 10 new parking areas (surfaced with pervious materials such as a clay/shell base) and the reuse or resurfacing for public parking of two existing paved areas<sup>1</sup> that were not previously used for public parking, which in combination would create or improve a total of approximately 135 new public parking spaces along the Seashore. These actions are listed in Table 1 below and are considered in this SOF.

<sup>1</sup>The reuse/resurfacing of two existing paved areas was not considered to be "new construction" in this Statement of Findings, as the existing paved areas would be replaced with pervious materials and used as public parking areas.

**Table 1. Alternative F Proposed New or Relocated Ramps; New, Reused or Resurfaced Parking Areas; New, Extended or Relocated Interdunal Roads; and New Pedestrian Trails**

<b>BODIE ISLAND</b>
Reuse or resurface for public parking the existing asphalt-paved area at the old Bodie Island Coast Guard Station site after site is used as a potential staging area for proposed widening and repaving of NC12 (if resurface existing paved area, would use pervious material)
Relocate ramp 2 approximately 0.5 mile south of Coquina Beach and install new parking area at 2.5
New parking area and trailhead near ramp 4, with pedestrian trail to the "flats" on the northeast side of the Bait Pond
<b>HATTERAS ISLAND</b>
New parking 1.0 mile south of ramp 23
New ramp with parking established at 25.5
New parking near soundside ramp 48
New ramp established at 32.5
New parking near soundside ramp 52

New parking area on west side of highway at or near Kite Point
New parking area on west side of highway at or near soundside ramp 60
Reuse or resurface/reconfigure for public parking the existing asphalt-paved area at the old Buxton Coast Guard Station site after U.S. Coast Guard has completed clean-up of the site (if resurface/reconfigure existing paved area, would use pervious material)
New parking area at Loran Road
Interdunal ORV route extended from ramp 45 to ramp 49 with new ramp 47.5.
New interdunal ORV route from eastern portion of Spur Road west toward inlet
<b>OCRACOE ISLAND</b>
Relocate ramp 59 to 59.5
New parking area on west/north side of the highway at or near the entrance to Barrow Pit Road
New ramp 63
A new pedestrian trail to Pamlico Sound from the end of an ORV route perpendicular to the beach 0.6 mile south of ramp 72.

Source: Table 7-1 and Table 8 in the Plan/EIS. Table does not include two on-sand parking areas for 4-wheel drive access (described below).

The interdunal roads, essentially “over sand” ORV routes that are not located along the beach, would be constructed at grade. They would not alter topography, require a finished or impervious surface, or involve any above-grade structures. The pedestrian trails would be primitive sand trails and would not be paved or surfaced. The new or relocated ORV ramps would be surfaced with semi-permeable clay/shell base or some other porous material. The average ORV ramp is 40 feet wide and 500 feet long, occupying 20,000 square feet.

The alternative F on-sand parking areas accessible by 4-wheel drive vehicles at the terminus of the new interdunal ORV route for Hatteras Inlet and near South Point at the beginning of a new pedestrian trail to Pamlico Sound would not need a hardened surface because vehicles would travel over sand to reach them. Also, overnight camping would not be allowed in these two on-sand parking areas. Therefore, the on-sand parking areas are not considered further in this SOF. The other new, reused or resurfaced parking areas would be directly accessible by 2-wheel drive vehicles from NC Highway 12 (NC 12). These would be designed and constructed with a semi-permeable clay/shell base, turf block or some other porous material, using environmentally sensitive standards to minimize stormwater runoff. The only area where a paved surface would be considered is a short section from handicapped spaces to an adjacent boardwalk. With two exceptions involving the reuse, resurfacing and/or reconfiguration for public parking of existing paved areas (a 10-car parking area at the former Bodie Island Coast Guard Station site and a 50-car parking area at the former U.S. Coast Guard Station in Buxton, both in previously disturbed areas), new parking would comprise an estimated 5 – 10 spaces per parking area. A 10-space, 100 foot by 80 foot parking area would occupy about 8000 square feet.

Before constructing the proposed new parking areas, the Seashore would conduct a separate environmental analysis process to evaluate the potential surface materials that could provide an environmentally sustainable, porous treatment and could avoid the need for stormwater control structures (curbs, drains, culverts, holding ponds, etc.). This on-site analysis would also evaluate specific locations to avoid sensitive species in the Seashore’s Significant Natural Heritage Areas that have been identified by the North Carolina Natural Heritage Program. Exact location and number of added spaces for each area would be determined during the site-specific planning and environmental analysis subsequent to approval of the Plan/EIS.

## **SITE DESCRIPTION**

The project site is on three North Carolina barrier islands, which are part of the Outer Banks. These islands have historically been and continue to be affected by coastal forces and flooding events. The barrier islands comprising the Seashore are flat and narrow and lie between the Atlantic Ocean and the shallow and wide Pamlico Sound. The widest part of the Seashore islands is near Cape Point, between Buxton and Frisco. According to FEMA Flood Insurance Rate Maps, nearly the entire Seashore is within the 100-year floodplain. Generally, lands along the ocean beaches and adjacent to the sound (at wide points) are in flood zone “VE,” which is the flood insurance rate zone that corresponds to the 100-year coastal floodplains that have additional hazards associated with storm waves. Zone “VE” is also referred to as the “Coastal High Hazard Area.” The rest of the Seashore not directly adjacent to the ocean or sound lies in the “AE” zone, which is in the 100-year floodplain and subject to waves less than 3 feet high (NCDCCPS 2008).

Because the Seashore is almost entirely in the 100-year floodplain and is subject to high-water-table conditions, many areas are conducive to drainage and flooding that often result from storm events. Areas near Buxton Woods and Cape Point Campground have been documented as historically flood-prone and are examples of popular Seashore destinations that experience flooding during times of above-average precipitation events (NPS 2003).

Elevations in the vicinity of the proposed ramps, interdunal roads, pedestrian trails and parking areas range from sea level to about 25 feet above sea level. Due to the low topography, the entire project area is located within the 100-year flood zone and is subject to inundation during extreme storm events. Some parking areas would be within the “VE” flood zone, and others would be located in the “AE” flood zone. Those in the “VE” or coastal high hazard area are classified as a Class III Action, according to Director’s Order #77-2.

## **GENERAL CHARACTERIZATION OF FLOODPLAIN VALUES AND OF THE NATURE OF FLOODING AND ASSOCIATED FLOODPLAIN PROCESSES IN THE AREA**

The Seashore’s barrier island floodplains help reduce the impact of hurricanes and other storms on the shorelines that they shelter. These floodplains provide storm water holding capacity, reducing runoff that could otherwise flood NC12 and other developed areas. They also provide habitat for species adapted to the coastal barrier island environment.

Storm events such as hurricanes and nor’easters (winter storms along the mid-Atlantic coast) and associated wave action and high precipitation are the prime sources of flooding in the Seashore. Additionally some areas are known to be susceptible to minor flooding without wave involvement when large amounts of rainfall occur.

## **JUSTIFICATION FOR LOCATION OF THE ACTION IN THE FLOODPLAIN**

The purpose of constructing or relocating ORV ramps, establishing interdunal roads, creating pedestrian trails, and installing parking areas is to improve visitor access to the shoreline, both in areas where ORV routes would be designated and in areas where ORV routes would not be designated. To provide access the ORV ramps, interdunal roads, pedestrian trails and parking areas must be located in the vicinity of the shoreline. Avoidance of impacts to floodplains is not possible because the all areas between access points along NC-12 or interdunal roads and the shoreline is within the 100-year floodplain.

## INVESTIGATION OF ALTERNATE SITES

Alternatives A and B (the no-action alternatives) do not provide for any new ORV ramps, interdunal roads, pedestrian trails, or new parking areas. Alternative F and the other action alternatives provide for differing numbers of ramps, interdunal roads, and new parking areas, as displayed in Table 2 below. As explained above, because all areas between access points along NC-12 (or interdunal roads) and the shoreline is in the floodplain and access to the beach is needed, no sites outside the floodplain were considered.

**Table 2. Number of New or Relocated Ramps; New/Reused/Resurfaced Parking Areas; New, Relocated or Extended Interdunal Roads; and New Pedestrian Trails Proposed in the Plan/EIS Alternatives**

	Alternative A/B	Alternative C	Alternative D	Alternative E	Alternative F
Number of new or relocated ramps	0	6	4	7	6
Number of new, reused or resurfaced parking areas	0	7	0	14	12
Number of new, extended or relocated interdunal ORV routes	0	1	0	1	2*
Number of new pedestrian trails	0	0	0	1	2

Source: Routes and Areas Tables and Summary of Alternative Elements of the Plan/EIS

\* In addition to the interdunal ORV route extension between ramp 45 to ramp 49, this number includes the addition of small interdunal ORV route near Hatteras Inlet as described above in Table 1 and as depicted on the maps for alternative F in the FEIS.

The impact analysis in the Plan/EIS indicates that alternatives A and B would have no impacts on floodplains, and the preferred alternative and the other 3 action alternatives would have minor impacts on floodplains. A minor floodplain impact is defined in the Plan/EIS as an impact that “would result in a detectable change to floodplain functions and values, but the change would be expected to be small, of little consequence, and localized. There would be no appreciable increased risk to life or property. Mitigation measures, if needed to offset adverse effects, would be simple and successful.”

## IMPACTS TO FLOODPLAIN FUNCTIONS AND VALUES

The use of vehicles for NPS administrative use and by visitors for beach access would result in no or negligible impacts to floodplain functions or values. Under alternative F, the establishment of interdunal roads would not result in floodplain impacts because impervious surfaces or above-grade structures would not be constructed. The interdunal roads would be constructed at grade and would not alter topography or require a finished surface. Therefore floodplain functions would not be altered.

The pedestrian trails would also not result in floodplain impacts because the trails would be primitive sand trails and would not be paved or surfaced. Minor impacts would result from the construction or relocation of ramps, which would be surfaced with semi-permeable clay/shell base, reducing storm water runoff and limiting the potential for impacts to the floodplain’s water storage function. Similarly, minor impacts would result from the construction of parking areas because they also would be surfaced with semi-permeable or porous materials, with the possible exception of a short access path from handicapped spaces to an adjacent handicapped accessible boardwalk. Because there are no more than minor impacts to the floodplain, there would not be significant impacts to floodplain function and values from establishment or relocation of interdunal roads and ramps, establishment of pedestrian trails, or construction of new parking areas.

## MINIMIZATION OF HARM OR RISKS TO LIFE AND PROPERTY

Mitigation would be provided by incorporating methods for protecting human safety and protection of investment. Minimization of harm or risk to life and property would be accomplished by siting new parking areas in locations known to be less susceptible to flooding from rainfall alone. Parking areas directly accessible from NC 12 are landward of the primary dune line. Overnight camping would not be allowed in the new parking areas or on the beach. Hurricanes and large nor'easters that may result in storm surge are predicted far enough in advance to allow ample time for evacuation.

In addition to Cape Hatteras National Seashore, the Fort Raleigh National Historic Site and the Wright Brothers National Memorial are collectively managed by NPS as the Outer Banks Group. The NPS – Outer Banks Group annually updates its *Hurricane Plan* (NPS 2009), which describes the Incident Command System (ICS) priorities, procedures, and timelines for the protection of human safety, property, and park resources and values in the event of a hurricane or other emergency. The *2009 Hurricane Plan* details actions to be taken at the beginning of hurricane season (June 1), at critical intervals from 96 hours before storm force winds through landfall of a hurricane, recovery, and re-entry. As early as 96 hours before storm force winds, the Superintendent activates the ICS and the following occurs on the Seashore:

- Visitors are informed of weather conditions, park status, and recommended actions.
- Hurricane watch notices are posted at all visitor centers, campground kiosks, and on the Park's website.
- Visitors are advised to leave the island or be prepared for short notice evacuation. Ocracoke must be evacuated before termination of ferry services or before onset of gale-force winds, and preparatory actions for Ocracoke Island occur a day in advance of the other Seashore islands.
- Normal park operations and visitor facilities (e.g., visitor centers, campgrounds, swim beaches) close.
- Concessionaires and local businesses are notified of the park status.
- All non-assigned personnel are released by noon to permit daylight evacuation.
- All non-essential vehicles and equipment are secured.

Since the ramps, interdunal roads, pedestrian trails, and parking areas cannot be assured of protection from all future damage related to flood/storm events, the NPS would tolerate risk to these investments and would repair or reconstruct them when damage occurs.

## CONCLUSION

Alternative F (the preferred alternative) includes the construction of 4 ORV access ramps and the relocation of 2 ramps, and the construction of 2 new interdunal roads, pedestrian trails on Bodie and Ocracoke islands, and 10 new parking areas, and the reuse for public parking of two existing paved areas, to be surfaced with pervious materials such as a clay/shell base, resulting in the creation of approximately 135 new parking spaces along the Seashore. The NPS concludes that there is no practicable alternative for locating these outside the floodplain because their purpose is to provide access for visitors on foot and by ORV to the shoreline. To accomplish this purpose the ramps, interdunal roads, pedestrian trail, and parking areas must be located close to the shoreline.

The establishment of ramps and interdunal roads would not result in floodplain impacts because impervious surfaces or above-grade structures would not be constructed. The pedestrian trails would also not result in

floodplain impacts because the trails would be sand trails that would not be paved or surfaced. On the ocean side of NC 12, the parking areas would be located behind the primary dunes. Because hurricanes and big nor'easters are predicted far enough in advance to allow ample time for visitors to evacuate the area, overnight camping would not be allowed in the parking areas, and the park has prepared and regularly implements and updates a *Hurricane Plan* for the protection of human safety, property, and park resources and values in the event of a hurricane or other emergency, there would be no effect on human safety from the alternative F actions. Construction of the parking areas would result in long-term, minor adverse effects to floodplain functions and values because, although the change to floodplain functions and values would be detectable, it is expected to be small, of little consequence, and localized in the immediate area of the parking areas, ramps, and interdunal roads. Mitigation measures, such as the use of pervious surface materials, would be simple and successful and have been incorporated into alternative F.

Establishment of the ramps, interdunal roads, pedestrian trails, and parking areas would not affect flood storage capacity of the Seashore as a whole. The existing floodplain would continue to function as a floodplain after the construction or expansion of these areas.

The NPS finds the proposal to be consistent with Executive Order 11988. The NPS finds that this proposed action is consistent with the policies and procedures of NPS Special Directive 93-4 (Floodplain Management Guidelines).

## REFERENCES

National Park Service, U.S. Department of Interior

- 1993 Special Directive 93-4: Floodplain Management Guideline. Washington, D.C.
- 2003 October 23, 2003 Letter from Larry Martin (Hydrogeologist, Water Resources Division, NPS) to the Superintendent of Cape Hatteras National Seashore Regarding the Hydrology of the Buxton Woods and Cape Hatteras Areas.
- 2009 2009 Hurricane Plan, National Park Service, Outer Banks Group. Manteo, NC.

North Carolina Department of Crime Control and Public Safety (NCDCCPS)

- 2008. North Carolina Floodplain Management: 2008 Quick Guide.

**Cape Hatteras National Seashore  
Draft ORV Management Plan/EIS  
Concern Response Report**

**Public Comment Analysis Process and NPS Response to Comments  
on the Draft Plan/EIS**

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## Public Comment Analysis Process

### Introduction

Pursuant to the National Environmental Policy Act (NEPA), its implementing regulations, and National Park Service (NPS) guidance on meeting NEPA obligations, the NPS has reviewed and considered comments submitted on the *Draft Off-Road Vehicle (ORV) Management Plan/Environmental Impact Statement* (plan/DEIS). This appendix describes how the NPS considered public and agency comments and provides responses to the substantive comments received.

On March 5, 2010, the NPS published a notice of availability of the plan/DEIS in the Federal Register, posted the draft plan/EIS on the NPS Planning, Environment and Public Comment (PEPC) website at [www.parkplanning.nps.gov/caha](http://www.parkplanning.nps.gov/caha), and issued a news release announcing the electronic availability of the draft plan/EIS on PEPC. Following the announcement of the document's availability and the distribution of the draft plan/EIS to agencies and the public, a 60-day public comment period was open between March 12, 2010 and May 11, 2010. This public comment period was announced by publication of the U.S. Environmental Protection Agency notice of availability of the draft plan/EIS in the March 12, 2010, Federal Register, through the Seashore's website ([www.nps.gov/caha](http://www.nps.gov/caha)), through a newsletter sent to interested parties, elected officials, and appropriate local and state agencies, and through press releases. The draft plan/EIS was also available in local public libraries, at the public meetings, and by contacting the Seashore Superintendent to request a printed copy or CD. The public was encouraged to submit comments on the draft plan/EIS through the NPS PEPC website, by U.S. Postal Service or other mail delivery service, or hand delivery directly to the Superintendent at the Seashore's headquarters in Manteo, North Carolina. Oral statements and written comments were also accepted during the five hearing-style public meetings, discussed below. Each submission received (a letter, oral testimony, or comment directly entered into PEPC is referred to as a correspondence. As provided in the Federal Register notice of availability for the draft plan/EIS, comments were not accepted by fax, email, or in any other way than those specified above. Bulk comments in any format (hard copy or electronic) submitted on behalf of others were not accepted.

### Public Comment Meetings

In April 2010 five public meetings were held to continue the public involvement process and facilitate community feedback on the draft plan/EIS, in addition to the opportunities provided to submit written comments, as described above. Meeting times and locations for the five public meetings were as follows.

- April 26, 2010 from 9:00 am to 11:00 am at the Ocracoke School, Ocracoke, North Carolina.
- April 26, 2010 from 5:00 pm to 8:00 pm at the Cape Hatteras Secondary School, Buxton North Carolina.
- April 27, 2010 from 6:00 pm to 8:00 pm at the Wright Brothers National Memorial, Kill Devil Hills, North Carolina.
- April 28, 2010 from 6:00 pm to 8:00 pm at the McKimmon Conference & Training Center, Raleigh, North Carolina.
- April 29, 2010 from 6:00 pm to 8:00 pm at the Holiday Inn & Conference Center, Hampton, Virginia.

The public meetings were announced on the PEPC website, the Seashore's website, through news releases, a newsletter, and notices in local newspapers.

A total of 793 attendees signed in during the five meetings. Some individuals attended more than one meeting and are counted more than once in this total. Each meeting began with a brief presentation by the Seashore Superintendent, explaining the project background and NEPA timeline. The presentation was followed by an opportunity for attendees to provide oral statements to the Superintendent. All oral statements made within the allotted time (three minutes per speaker) were recorded by a court reporter and the transcripts entered into PEPC as correspondences. Written public comments were also accepted at the public meetings and entered into PEPC by the project team. NPS provided attendees with a copy of the newsletter sent out before the meetings, which provided additional information about the NEPA process, frequently asked questions regarding the project, and additional opportunities for comment on the project, including directions on how to provide comments directly on the NPS PEPC website.

## **Comment Analysis Methodology**

During the comment period, over 15,00 pieces of correspondence were received. Correspondence was received by one of the following methods: hard copy letter via mail or in-person delivery to the Seashore, oral or written statement provided at a public meeting, or entered directly into the NPS PEPC website. All correspondence delivered by any of those methods were entered into the PEPC system for analysis. Each correspondence was read and specific comments within each correspondence were identified. All comments were categorized by applying a series of codes which identify the general content of a comment and help to group similar comments together. An example of a code developed for this project is AL1115 Alternative Elements: Nighttime Restrictions. In some cases, the same comment may be categorized under more than one code, reflecting the fact that the comment may contain more than one issue or idea.

During coding, comments were also classified as substantive or non-substantive. A substantive comment is defined in the NPS Director's Order #12 (DO-12) Handbook as a comment that does one or more of the following (DO-12 Handbook, Section 4.6A):

- Question, with a reasonable basis, the accuracy of information presented in the EIS;
- Question, with reasonable basis, the adequacy of the environmental analysis;
- Present reasonable alternatives other than those presented in the EIS; and/or
- Cause changes or revisions in the proposal.

As further stated in the DO-12 Handbook, substantive comments “raise, debate, or question a point of fact or policy. Comments in favor of or against the proposed action or alternatives, or comments that only agree or disagree with NPS policy, are not considered substantive.” NPS read and considered all substantive and non-substantive comments, in the process of preparing the final plan/EIS. Although typically only substantive comments are analyzed to create concern statements for NPS response, in this report the NPS has also responded to some non-substantive comments where it believed such responses would provide helpful information to the public.

Under each code, all substantive comments and those non-substantive comments for which NPS decided a response would be useful, were grouped by similar themes, and those groups were summarized with a concern statement. For example, under the code AL1125 Alternative Elements: Species Closures/Buffers, one of the concern statement identified was,

Commenters stated that the buffers proposed for turtle nests were too large, and smaller buffer sizes were needed. One commenter suggested that the exit to the ocean be no more than 18 inches wide. They suggested these closures be removed in the morning as is done

at Pea Island National Wildlife Refuge. Other commenters suggested that nests be closed off from the nest to the surfline from one hour before sunset until dawn.

This one concern statement is an example of a concern statement that captured many comments. Following each concern statement are one or more “representative quotes” which are comments taken from the correspondence to illustrate the issue, concern, or idea expressed by the comments grouped under that concern statement. Sometimes comments under a concern statement provided opposing points of view. In those cases, one or more representative quotes were included to illustrate the differing perspectives.

## NPS Response to Comments on the Draft Plan/EIS

### *AE1100 - Affected Environment: Threatened and Endangered Species*

#### **Concern ID: 25210**

Concern Statement: Commenters stated that the NPS's bird count data in the DEIS is incorrect because it only considers the birds at the Seashore and not in nearby areas such as Pea Island NWR, dredge and spoil islands, and nearby towns and villages. One commenter also stated that the DEIS contained errors with respect to the characterization of dredge spoil habitat and the presence of pebble/cobble substrate in the Seashore.

#### **Representative Quotes:**

**Corr. ID:** 3490

**Organization:** *Not Specified*

**Comment ID:** 141207

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with how NPS does not adequately consider locations neighboring the Recreational Area that are part of the same ecosystem. They did not consider:

- Villages, dredge and spoil islands, Pea Island National Wildlife Refuge
- Dredge and spoil islands typically have fewer predators to threaten nesting birds
- Bird activity within neighboring areas should be tracked and included in target productivity levels. Fluctuations and trends in Recreational Area bird populations should be viewed relative to regional and state experiences -not in isolation.

I agree that all locations neighboring the Recreational Area that are part of the same ecosystem and should have been considered.

**Corr. ID:** 12002

**Organization:** *Not Specified*

**Comment ID:** 134207

**Organization Type:** Unaffiliated Individual

**Representative Quote:** DEIS Part 2, Chapter 3: Affected Environment, Page 190, the DEIS states that dredge spoil sites are ideal habitat as follows: "(8) Natural conditions of sparse vegetation and little or no topographic relief mimicked in artificial habitat types (e.g., dredge spoil sites)." Yet just a few Pages later you counter this positive statement concerning dredged material with an incorrect one.

On the last sentence of page 211, continuing onto page 212 you state, "A recent study theorized that beach nourishment projects may negatively impact plover habitat because the resulting dredge spoil is often fine-grained, reducing the availability of pebbles and cobbles, which are a preferred substrate for nesting plovers (Cohen, Wunker, and Fraser 2008)."

This statement is not valid for habitat at Cape Hatteras Seashore - there is no pebble or cobble substrate on Cape Hatteras. This study probably applies to New England where the Plover is most prevalent. On Hatteras shorebirds prefer to nest in areas of high shell content and dredged material from areas close to Hatteras (ocean or sounds) are likely to contain relatively high shell-quantities that are preferred by Plovers and other shorebirds.

These points are important because dredged material from the ferry channel to Ocracoke have been used with considerable success to nourish the beach near Ramp 55 in the past. Material was coarse sand and shell - ideal bird habitat on Hatteras.

**Corr. ID:** 14408

**Organization:** *Not Specified*

**Comment ID:** 140855

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The methodology to determine the number for each species should include areas outside of NPS Jurisdiction. Specifically it should count all species from Kitty Hawk to Ocracoke as part of the population. The current methodology fails to count species in Pea Island, emergent islands in the sound such as Cora June

Island, and non traditional nesting sites. A 2007 NCWRC found 3rd largest least tern nesting location was the roof of the Belks in Kitty Hawk. According to the same study Least Terns have previously nested in great numbers on the roof of the Outer Banks Mall. The survey also found that there were 55 least terns, 78 black skimmers, and 79 Colonial water birds on Cora June Island. Failure to include nesting areas contingent to the park is short sighted and does not reflect the actual status of the species in the area. Certainly you should include the wildlife refuge in the boundaries of the park.

**Response:** While the status of bird populations outside of Cape Hatteras National Seashore, including but not limited to Kitty Hawk, Pea Island as well as the use of dredge spoil islands and shopping center rooftops, is of regional importance, the NPS is obligated to manage bird species such that they have ample habitat available and sufficient protection within the Seashore. Nevertheless, in the Affected Environment section the status of birds in the wider region is reviewed and discussed. Specifically, regarding piping plover, both regionally in the Atlantic Coast Southern Region Recovery Unit, in North Carolina (see page 184 and 185 of the DEIS), and at Cape Hatteras National Seashore itself the species has risen above the historic lows recorded. Furthermore, the performance and status of birds in areas outside of the Seashore are covered under cumulative impacts. However, the focus is necessarily at Cape Hatteras National Seashore, where the number of piping plover breeding pairs continues to be lower than the historic highs recorded during 1989 and 1995 and 1996. Perhaps more importantly, piping plover, are still performing well below the 400 breeding pair target established in the Revised Recovery Plan for the Atlantic Coast region which includes the Seashore as well as all other nesting areas throughout the Atlantic coast.

For American oystercatcher the number of nesting pairs at Cape Hatteras National Seashore has declined steadily since the high of 41 pairs in 1999 and remained essentially flat at 23 pair since 2006. See pages 223 and 224 for a discussion of the status of American oystercatchers in North Carolina and along the Atlantic seaboard.

Colonial waterbirds have, similar to the piping plover and American oystercatcher, been in decline at Cape Hatteras National Seashore when compared to historic highs. Specifically, colonial waterbirds have declined from a historic high number of 1,236 pairs (for all 4 species combined), in 1977 to a historic low of 255 in 2008. And while colonial waterbirds did increase from that low to 691 pair in 2009, it is more important to focus on the historic trend for these species. See pages 235 and 236 for a discussion of the status of colonial waterbird species in North Carolina and along the Atlantic seaboard.

While it is true that beach nourishment projects have made suitable shell and sand substrates available for nesting and shopping center rooftops are known to also provide suitable nesting substrates, the value of these new substrates does not release the Seashore from its responsibility to minimize human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them. As noted by one commenter, and in the DEIS, dredge materials can provide habitat for piping plover. The example given in the DEIS related to pebble and cobble substrate was not meant to convey the situation at the Seashore, but to give an example of situations where dredge material is not suitable. Clarifying language will be added to the FEIS to make this distinction.

In summary, while there are other opportunities for nesting both locally and regionally (including but not limited to dredge spoils and shopping center rooftops) , piping plover, American oystercatcher and colonial waterbirds are all trending downward regionally when compared to their historic highs and when compared to conservation targets that have been established for achieving sustainable numbers (piping plover). Under NPS Management Policies, the Seashore must manage for the protection of the species, and their habitat, within the Seashore boundaries, regardless of other available habitat such as rooftops or dredge spoils that may be available regionally.

#### **Concern ID: 24018**

**Concern Statement:** Commenters stated that the NPS did not correctly address environmental issues related to sea turtles. They stated that false crawl statistics do not indicate that light pollution is an issue and that the EIS should address weather events being more detrimental to recovery than ORV or pedestrians.

**Representative Quotes:**

**Corr. ID:** 3490

**Organization:** *Not Specified*

**Comment ID:** 141218

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I agree with the assessment that NPS Inadequately Addresses Environmental Issues More Detrimental to Turtle Recovery Success than ORVs or Pedestrians (p. 392-396) because:

- 38.5% of nests had 0% hatchlings due to weather events. (p. 87, p. 219) - 2009 Loggerhead Recovery Plan calls this catastrophic

- False crawl statistics do not support theory that light pollution is a significant problem at the Recreational Area. (p. 125, p. 219)

- Predator management and nest enclosure practices encourage ghost crabs which are a primary predator of turtle eggs and hatchlings

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140246

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Sea turtles- The beaches of CHNSRA have not been hospitable to nesting sea turtles. Over the last 10 years of NPS data there has been an average loss of 40% of the turtle nests laid each year. The loss would be closer to 60% or 70% without relocation which involves human manipulation. This is called management of the resource. No other Atlantic coast or Gulf shore area suffers such disastrous losses because other beaches are less violent and/or their management includes a much higher rate of relocation.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140447

**Organization Type:** Conservation/Preservation

**Representative Quote:** The DEIS inexplicably diminishes the true extent of sea turtle nest loss at the Seashore due to the damaging storms that frequently strike the area. As the DEIS recognizes, "Periodic, short-term, weather-related erosion events (e.g., atmospheric fronts, Nor'easter storms, tropical storms, and hurricanes) are common phenomena throughout the loggerhead nesting range and may vary considerably from year to year." DEIS at 219. The DEIS then describes six storm-related losses that occurred in Florida and Georgia between 1985 and 2001, which caused an average of 27.3 percent loss of loggerhead nests. DEIS at 219-20. With respect to the Seashore, the DEIS provides surprisingly little information relating to storm losses. All it says is that "The majority of turtle nest losses at the Seashore from 1999 to 2007 were weather related, particularly due to hurricanes and other storms. During this time, six hurricanes caused impacts to nests. In 2003, Hurricane Isabel destroyed 52 of the 87 nests (34 had hatched before the storm); there was so much water and sand movement along the beaches that no evidence of any nests could be found afterward. The Seashore also felt the effects of numerous tropical storms and hurricanes as they passed by offshore." DEIS at 220. This amounted to a 59.8 percent loss, higher than any other catastrophic event listed in the DEIS.

In fact, the DEIS fails to mention that, between 2000 and 2009, 36.4% of nests laid at the Seashore have been lost. Last year, with no hurricanes or tropical storms within 400 miles, the Seashore lost 35.58 percent of its nests due to weather-related events. The USFWS Recovery Plan-which inexplicably does not even mention the Seashore's severe losses from Hurricane Isabel in 2003-appears to believe that Georgia's loss of 16 percent of nests in 2001 due to weather-related erosion events was catastrophic. Certainly, a 10-year average loss of 37.25 percent ought to be of concern. But, given that the causes of these losses cannot be attributed to ORV use, the ORV closures that would be required under Preferred Alternative F will not make a dent in these loss rates. Other appropriate management actions are required.

**Response:** As stated in the FEIS (Chapter 3: Affected Environment, Sea Turtles, Potential Threats) the NPS does recognize that weather related events, particularly storms and hurricanes, do cause the majority of nest losses at the Seashore. However, as evidenced by storms during the 2009 season, these events impact nests left in place as well as those that are relocated (of the 24 nests lost to Hurricane Bill and Tropical Storm Danny, 7 were nests that had been relocated to protect them from normal tidal inundation.) Storms are unpredictable as to when they will occur and on what portion of the beach they will most heavily have an impact. However, female sea turtles have adapted to these natural events by laying large quantities of eggs in a number of nests at different times during the nesting season and

at various locations on the beach environment (some lower on the beach, some higher on the beach) to avoid the complete loss of their reproductive effort. This variation also provides a variety of incubation environments for the nests to develop under. Because hatchlings vary with incubation environments, a scattered nesting pattern also increases the variation of hatchling characteristics, which may ensure that at all times at least some hatchlings have characteristics that are appropriate for survival when the exact characteristics that are best suited for survival vary unpredictably over space and time (Carthy et al 2003). Because sea turtles have adapted their nesting strategy to help avoid complete loss due to storms, and the fact that the NPS cannot predict when and where storms will occur and what nests they will or will not impact, the NPS manages the sea turtle nesting population for impacts it can control.

Many different factors (both natural and human) can cause false crawls (DEIS page 373) of which light pollution is just one cause. Even though false crawl to nest ratios at the Seashore average near what would be expected under "natural" conditions (1:1), as would be expected some years the ratio is above 1:1 and some years it is less than 1:1. However, unless a false crawl is witnessed (e.g. people harassing a nesting turtle or a crawl ending at a fire pit and then returning to the ocean) it is difficult to attribute a specific cause. Therefore, the EIS does not attempt to do so, but it does recognize that from scientific studies light pollution can cause false crawls and therefore manages for that impact.

**Concern ID: 24019**

**Concern Statement:** Commenters stated that data shows protected species populations recovering, and therefore additional restrictions are unnecessary.. They further stated that the Interim Protected Species Management Strategy (Interim Strategy) is an approved plan that has provided effective protection.

**Representative Quotes:**

**Corr. ID:** 13490

**Organization:** *Not Specified*

**Comment ID:** 141153

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Nowhere in the DEIS is it mentioned that protected species populations are growing without the needs of additional restrictions such as those of consent decree and Alternative F.

Published USFWS data suggests that the piping plover is "recovering" well beyond 1986 levels and do not suggest that additional restrictions beyond regional recovery plans are necessary or essential at the Cape Hatteras National Seashore Recreational Area for the continued recovery of the species.

Piping Plover--Atlantic Coast Pairs

Year 1986 1999 2005 2006 2007

Nesting Pairs (est.) 790 1386 1632 1749 1880

<http://www.fws.gov/northeast/pipingplover/index.html>

**Corr. ID:** 14421

**Organization:** *Not Specified*

**Comment ID:** 139598

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Data collected and published by NPS in recent suggest that Cape Hatteras National Seashore Interim Management Plan prepared with public input and publically reviewed in 2005, published in the Federal Register was showing every sign of being effective at protecting birds and natural resources. The Interim Management Plan was set aside by the court and replaced by the consent decree and settlement that mandated extensive closures without public comment or review.

The consent decree closures of recent years have been of exorbitantly high cost to the public but have not contributed to an improvement in species production or safety. The consent decree has produced no natural resource benefit over and above the interim plan. The fledge counts were higher under the interim plan than under the consent decree. 7 Piping Plovers fledged in 2008 under the interim plan, 6 in 2009 under the highly restrictive consent decree. 17 American Oyster Catchers (AMOY) fledged in 2008 under the interim plan and 13 in 2009 under the highly access restrictive consent decree, the same management structure now found in Alternative F. Species productivity is decreasing under consent decree and now Alternative F restrictions.

**Response:** Management in 2008 was under the consent decree, not the interim plan, as stated in the comment. Regarding piping plovers, both regionally in the Atlantic Coast Southern Region Recovery Unit, in North Carolina, and at the Seashore itself the species has risen above the historic lows recorded. However, at the Seashore, piping plover continue to be lower than the number of breeding pairs compared to the historic highs recorded during 1989 and 1995 and 1996. Perhaps more importantly, they are still performing well below the 400 breeding pair target established in the Recovery Plan for the Atlantic Coast Southern Region Recovery Unit.

For American oystercatcher the number of nesting pairs at the Seashore has declined steadily since the high of 41 pair in 1999 and essentially flat at 23 pair since 2006.

Colonial waterbirds have, like piping plover and American oystercatcher, been in decline at the Seashore when compared to historic highs. Specifically, colonial waterbirds have declined from a historic high number of 1,236 pairs (for all 4 species combined), in 1977 to a historic low of 255 in 2008. And while colonial waterbirds did increase from that low to 691 pair in 2009, it is more important to not just focus on short-term trends but rather to focus on the historic trend for these species. This is especially important regarding colonial waterbirds as their numbers are known to fluctuate rather significantly in the short-term. Therefore, it is the longer term trends that more directly reflect the health and stability of their populations.

In summary, the number of piping plover, American oystercatcher and colonial waterbirds nesting at the Seashore have been trending downward at the Seashore off historic highs and when compared to conservation targets for achieving sustainable numbers (piping plover), and therefore, the levels of protection proposed under alternative F, as modified, are what the NPS believes are necessary for adequate species protection and believes will go further than the Interim Strategy to minimize conflicts between recreation and birds.

**Concern ID: 24020**

**Concern Statement:** Commenters stated that studies show most nest failures of piping plover are from non-human factors, such as predation and weather. They asked that these factors be given greater weight in the EIS. They stated piping plover numbers at the Seashore have historically been low unrelated to ORV use with population numbers actually being higher during periods of less ORV regulation and lower under the consent decree and requested that the NPS publish data regarding the number of piping plover and other shorebird species deaths related to ORV use. Other commenters provided data regarding chick behavioral responses to consider in the FEIS and stated that even if there is not direct contact, there are still impacts from disturbance.

**Representative Quotes:**

**Corr. ID:** 29                      **Organization:** *Not Specified*  
**Comment ID:** 126097        **Organization Type:** Unaffiliated Individual

**Representative Quote:** CURIOUSLY, BASED ON THE TABLES ILLUSTRATING PIPING PLOVER HISTORICAL ABUNDANCE, (Tables 14-24) IT APPEARS THAT HIGHER DENSITIES AND FLEDGLING SUCCESS OCCURRED DURING PERIODS OF HIGHER ORV USE (1990s).

**Corr. ID:** 29                      **Organization:** *Not Specified*  
**Comment ID:** 126098        **Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 210- "At other sites, it was documented that fledging success did not differ between areas with and without recreational ORV use (Patterson et al. 1991), although pedestrians caused a decrease in brood foraging behavior in New Jersey (Burger 1994)." OTHER STUDIES SUGGEST THAT HUMAN PRESENCE AFFECTS BIRDS. EVIDENCE IS NEITHER CLEAR NOR CONVINCING THAT ORV USE NEGATIVELY AFFECTS PIPING PLOVER BEHAVIOR OR BREEDING SUCCESS. YOU CANNOT SIMPLY CHOOSE TO ACCEPT ONE STUDY WHILE IGNORING OR DISREGARDING ANOTHER- NOT WITHOUT SOME JUSTIFICATION.

**Corr. ID:** 232                      **Organization:** NCBBA  
**Comment ID:** 130473        **Organization Type:** Unaffiliated Individual

**Representative Quote:** North Carolina is the southern most range of the PP. No PP's were found in South Carolina during the 2008 survey. A clear majority of the population was found in the northern states of Massachusetts (566) and New York (443) while 64 were found in North Carolina. The state of Maine on the other hand is the most

northerly range of the PP where 10 were counted in 2008.

This population distribution can be graphed into a bell shaped curve i.e. Normal Distribution graph. Variability exists in every biological population. The greatest variability in the PP population exists at its extremities (North Carolina and Maine). The least variability is found in the states, which harbor the largest numbers (Massachusetts and New York). Statistically speaking, it is very difficult if not impossible to have a high degree of confidence in North Carolina PP numbers used to make important decisions on beach closures.

**Corr. ID:** 3617

**Organization:** *Not Specified*

**Comment ID:** 133267

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The consent decree and all the closures have not increased the PIPL population at all, in fact, according to your own resource management report, the piping plover has decreased from 2008. If beach driving is harmful, then why are there less PIPL with less driving- shouldn't the numbers have increased with more closures?

In 2003= 50% hatching rate

2005 =100%

2007 =: 40%

2008 =23%

The weather(storms) have controlled the PIPL population, not beach driving. As you can see from the statistics above, some of the best hatch rates were when there was more beach driving.

**Corr. ID:** 3906

**Organization:** The Cove Bed and Breakfast

**Comment ID:** 131334

**Organization Type:** Business

**Representative Quote:** The frequently released reports of the NPS regularly reveal that the "piping plover product" of CAHA Ocracoke, those which flyaway, rarely exceeds single digits annually. This is of no significance to species survival. In the period 1989-2009 the annual average fledge rate has been 0.27 for Ocracoke North Spit, 0.52 for South Point. DEIS further asserts (see Table 14, p. 186 and adjacent Fig. 3, p. 187) that whereas between 1986 and 2009 the number of breeding pairs of plovers doubled in Virginia ( 100 to 208) and elsewhere in North Carolina (30 to 64), the number remained constant and low (12 to 10) in CAHA. This points out that plovers seem to be doing fine- they simply don't like CAHA.

**Corr. ID:** 13163

**Organization:** *Not Specified*

**Comment ID:** 140884

**Organization Type:** Unaffiliated Individual

**Representative Quote:** As a scientist, I think that much of the data many of these proposals are based upon is not statistically significant. The main problem is the small number of bird breeding pairs due to the fact that Cape Hatteras is on the southernmost fringe of the Piping Plover's range. Less than 3% of the Atlantic population of Piping Plovers are in North Carolina (Melvin SM and Hecht A, Waterbirds 32(1):64-72. 2009), consisting of 46 pairs in the entire state (not just Hatteras Island). Hatteras Island seems to rarely have over 10 nesting pairs (p 195). Thus it is very difficult to make any statistically valid conclusions about ORV impact without an extremely long study period, especially with the number of confounding factors (variations in predator populations, weather variations, climate change, etc). Thus year to year comparisons attempting to show impact are very difficult to attribute to a specific cause, and the amount of human (and ORV) impact (if any) demonstrated in the document in Cape Hatteras National Seashore is statistically insignificant. It is clear from the Park Services own historic statistics that most failures to go from nesting to fledging are due to non-human factors, including mammalian predation (including predation from a large population of feral cats on the island), tidal and storm washouts, avian predation and crab predation. Human disturbances account for less than 5% of egg and chick mortality according to the park services own figures, and some of that has been from Park Service monitoring and banding activities.

**Corr. ID:** 13446

**Organization:** *Not Specified*

**Comment ID:** 138779

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Please explain, why there has never been a public list of reported incidents to back up the assumptions made by the NPS regarding endangered species and their nests. As far as the public is informed, on record, only one incident has been reported, and no charges were brought against or for the individuals involved.

**Corr. ID:** 14154      **Organization:** *Not Specified*  
**Comment ID:** 140477      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Why doesn't the NPS publish a list of Piping Plover deaths attributable to ORV use? (p. 210)

**Corr. ID:** 15043      **Organization:** Southern Environmental Law Center  
**Comment ID:** 137461      **Organization Type:** Conservation/Preservation  
**Representative Quote:** Regardless of whether or not the impacts result from direct contact with ORVs or the impacts result from the associated disturbance, the end result is the same -- a direct negative impact resulting from off-road vehicle use. With respect to Piping Plovers, the Guidelines for Managing Recreational Activities in Piping Plover Breeding Habitat on the U.S. Atlantic Coast to Avoid Take Under Section 9 of the Endangered Species Act (USFWS 1996) states:

"Unrestricted use of motorized vehicles on beaches is a serious threat to piping plovers and their habitats. Vehicles can crush eggs (Wilcox 1959; Tull 1984; Burger 1987b; Patterson et al. 1991; United States of America v. Breezy Point Cooperative, Inc., U.S. District Court, Eastern District of New York, Civil Action No. CV-90-2542, 1991; Shaffer and Laporte 1992), adults, and chicks. In Massachusetts and New York, biologists documented 14 incidents in which 18 chicks and 2 adults were killed by vehicles between 1989 and 1993 (Melvin et al. 1994). Goldin (1993) compiled records of 34 chick mortalities (30 on the Atlantic Coast and 4 on the Northern Great Plains) due to vehicles. Many biologists that monitor and manage piping plovers believe that many more chicks are killed by vehicles than are found and reported (Melvin et al. 1994). Beaches used by vehicles during nesting and brood-rearing periods generally have fewer breeding plovers than available nesting and feeding habitat can support. In contrast, plover abundance and productivity has increased on beaches where vehicle restrictions during chick-rearing periods have been combined with protection of nests from predators (Goldin 1993; S. Melvin, pers. comm., 1993).

**Corr. ID:** 15043      **Organization:** Southern Environmental Law Center  
**Comment ID:** 137462      **Organization Type:** Conservation/Preservation  
**Representative Quote:** Typical behaviors of piping plover chicks increase their vulnerability to vehicles. Chicks frequently move between the upper berm or foredune and feeding habitats in the wrack line and intertidal zone. These movements place chicks in the paths of vehicles driving along the berm or through the intertidal zone. Chicks stand in, walk, and run along tire ruts, and sometimes have difficulty crossing deep ruts or climbing out of them (Eddings et al. 1990, Strauss 1990, Howard et al. 1993). Chicks sometimes stand motionless or crouch as vehicles pass by, or do not move quickly enough to get out of the way (Tull 1984, Hoopes et al. 1992, Goldin 1993). Wire fencing placed around nests to deter predators (Rimmer and Deblinger 1990, Melvin et al. 1992) is ineffective in protecting chicks from vehicles because chicks typically leave the nest within a day after hatching and move extensively along the beach to feed (see Table 1).

Vehicles may also significantly degrade piping plover habitat or disrupt normal behavior patterns. They may harm or harass plovers by crushing wrack into the sand and making it unavailable as cover or a foraging substrate, by creating ruts that may trap or impede movements of chicks, and by preventing plovers from using habitat that is otherwise suitable (MacIvor 1990, Strauss 1990, Hoopes et al. 1992, Goldin 1993)."

**Corr. ID:** 15136      **Organization:** *Not Specified*  
**Comment ID:** 138476      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** According to your own resource management report from 2008, there was a 28 percent fledge rate last year. That is less than the years before the Consent Decree. There's no scientific reason for these statistics, but it can't be based on beach driving or human presence. If that were the case, there should be more fledged chicks with the new restrictions and closures. And there's not; there's less. The closures aren't working.

**Response:** Numbers of piping plover at the Seashore are too low on an annual basis and the magnitude and number of potential and actual human and natural risks to piping are too high to establish statistically clear within-year cause-and-effect relationships. Typical sample sizes necessary to allow for scientifically and statistically valid studies of reproductive performance in birds are 12 nesting pairs at a minimum and more typically exceed 20-30

pairs, which is not occurring at the Seashore. These low numbers lead to a situation where there is high degree of scientific uncertainty in the system which in turn makes it very difficult to manage biological resources.

Compounding this low sample size is the fact that when it comes to poor breeding performance of piping plover at the Seashore (which can include but not be limited to these: the unavailability of habitat due to recreational pressure, failure of Piping Plover to settle at the Seashore and establish territories, failure of piping plover pairs to build nests, failure of piping plover to hatch eggs and fledge young), it is very rare indeed to be able to establish conclusively and scientifically what natural and/or human variable may have been at the root cause of the failure. Rather, it is more typically the case that adults, eggs, and young simply disappear without a trace. Therefore, it is almost impossible to assign a particular poor reproductive outcome to a single environmental issue with assurance.

As discussed in the response to Concern ID 24019, species numbers at the Seashore have been trending downwards. The exact cause of this downward trend is not known, but human activity, including direct and indirect effects of ORVs, is considered to be one of the factors. The adverse effects of ORVs, and the additional people brought into remote areas by ORVs, on wildlife is amply documented in the literature cited in the DEIS. The DEIS correctly acknowledges the other factors that also adversely affect wildlife at the Seashore. None of the applicable laws impose a burden of proof on NPS to show direct causality of ORV impact on a species. Quite to the contrary, Executive Order 11644 and the NPS statutes and regulations generally require that the default be no ORV use, unless ORV routes can be designated consistent with the Executive Order, which states that trails shall be located in areas of the National Park System only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values (which include park wildlife). Part of the purpose of the ORV Management Plan/EIS is to manage ORV use/access in the Seashore to protect and preserve natural and cultural resources and natural processes to meet these requirements.

Regarding specific mortality events and/or disappearances of birds, nests and eggs from territories, NPS publishes information in its annual species reports regarding the potential disturbances to the species (weather, predation and human disturbance to name a few). Other than the rare case where chicks or adults are found dead in tire tracks or cases where predator signs are found near a failed nest, the majority of cases are necessarily categorized as “unknown” or “indeterminate” regarding the actual cause. Although these specific cases are unknown, what is known, and provided in the reports, are the types of disturbances that are occurring. For example, the 2009 piping plover report states that, “No hurricanes or tropical storms occurred during the breeding season. However, smaller localized events may have affected nesting. A very high new moon spring tide overwashed one nest on South Point and may have contributed to the loss of Brood 3a on Hatteras. The brood was foraging in the Small Salt Pond when the event occurred and was never observed afterwards.” In regards to human disturbance the report notes that, “Human disturbance, direct or indirect, can lead to the abandonment of nests or loss of chicks. Throughout the season, resource staff documented 192 pedestrian, eight ORV, 19 dog, three horse and three boat violations in the pre-nesting closures. The numbers are conservative since sites are not monitored continuously, weather erases tracks, and staff did not disturb an incubating pair or young in order to document disturbance. These numbers indicate violations to closures specifically containing nesting PIPLs or habitat protected for PIPLs.” While the NPS is not able to derive exact numbers of nest abandonment, egg or chick loss due to all of these factors, it is accurate to say they all play a role in why these losses occur.

Because of the low numbers of piping plover coupled with the inherent uncertainties surrounding piping plover reproductive performance, the NPS provides the required protection for this species from factors it can address, such as ORV use and human disturbance. This is consistent with NPS management policies provisions on listed species, which state the NPS will undertake active management programs to inventory, monitor, restore, and maintain listed species' habitats; control detrimental non-native species; control detrimental visitor access; and re-establish extirpated populations as necessary to maintain these species and the habitats on which they depend. (Section 4.4.2.3) In addition to NPS management policies, the NPS has a responsibility under the ESA to provide protection to the piping plover. Additionally, it is not required that an agency remedy all factors related to a problem in order to manage one factor. Thus, it is reasonable, and consistent with Executive Order 11644, for NPS to manage ORV use as provided in the Plan/EIS.

**Concern ID: 24022**

Concern Statement: Commenters stated that NPS provided information on the Seashore's website that the piping plover is endangered, when its status is threatened and felt this information was misleading. They further stated that the piping plover is reaching the threshold to be removed from the federally threatened list.

**Representative Quotes:**

**Corr. ID:** 237

**Organization:** NCBBA

**Comment ID:** 130523

**Organization Type:** Unaffiliated Individual

**Representative Quote:** My second point is that THE PIPING PLOVER POPULATION IS VERY NEARLY AT THE FEDERALLY MANDATED REMOVAL NUMBER OF 500 PAIR OF BIRDS. PIPING PLOVER WILL BE REMOVED FROM THE "THREATENED" LIST IN THE VERY NEAR FUTURE. So the Hatteras Island National Seashore (HINS) folks have developed a plan based on a "Threatened" not "Endangered" species that is about to be removed from the Threatened and Endangered list all together. What kind of sense does that make? OH, Yes they must be MONITORED for an additional five years but that is just that, MONITORED, nothing more.

**Corr. ID:** 13806

**Organization:** *Not Specified*

**Comment ID:** 139841

**Organization Type:** Unaffiliated Individual

**Representative Quote:** On the CAHA NPS website in the "Nature and Science" section there is a reference to the piping plover as "endangered" when in fact the bird is "threatened". Statements like this on the official NPS website are misleading to the general public.

**Response:** As stated in the DEIS (p. 185 and 202), plovers from the endangered Great Lakes population have been observed at the Seashore in fall and spring migration and during the wintering period. Plovers from the threatened Atlantic Coast population also use the Seashore during all seasons with some birds even overwintering on the Seashore. Text of page 185 of the DEIS states that there have been sightings of all three North American breeding populations at the Seashore. While the critical habitat rule for wintering piping plover (FR 62820) notes that the Great Plains population "possibly" use the Seashore, this population has not been documented (both the Great Lakes and Atlantic populations have been documented). To correct this, the following sentence has been removed from the DEIS (p. 185), "Band sightings indicate that plovers from all three North American breeding populations depend on Cape Hatteras during migration and/or the winter." This same correction will be made to page 202 (under Affected Environment, Piping Plover, Nonbreeding Population) and mention of the Great Plains population occurring at the Seashore will be removed.

NPS has responsibilities under other statutes, such as the NPS Organic Act, to protect piping plover and its habitat in addition to its responsibilities under the Endangered Species Act and the Migratory Bird Treaty Act. Managing the list of endangered and threatened species is a U.S. Fish and Wildlife Service responsibility, and until delisting occurs NPS must manage the species as listed. NPS does not expect a change in the listing status of the threatened Atlantic Coast population at the Seashore to substantially change the Seashore's management to protect the piping plover and its habitat. However, when desired conditions for the piping plover at the Seashore are achieved, and as new information relating to effective management measures becomes available, changes may be considered, consistent with NPS responsibilities under all the relevant statutes and policies.

**Concern ID: 24023**

Concern Statement: One commenter stated that since sea turtles only lay eggs every 3 to 5 years, any improvements being seen today should not be attributed to the consent decree.

**Representative Quotes:**

**Corr. ID:** 14774

**Organization:** *Not Specified*

**Comment ID:** 137802

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I have also learned from doing a little research that the turtles only come to shore to lay eggs every 3 to 5 years therefore any increase in turtle nesting during the years of the consent decree is indeed due to the policies in place before the consent decree.

**Response:** The number of nests laid by sea turtles are often highly variable from year to year due to a number of factors including both environmental and anthropogenic factors, some of which occur outside the nesting area (e.g. strandings and fishery impacts). These factors combined with a long age to sexual maturity (32-35 years) and a remigration interval (number of years between successive nesting migrations) of approximately 2-3 years (NMFS and USFWS 2008) indicate that successful conservation efforts implemented both at nesting beaches and outside nesting beaches may take several decades to yield detectable results on the nesting beaches (Hawkes et al. 2005). While recently implemented management policies, such as night driving restrictions under the consent decree, may help to increase nesting by reducing potential false crawls, given the variability of nesting numbers on an annual basis and the multiple factors that can influence those numbers, it would be difficult to conclusively attribute any near term increase or decrease in turtle nesting at Cape Hatteras National Seashore to recently implemented management changes, and the EIS does not attempt to do so.

**Concern ID: 24024**

**Concern Statement:** One commenter stated that the NPS has tampered with nests to manipulate the closures.

**Representative Quotes:**

**Corr. ID:** 846

**Organization:** *Not Specified*

**Comment ID:** 132661

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The National Park Service is ill-equipped and seriously negligent (according to the local's who live & work in this area). They have been caught tampering with nests to manipulate closures.

**Response:** NPS has no knowledge that this has occurred. No evidence has been provided to support the commenter's allegation that this has occurred.

**Concern ID: 24025**

**Concern Statement:** Commenters felt that based on existing data, closures in certain areas of the Seashore were not warranted. This included closures at Cape Point as data shows that chicks do not travel toward the ocean, but rather toward the dunes. They also felt that the north end of Ocracoke should not be closed as only four chicks have fledged from this area in the past 18 years.

**Representative Quotes:**

**Corr. ID:** 265

**Organization:** *Not Specified*

**Comment ID:** 130596

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The National Park has done a decent job helping these species. But neither you nor I are responsible for their fluctuating numbers. There are several major factors that cause these bird's survival numbers to go up and down. Storms and predation are by far, and with no argument, the two biggest factors. The Park's own data shows it is not from visitors walking or running over nests or chicks! The bird enclosures in the Cape Point area are necessary and I have personally always endorsed them. However, I spent the last two months reviewing piping plover nest hatchings at Cape Point. Over an eight-year period, all the data I reviewed showed that every chick hatched in an enclosure has traveled west towards the salt pond or lateral dune, never east towards the north beach or ocean! I know my birds and their activities very well after observing them for over 40 years. Perhaps that is why I'm presently working with Duke Energy studying avian patterns in the Pamlico Sound for the proposed wind energy project. Please look at that data very closely when making final decisions at Cape Point. There is no reason access to Cape Point should be denied when the area is being monitored by so many qualified Park biologists and the enclosures are properly in place.

**Corr. ID:** 15169

**Organization:** *Not Specified*

**Comment ID:** 139755

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Starting at the North end is the North Point of Ocracoke. Closing down this area completely to ORVs except for a quarter mile on either side of ramp 59 is just a shame. There has not been a piping plover nest there in the last ten years. As on Chart 200 -- piping plover nests -- no nests since -- when there was one in 1996, and only four chicks have fledged there in the last 18 years. That's kind of a big area to close down completely, for little gain.

**Response:** Regarding suggestions specific to Cape Point, it is very difficult to craft a local management plan based on the behavior of a few birds over a short period. Rather, it is more effective to manage birds in a way that uses knowledge of local conditions and past performance at a particular site. As documented in the Seashore's annual reports, in recent years piping plover chicks have routinely moved east of their nest sites to forage in the ephemeral run-off channel from the small pond and there have been documented occasions in which chicks have foraged on the eastern ocean shoreline.

A reality at the Seashore is that conditions often change at short notice. For example, piping plover chicks at Cape Point could at any time need to access areas to the east in the event that their favored micro-sites, such as the salt pond, become physically unavailable or become host to a predator. Therefore, species management cannot be not based solely upon the behavior of a few individual birds over a short period of time and at one particular location. Rather, management must be adaptive and consistent with biological requirements and physical realities for each species such that it is responsive to changing conditions. For example fencing chicks away from and/or allowing ORVs while chicks are present at or near the east side of Cape Point or in the vicinity of the small or large salt pond would essentially reduce their chances of survival by making it more difficult or impossible for plovers to forage on the high quality food at these sites.

While alternative F, as modified, allows for ORV access to Cape Point (see Concern ID 24198), resource closures would still apply to this area as needed. Because of its consistent use as a nesting area, Cape Point was changed to vehicle-free year-round from about 0.3 miles west of the Point to milepost 47 and other areas that are open could be closed if breeding/nesting activities occur.

Because of the dynamic nature of the shoreline at the points and spits, especially at Hatteras Inlet and the North Point of Ocracoke, these areas may or may not attract piping plover breeding pairs in any given year. However, the areas that were historically occupied by nesting pairs and still provide high quality potential habitat are the sites that are most likely to become occupied again in the future given a growing population and assuming that nesting habitat is still available. Similarly, the North Point of Ocracoke and specifically ramp 59 is also very high quality potential habitat and while it may be underused at current population levels, it is essential that these areas be protected and maintained as they could be colonized in the future. Also, Seashore resource management staff have also concluded that morphological changes to the north end of Ocracoke, specifically accretion and increased tidal flats, is creating enhanced habitat for piping plover reproduction. This has been supported by increased observation of piping plovers in the area in the past few years, including a piping plover nest that occurred there in 2010.

Based on these regulations and what is known about the potential for habitat, the North Point of Ocracoke would be designated as vehicle free year-round under alternative F, and open to pedestrian access.

In general, the closures at the inlets and spits were examined and under new alternative F a decision was made to have many of the points and spits open to pedestrian access, but vehicle free either seasonally for the protection of nesting birds or year-round in recognition of the additional value of these areas to migrating and wintering shorebirds as further discussed under Concern ID 24198.

### ***AE11000 - Affected Environment: State-listed and Special Status Species***

#### **Concern ID: 24026**

**Concern Statement:** Commenters stated that data for American oystercatcher shows that human actions account for only 3% of disturbance and management should focus on factors that make up the majority of the disturbance such as predation and weather.

#### ***Representative Quotes:***

**Corr. ID:** 15236

**Organization:** Not Specified

**Comment ID:** 138861

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The existing policies may be reviewed in the future. To look at an example, an American oystercatcher nest failure statistics from the National Park Service indicate a mammalian predation causes 50 percent, or 54 percent, of nest failures; storms and Lunar Tides, 29 percent; nest abandonment, 6 percent; avian predation, 5 percent; ghost crab predation, 3 percent. Finally, human interference, 3 percent total nest failures.

Shouldn't the focus be on the 97 percent, and not the 3 percent.

**Response:**

Nest failure statistics only include direct sources of nest failure and do not include any indirect effects from human disturbance. Regarding the direct sources of failure, it is important to also be aware that for only 50% of the nest failures are the actual reason "source" known. Therefore, when it is reported that 3-4% of oystercatcher nest failure is attributable to direct human activities from such thing as physical destruction of nests and/or eggs, this does not include any indirect effects by humans upon oystercatchers.

The Seashore is focusing on minimizing factors it has control over (i.e. disturbance and predation) as opposed to factors it has no control over (i.e. weather events) in order to maximize American oystercatcher productivity. Predator populations and the pressure they exert on other species are themselves dependent upon and enhanced to some degree by recreation and other human activities. Similarly, some portion of observed nest abandonment and predation is likely contributed to by recreation and other human activity at the Seashore. So, it is not correct to ascribe just four percent of total American oystercatcher nest failures to human interference, when some significant percent of loss to predators and nest abandonment is likely to be directly and/or indirectly linked to recreation and human activities. In any event, management of recreation must be consistent with the best available information regarding how to minimize the negative impacts both direct and indirect from recreation and other human activities to all protected species at the Seashore.

As discussed above under Concern ID 24020, none of the applicable laws impose a burden of proof on NPS to show direct causality of ORV impacts on a species. ORV use is to be allowed only if NPS can determine that off-road vehicle use on the routes to be designated will not adversely affect the natural, aesthetic, or scenic values of the Seashore (including listed and non-listed park wildlife).

**Concern ID: 24027**

**Concern Statement:** Commenters did not agree that there has been a decline in beach nesting species at the Seashore. Some commenters stated that ORV driving has contributed to the decline of bird species and that the consent decree has addressed this as populations have remained stable or have increased. Others felt that ORVs were not the cause and other factors, such as feral cats, should be considered.

**Representative Quotes:**

**Corr. ID:** 726

**Organization:** *Not Specified*

**Comment ID:** 133130

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree that there has been "a decline in most beach nesting bird populations on the Seashore since the 1990's." There is no data to support this vague generalization.

**Corr. ID:** 11639

**Organization:** *Not Specified*

**Comment ID:** 135372

**Organization Type:** Unaffiliated Individual

**Representative Quote:** A recent change in management at the Seashore demonstrates that, given a chance, wildlife can rebound. Under a new science-based management plan, the number of nests laid by colonial waterbirds more than doubled in 2009 compared to 2007. And the two years under the new plan have seen a record 112 sea turtle nests in 2008 and 103 nests in 2009, compared to 82 in the 2007 season prior to the implementation of the plan.

**Corr. ID:** 15043

**Organization:** Southern Environmental Law Center

**Comment ID:** 137466

**Organization Type:** Conservation/Preservation

**Representative Quote:** The consent decree has governed management of ORV use as it affects wildlife on the Seashore for two breeding seasons (2008, 2009) and the beginning of the 2010 breeding season. All species or species groups targeted by the management measures in the consent decree remained stable or increased during the two breeding seasons under the consent decree. Piping plovers increased to 11 pairs in 2008 and 9 pairs in 2009 from 6 pairs in 2006 and 2007, the highest number of pairs since 1997. The number of pairs of American oystercatcher on Seashore beaches declined from 35 in 2000 to 21 in 2006 and remained stable through 2009. Fledged oystercatcher chicks increased to 17 in 2008 and 13 in 2009. In 2009, the number of least tern nests more

nearly tripled to 577, compared to 194 nests in 2007. Black skimmers also nested on the Seashore's beaches for the first time in three years, with 40 nesting pairs. The number of common tern nests almost doubled with a minimum of 31 nests laid in 2009, compared to 18 nests in 2007. Sea turtles had a record nesting year on the Seashore in 2008 with 112 nests followed by 104 nests in 2009 and the number of nests exceeded false crawls both years.

**Response:** Although some increases in species numbers (but not for American oystercatcher, which have been flat for the last 4 years) has occurred over the last few years under the consent decree, it cannot necessarily be ascribed to or disassociated from any particular change in management. The number of nesting pairs (especially for piping plover) necessary to support that conclusion is simply too few to point conclusively to one or another aspect of management. When all of the species in question are looked at in ten year increments, they are all presently well below where they have been in recent years and in the case of piping plover, well below the established minimum for achieving regional sustainability. This is discussed further under the response to Concern ID 24020. Furthermore, piping plover, American oystercatcher and especially colonial waterbirds can colonize habitats due to disturbance at other nesting areas that can be many miles away. Therefore, it is possible that some of the flux in numbers observed at the Seashore may be due to events at nesting areas far removed from the Seashore. NPS nevertheless is required to conserve and maintain all of these species within the Seashore.

### ***AE12000 - Affected Environment: Wildlife And Wildlife Habitat***

#### **Concern ID: 24028**

**Concern Statement:** One commenter noted that ORVs have the potential to spread invasive plants at the Seashore.

#### ***Representative Quotes:***

**Corr. ID:** 12406

**Organization:** Oklahoma Native Plant Society

**Comment ID:** 137838

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I can think of no better way to spread invasive plants on a National Seashore than to allow ORV access to it. In addition to what they bring in, they can go anywhere, gathering plant parts and distributing those parts over the whole area.

**Response:** The potential for ORV to introduce non-native plants at the Seashore is discussed in the DEIS (p. 33) which concludes that because only a small number of non-native species can live in the salty, windy, dynamic environment of the Seashore, there is a low potential for ORV to promote non-native species. The following sentences have been added to the Issues Considered but Dismissed from Further Analysis section of the FEIS to further clarify the low potential for ORV to introduce or promote non-native plants at the Seashore:

“Additionally, ORVs are prohibited from driving on vegetation at the Seashore. Therefore the potential for spreading plants from one area of the Seashore to another by driving on Seashore vegetation is also very low.”

### ***AE21000 - Affected Environment: Socioeconomics***

#### **Concern ID: 24031**

**Concern Statement:** Commenters stated that the economy in the Seashore is currently being impacted by restrictions on ORV use. Commenters provided statistics of the current economic situation they felt should be considered in the FEIS including unemployment rates, reductions in businesses, losses in tax revenues, and a decline in building permits.

**Representative Quotes:**

**Corr. ID:** 3874                      **Organization:** Outer Banks Chamber of Commerce

**Comment ID:** 139461              **Organization Type:** Unaffiliated Individual

**Representative Quote:** In September 2009, (the first full year under the Consent Decree) the beginning of the prime fall fishing season - Dare County as a whole experienced an unemployment rate of 6.8 percent, one of the lowest in the state, but when the North Carolina Division of Labor Marketing broke the unemployment down to zip codes it showed that Hatteras Island's villages had extraordinary unemployment. The island as a whole had 12.8 percent unemployment. When broken down to the villages, Salvo was at 28 percent; Buxton 16.5 percent; and Rodanthe was 12.4. According to data provided by the Dare County Social Services, in 2009, the first full year under the Consent Decree, the Hatteras Island increase in individuals applying for food stamps was 81.6 percent over 2008. The remainder of Dare [north of Oregon Inlet] 56.6 percent, and the countywide 59.3 percent. In October 2009, Cape Hatteras United Methodist Men's Emergency Assistance and Food Pantry reported that requests for food and other assistance in the seashore villages were continuing to rise. In 2008, the group paid out \$56,000 the entire year to help with utility bills, rent, etc.. but in 2009, the amount was surpassed before the end of October.

**Corr. ID:** 14888                      **Organization:** NCBBA

**Comment ID:** 136465              **Organization Type:** Recreational Groups

**Representative Quote:** Without sensible beach access, there is no reason for tourists to come here. Since 2008, with the increased closures, successful businesses that are older than the park itself have started to fail. All walks of business are reporting that staffs have been reduced by 25 to 50% and the same for their sales figures. Restaurants are often half full in summer and finding a place to stay is now easy. The people who are still working are earning less. Charity organizations are reporting a tremendous increase in the number of families needing their assistance, doubling every year since the Consent Decree took effect. Church donations have decreased. Area banks are reporting that businesses have exhausted most of their lines of credit trying to stay afloat. Dare County now has the highest rate of unemployment in the state of North Carolina.

**Corr. ID:** 14896                      **Organization:** *Not Specified*

**Comment ID:** 136399              **Organization Type:** Unaffiliated Individual

**Representative Quote:** At the present time the OBX economy is suffering. During the 1st quarter of 2007 building permits totaled \$30,000,000 see The Virginian Pilot March 30, 2008. On May 6, 2010, The Coastland Times gave the total building permits for the first 4 months of 2010 as \$5,15,535.18 This represents a decline of over 83%. Our unemployment has been among the highest in the state; often twice the state's average.

**Corr. ID:** 15063                      **Organization:** Rodanthe-Waves-Salvo Civic Association

**Comment ID:** 138970              **Organization Type:** Civic Groups

**Representative Quote:** In 2009, Ramp 23 was closed from June 1 through August 3 1 for a colonial waterbird nesting area. No access at the ramp was available for beach walkers or drivers. This closure may explain why the unemployment rate in Salvo in September 2009 was 28 percent, while Dare County's as a whole was 6.8 percent. In 2010, Ramp 23 was closed for shorebird breeding activity on May 7, three weeks sooner than in 2009. This deals a second, and potentially larger, economic hardship to Hatteras Island's northern villages.

**Corr. ID:** 15096                      **Organization:** *Not Specified*

**Comment ID:** 139559              **Organization Type:** Unaffiliated Individual

**Representative Quote:** You cannot blame the 28 percent unemployment in Salvo and Rodanthe on the economy and for the whole of Dare County at 6 percent. Please poll Hatteras Island. Now do not use aggregate figures of Dare County to base Alternative F.

**Corr. ID:** 15240

**Organization:** *Not Specified*

**Comment ID:** 138742

**Organization Type:** Unaffiliated Individual

**Representative Quote:** You heard last night from an ice supplier; he gave you statistics that his ice sales on Hatteras Island changed by nearly a 100 percent between the date closures came into effect and the date that the beaches were reopened. Again, a significant impact. In Dare County Food Stamp allocations on Hatteras Island, if you look county wide, they're up around 59 percent. On Hatteras Island, they're up 81.6 percent. The county north of Oregon Inlet, they're only up 56.6 percent. Again, a very significant negative impact on Hatteras Island. If you go to the island and look at the local community and talk to the people down there, the Cape Hatteras United Methodist Church men's assistance fund, in 2008 they spent about \$56,000. By October of 2009, in that year, they had used their whole \$56,000 allotment. In Hyde County, Ocracoke has about 50 percent of the tax base, and they have only about 10 percent of the people. The average weekly -- the average wage in Hyde County is about \$22,000, again, about a hundred dollars more than the poverty level. Small economic impacts on Ocracoke have significant economic impacts throughout the county. These are but a few of the impacts that you'll see.

**Response:** The Affected Environment section (Chapter 3 of the DEIS) presents an overview of the socioeconomic environment in the area without specific reference to different alternatives, while the Chapter 4 presents estimates of the impacts of the alternatives on the economy. The data discussed in Chapter 3 includes county-level unemployment rates in Dare County, Hyde County and the State of North Carolina (see Figure 31).

Commenters requested that the FEIS present unemployment by zip code. Data provided by the Employment Security Commission of North Carolina's Labor Market Information Division regarding unemployment levels by zip code relies on the ratio of unemployment by zip code to unemployment within the entire county in the year 2000. This ratio, based on data from the 2000 Census, is multiplied by the current county unemployment rate to create the zip code level unemployment figures. While the ratio was high for some zip codes, cited by the commenters, other zip codes on Hatteras, such as Waves, have 0% unemployment according to these data. Data from 2000 are too out-of-date to be relevant for the analysis. Differences in unemployment rates in the year 2000 are not the result of ORV management under the no action plans, implemented beginning in 2007. Text was added to the Socioeconomic Impact section of Chapter 3 about the 2000 unemployment rates by zip code and the graph of current county-level unemployment was updated with the latest data.

Differences in tax revenue are difficult to compare across years because the county changes what items are taxable and there can also be changes in enforcement. However, assuming all of Dare County follows the same rules, we can compare the percent of tax revenue generated in the Seashore villages compared to Dare County as a whole over time to see if the months and years during which beach driving restrictions are in place disproportionately affect the Seashore villages. As discussed in the Socioeconomic Impacts section of Chapter 3, the monthly and yearly trends do not suggest disproportionate impacts on the Seashore villages due to the closures.

Data from the business survey (RTI 2010c) does not identify any businesses that had closed or reports of businesses that had closed. A number of businesses had experienced a decline in revenue between 2007 and 2008 or 2009, some of which the businesses attributed to the ramp closures.

The article from the Virginian Pilot referenced in a comment discussed the impact of the national economic recession on Dare County. Building permits for Dare County in January and February declined from \$30 million in 2007 to \$27.5 million in 2008. The article discussed how conditions in Dare County were similar to conditions across the nation. The Coastland Times issue referenced in the same comment contains a "Dare County Building Permit Report (Summary) January 2010" which lists the building permits issued in the county to date in 2010. It does not discuss why the number of permits is up (221 to date for 2010; 176 to date for 2009) and the value is down (\$5,315,535.18 to date for 2010; \$15,019,612.79 to date for 2009). Overall, the data suggest that the value of building permits declined between 2007 and 2009, as did housing sales and the median sales price of new houses.

Generally, building permits are dependent on many factors unrelated to beach closures such as access to credit, personal income, government incentives, and available land. The trends for Dare County are similar to trends around the nation. For this reason, we do not include data on building permits in the DEIS or FEIS. Text was added to the Socioeconomic Impact section in Chapter 3 of the FEIS about the 2000 unemployment rates by zip code and the graph of current county-level unemployment was updated with the latest data.

The economy all over North Carolina has been affected by the national economic recession. Business closures, loss of revenue, lack of credit from the financial markets, declining building permits and an increase in requests for public assistance are state-wide and nation-wide trends. For example, the following quote comes from The Durham News out of Durham, North Carolina: "The food bank saw its requests for food rise last year by 30 to 60 percent in the 34 counties it serves. The region mirrors national and statewide trends. More than one in seven American households struggled to put enough food on the table in 2008, the highest rate since tracking began in 1995, according to a U.S. Department of Agriculture report. That's about 49 million people in the country".  
<http://www.thedurhamnews.com/2010/04/11/201466/food-programs-struggle-to-keep.html>

As discussed in the DEIS, it is difficult to identify the proportion of the impact on the economies of Dare and Hyde counties that are due to national economic trends, the cost of gasoline in the summer of 2008 and the impacts of ramp closures.

In Chapter 4 of the DEIS, the range of impacts for each alternative was developed using several sources. One of the sources was data gathered during a survey of local businesses. The business survey methodology and results are described under "Assumptions and Methodology" in the Socioeconomic Impacts section of Chapter 4 of the FEIS and beginning on page 566 of the DEIS. Information about the business survey methodology was added to the Socioeconomic Resources section of Chapter 3 of the FEIS. The data gathered from local businesses forms one set of information used to generate the range of impacts.

### ***AE22000 - Affected Environment: Visitor Use***

#### **Concern ID: 24032**

**Concern Statement:** Commenters disagreed with the NPS's description of the evolution of recreational uses in the DEIS, specifically stating that recreational fishing has been practiced for more than 50 years.

#### ***Representative Quotes:***

**Corr. ID:** 726

**Organization:** *Not Specified*

**Comment ID:** 133129

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the characterization that ORV for recreational purposes only resulted in the last half century due to increased accessibility to the barrier islands; that generalization can be made for beach recreation as a whole.

**Corr. ID:** 14971

**Organization:** *Not Specified*

**Comment ID:** 139000

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The NPS also argues that visitor use patterns have changed. For example, the NPS states that recreational fishing has only been practiced for 50 years when it "almost completely supplanted commercial fishing" and that neither recreational or commercial fishing are integral to the "continuing cultural identity of any community. " This is categorically untrue. As the following excerpt from a letter from Lindsay Warren to Secretary of the Interior Harold Ickes clearly demonstrates, recreational fishing and tourism were major factors as early as 1935. Furthermore, the beach hauling method of commercial fishing was practiced as early as 1930. (Footnote 26)

**Response:** The DEIS does not state that no recreational or commercial fishing occurred at the Seashore in the period preceding the last 50 years. The discussion on DEIS p. 35 of ethnographic resources notes that the North Carolina Department of Cultural Resources (NCDRC) found that the Cape Hatteras Preservation Alliance (CHAPA) request to the NCDRC focused on activities occurring during the last 50 years. See the response to Concern ID 24160 for additional information on ethnographic resources and the Traditional Cultural Properties (TCP) determination.

The DEIS Chapter 3 section on Visitor Access and Off-road Vehicle Use (DEIS p. 261) contains the sentence "With the paving of NC-12, the completion of the Bonner Bridge connecting Bodie and Hatteras islands, and the introduction of the NCDOT Ferry system to Ocracoke Island, visitor access to the islands resulted in increased vehicle use on beaches for recreational purposes."

To clarify in the FEIS that recreation in general increased with improved road, bridge and ferry access to the islands, the sentence has been re-written to read: "With the paving of NC-12, the completion of the Bonner Bridge

connecting Bodie and Hatteras islands, and the introduction of the NCDOT Ferry system to Ocracoke Island, improved visitor access to the islands resulted in increased recreational use of the Seashore in general as well as increased vehicle use on beaches for recreational purposes."

**Concern ID: 24033**

**Concern Statement:** Commenters felt that the DEIS did not take into account the variety of watersports that occur at the Seashore, and requested that information provided by these groups previously be incorporated into the FEIS. Commenters also stated that kiteboarding is currently banned from bird closures, and didn't feel this should be the case.

**Representative Quotes:**

**Corr. ID:** 7036

**Organization:** OBPA

**Comment ID:** 136990

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Kiteboarding has been banned within the boundaries of bird closures and SMA's, for dubious reasons. Kites are not predators to plovers, and the species will over time realize this fact and adapt accordingly. How long before surfing and windsurfing are also banned for the same nonexistent reasoning?

**Corr. ID:** 14529

**Organization:** WSIA

**Comment ID:** 134564

**Organization Type:** Unaffiliated Individual

**Representative Quote:** There was a very small description of the fishing community and the local fishing tournaments, but there was no description of the active watersports use, watersports tournaments, past and current world champions who frequent the area, or detailed map of popular areas of interest for each sport which was provided to the NPS during the Reg Neg process. Up until this point, we were very optimistic about the Reg Neg process, as we felt that this process would provide a very beneficial platform, of which qualified experts in their field could deliver invaluable information to the NPS on how the park is actually used on a daily basis in each of the user groups.

**Corr. ID:** 15083

**Organization:** Surf Rider Foundation - Outer Banks Chapter

**Comment ID:** 138399

**Organization Type:** Recreational Groups

**Representative Quote:** We'd

also like to encourage you, moving forward, when you are assessing this information, to not discount surfers as a user group, since aboard here in some of these meetings that nine-time world champion, Kelly Slater, has called it his neck of his pipeline, as far as his formative years are concerned. He's groomed countless surfers growing up. For his competitors, more importantly and from a lifestyle prospective, Cape Hatteras stands as the dominant, most enjoyable surfing spot on the whole east coast, and one of the few that is recognized around the world.

**Response:** All information provided to the negotiated rulemaking committee, including the materials referred to by commenter, was considered in the development of the DEIS. The DEIS indicates in several places (e.g. p. 259, 260) that visitors pursue watersports activities such as boating, fishing, kayaking, swimming, surfing, kiteboarding, and wind surfing at the Seashore. The following additional information has been added to the FEIS in Chapter 3, Recreational Opportunities and Use at Cape Hatteras National Seashore section, after the first sentence:

Materials submitted to the negotiated rulemaking committee by Cape Hatteras Business Allies mentioned the following recreational activities sought by visitors: birdwatching/wildlife viewing, fishing, horseback riding, shelling, sea glass, collecting, swimming, watersports (kayaking, kite boarding, paddle boarding, skim boarding, surfing and windsurfing). (Cape Hatteras Business Allies 2009. Draft Recreational Overview and Maps. pp. 5-8 of Addendum 4 in Negotiated Rulemaking Advisory Committee for Off-Road Vehicle management at Cape Hatteras National Seashore; Final Report of the Proceedings submitted to the National Park Service on behalf of the Committee by Patrick Field, Robert Fisher, and Ona Ferguson, Committee Facilitators, March 20, 2009. <http://parkplanning.nps.gov/document.cfm?parkID=358&projectID=10641&documentID=26286>)

A reference to these materials mentioned by the commenter has been added to the References section of the FEIS. Detailed descriptions of all the recreational activities pursued at the Seashore is not provided in the DEIS or FEIS

because it is not relevant; managing for each specific recreational activity is outside the scope of the plan and is not attempted.

Kiteboarding is managed differently than surfing and windsurfing because, unlike surfboards and windsurfing sails, the kite of a kiteboarder may fly overhead inside a closure or cast a shadow on the ground that is perceived by nesting shorebirds as a predator. This can result in flushing or physiological alarm reactions that change bird behavior. Inexperienced kiteboarders may be unable to control the kite sufficiently to prevent it from landing inside closures, resulting in disturbance to nesting birds and possible damage to nests and eggs.

**Concern ID: 24034**

**Concern Statement:** Commenters requested that the NPS provide data on visitor use conflicts/incidents. They further stated that they believed that there were no visitor conflicts to base management decisions on and that some statements in the DEIS were speculative.

**Representative Quotes:**

**Corr. ID:** 2748

**Organization:** *Not Specified*

**Comment ID:** 131569

**Organization Type:** Unaffiliated Individual

**Representative Quote:** "Restricting ORVs from areas of the Seashore could enhance the recreational experience for some and diminish the experience for others. Visitor experience could be affected by conflicts between motorized and non-motorized recreation users." pg. 5, part II. I disagree with this statement because it is based on speculation and not facts.

**Corr. ID:** 3051

**Organization:** *Not Specified*

**Comment ID:** 134685

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the Alternative F restrictions as those are the most stringent restrictions available. NPS stated: "Visitor experience could be affected by conflicts between motorized and non-motorized recreation users.:(pg. vi) - Why has NPS never made public a list of reported incidents? In the last 10 years, there has only been 1 minor incident involving a stuck vehicle and a pedestrian was disclosed. the driver was not blamed by those involved, nor was he charged.

**Response:** The presence of visitor conflicts has been documented in many public comments received on the Interim Strategy and on this Plan/EIS. The Seashore also receives letters from visitors complaining about the adverse effects of ORVs on their experience at the Seashore. Some members of the negotiated rulemaking committee represented members of the public that experience the presence of vehicles driving on the beach as a conflict with their experience of the Seashore. The Seashore does not compile data on numbers of these complaints or incidents of visitor conflict, nor is a quantitative analysis required to manage or minimize it under Executive Orders 11644 and 11989. As required by these Executive Orders, the Seashore is designating routes to "minimize visitor conflict."

**Concern ID: 24035**

**Concern Statement:** One commenter stated that NPS has not taken action to open sound access points after storms.

**Representative Quotes:**

**Corr. ID:** 14761

**Organization:** *Not Specified*

**Comment ID:** 135488

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In regard to the park area west of the ferry dock...numerous sound access points were lost during past storms but the CHNS has taken no action to reopen or establish access points to the sound.

**Response:** NPS assumes commenter is referring to the Hatteras Ferry dock and therefore the back side of Hatteras Spit behind the Pole Road. Over the past several years the Seashore has tried to provide ORV access to the back side of Hatteras spit whenever it is not in conflict with safety, bird nesting or foraging, and it would not cause additional damage to the vegetation and general ecological attributes of the area. Some of this area is very narrow with a small strip of sand that is subject to flooding at high tide unless one drives on the vegetation, including wetland vegetation, that bounds it on the land side. Because it is problematic to access the Sound from Pole Road at other points,

alternative F provides for ORV access to the Sound behind the Coast Guard Station, at Cable Crossing and at Spur Road.

**Concern ID: 24036**

Concern Statement: Commenters stated that the absence of vehicles on the beach would create safety issues, and provided examples of where they felt the presence of ORVs has been beneficial from a safety standpoint.

**Representative Quotes:**

**Corr. ID:** 11032

**Organization:** *Not Specified*

**Comment ID:** 136897

**Organization Type:** Unaffiliated Individual

**Representative Quote:** A Terrible Tragedy happened May 1st in Hatteras Inlet, within sight of the Beach, if only someone was there to see it go down. Well folks no one was there to see it because of the parties listed above..And massive Draconian Beach closures, where we can't even see Hatteras Inlet from what little Beach we have left off of RAMP 55. I will not go into details as I will leave that to the professionals here is the article.

[http://islandfreepress.org/2010Archives/05.02.2010-](http://islandfreepress.org/2010Archives/05.02.2010-OnEPersonDiesWhenBoatCapsizesInHatterasInletButFiveAreRescued.html)

[OnEPersonDiesWhenBoatCapsizesInHatterasInletButFiveAreRescued.html](http://islandfreepress.org/2010Archives/05.02.2010-OnEPersonDiesWhenBoatCapsizesInHatterasInletButFiveAreRescued.html)

What I will state is the Opinion of mine and a growing number of folks that live on this Island. On a hard SW wind Hatteras Inlet Beach's would have been full of Beach Fisher People Fishing for Drum, if it were not for all the Folks listed above. A Tragedy may (could, would, should insert any of your favorite non answers to our questions) have been avoided. If ( there's another one) if the Beach's were open, someone could have called in the Overturning of the TIDERUNNER, and a mans life could and should have been saved.

**Corr. ID:** 13352

**Organization:** NCBBA, OBPA, CHAC

**Comment ID:** 135555

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Current closures under the consent decree have been a direct cause of the loss of human life. With no visitors on the beach in the areas of the spits, a safety factor for the commercial and recreational boaters has been removed. Problems seen by beachgoers are reported to the US Coast Guard and rescue efforts implemented within minutes instead of hours after the incident.

**Response:** The purpose of the plan is to develop regulations and processes that carefully manage ORV use/access in the Seashore to protect natural and cultural resources and natural processes, to provide a variety of visitor use experiences while minimizing conflicts among various users, and to promote the safety of all visitors. The decision to allow or not allow ORV use on certain beaches must be based on resource protection and beach visitor use (including beach visitor safety), which are all known conditions or variables that can be identified and considered. While it is possible that under certain circumstances the presence of more potential witnesses might help those involved in certain offshore incidents or accidents, the governing laws and regulations do not allow NPS to make its decisions based on these sorts of infrequent and speculative scenarios. Also, after review of public comments the NPS has modified alternative F to allow for increased pedestrian access to spits and points, with many of these areas open to ORV use year-round or seasonally.

**Concern ID: 24037**

Concern Statement: Commenters asked for a greater balance and emphasis in the FEIS on pedestrian use and felt this use was being overshadowed in this process. They felt that the decline of pedestrian use was due to an increase in ORVs on beaches, which does not provide for adequate areas for a non-ORV experience. They also noted safety concerns related to ORVs and pedestrians using the same areas.

**Representative Quotes:**

**Corr. ID:** 290                      **Organization:** Audubon supporter

**Comment ID:** 130628           **Organization Type:** Unaffiliated Individual

**Representative Quote:** Under the National Park Service's preferred plan, Alternative F, ORVs would be prohibited year round on only 16 of the 68 total miles of Seashore beach. This does not represent a fair balance for other users and wildlife. If ORV use is allowed within the park, at least half of the beach should be available year round for non-ORV users and wildlife. Combined with more walkways and better access facilities, this approach would provide balanced access for all visitors. Pedestrians and families could then more safely enjoy the Seashore, and wildlife could have a chance to rebound to its traditional numbers and diversity within the park.

**Corr. ID:** 246

**Organization:** *Not Specified*

**Comment ID:** 130540

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I am pleased that the use of ORV's on Hatteras Island is being evaluated, but find that the concerns of ORV beach users, and environmental concerns seem to be overshadowing those of users who choose not to drive on the beach (pedestrian users).

This is probably due to the fact that there are dedicated and effective organizations which promote ORV use on beaches and there are also equally effective organizations dedicated to environmental protection. There does not seem to be a similarly effective organization to promote the needs of non-ORV users.

This could be because pedestrian beach users have an expectation that reasonable beach use does not ordinarily include ORV use. Because of this expectation, the beach users who prefer limited ORV use are not organized in the same manner as pro-ORV groups or environmental groups.

Consequently, non-ORV beach users' interests seem to be lowest on the priority list with regard to this issue. In fact, this group could very easily be a majority of users who are unfortunately at this point a silent one. While it may be true that this is a less organized group, that fact does not diminish the importance of equal enjoyment of the beaches for pedestrian users, especially those which are part of the National Park system.

**Corr. ID:** 2877

**Organization:** *Not Specified*

**Comment ID:** 132811

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I have many safety concerns involving pedestrians and ORVs. So far this season in Florida one pedestrian, a child, was killed by a vehicle on the beach (traveling at the appropriate speed) and another seriously injured. By having separate areas, pedestrians can avoid the ORV areas and there won't be as many concerns for safety.

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 139238

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Narrow beaches with more vehicles make pedestrian access less appealing. Incidents of recreational conflicts on these beaches are less because visitors seeking solitude and a non-ORV experience don't frequent these beaches. This has created a change in the demographics of visitors that come to CHNS. A National Seashore that promoted National Park values would attract visitors that would benefit and enjoy a non-ORV experience. The NPS has encouraged ORV access by not having an ORV plan for many years. ORV organizations have formed because of this and created unrealistic expectations for ORV use in a National Seashore.

**Corr. ID:** 14940

**Organization:** *Not Specified*

**Comment ID:** 137072

**Organization Type:** Unaffiliated Individual

**Representative Quote:** There are many grave concerns about your proposed Alternative F and they are as follows:

-Safety of pedestrians will be compromised; These are just a few examples: (1) On March 22,2010, a 4 year old child was run over and killed by a beach driver in Daytona Beach after the child ran in front of the car and the driver stepped on the gas instead of the brake pedal. The driver was traveling the posted speed limit of 10 mph and child was holding his mother's hand when the accident took place. Children and motor vehicles on the beach is a dangerous combination. If it happened there, it could happen here.

(2) In 2005 an ORV driving recklessly on the beach in Ocracoke (CHNS) flipped over and killed a passenger, a 17 year old German exchange student.

(3) A child was struck by an ORV on the Avon beach-front(CHNS) this past year and fortunately not seriously injured.

(4) In 2003, two teenagers were killed on Coquina Beach (CHNS) when they were speeding and flipped their jeep.

(5) There have been countless citations issued for speeding and reckless driving in the CHNS over the years resulting in many convictions in Federal Court.

**Response:** This plan provides a variety of recreational uses for Seashore visitors. As detailed on page 527 of the DEIS, the NPS believes that the enabling legislation of the park, as well as past planning documents, allows for ORV access, "within the context of preserving the cultural resources and the flora, fauna, and natural physiographic conditions, while providing for appropriate recreational use and public access to the Oceanside and soundside shores in a manner that will minimize visitor conflict, enhance visitor safety, and preserve Seashore resources." As stated above, the NPS believes that the revised range of alternatives accounts for the variety of visitor uses at the Seashore, without emphasizing one use over another.

Concerns regarding the level of pedestrian access provided in the DEIS were considered and as a result, alternative F has been modified to provide additional vehicle-free areas to provide for a greater variety of ways to access the beach for all visitors and address visitor safety issues raised by the public. Alternative F, as modified, provides 26.4 miles of the Seashore that are vehicle-free year-round and 27.9 miles of Seashore that are open to ORV year-round, with 12.7 miles that are seasonally designated as vehicle free at least six month per year (i.e., open to ORV use less than six months per year).

**Concern ID: 24038**

**Concern Statement:** Commenters requested that further analysis be completed on the number of fishing licenses issued in the State of North Carolina. They felt these data would show the adverse impacts of the consent decree on visitor use.

**Representative Quotes:**

**Corr. ID:** 14722

**Organization:** OBPA

**Comment ID:** 133636

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The data on recreational fishing fails to draw some obvious conclusions. Table 46 shows 519,000 participants for 2008 in the state. A comparison of that total to the total for 2007 would provide the context to understand the next chart. Table 47 shows a drop in Dare county license sales of over 10,500, or 10% from 2007 (93225) to 2008 (82635). This drop would need to be compared to the overall state recreational fishing participants, both in state and out of state, as in Table 46 for proper context as to the effects of the consent decree. If that drop isn't greater than or equal to 10% then you have evidence of the effect of the consent decree's harm. I request a more valid analysis of the effect on fishing license sales (a proxy for paying visitors) for the past three years, the 2009 data must be available as the license process is performed on line.

**Response:** The NPS has considered this concern and determined that there are multiple variables that impact fishing licenses outside of the potential impact from the consent decree and for this reason, it was not used as a tool for the impact analysis. Because the Coastal Recreational Fishing License has only been a requirement since 2007, there is really no long term data from which to draw any conclusion. These tables were included in the DEIS to provide a baseline for the types and level of expenditures that occur at the Seashore and across the state related to recreational fishing and to provide the reader with a picture of the activity at the Seashore. This information was provided not only for recreational fishing, but for other activities such as wildlife watching. The 2009 data will be reviewed and incorporated into the FEIS.

**Concern ID: 24040**

**Concern Statement:** Commenters stated that pedestrians, not ORVs, leave behind most of the trash and asked that references to refuse left behind by ORV users be stricken from the FEIS.

**Representative Quotes:**

**Corr. ID:** 7036

**Organization:** OBPA

**Comment ID:** 136993

**Organization Type:** Unaffiliated Individual

**Representative Quote:** CHNSRA NPS staff is lucky in the fact that the ORV users remove almost every scrap of trash from beach daily, negating the need for an official NPS trash removal program within the seashore. Pedestrian beaches are another story, and areas that are closed to ORV's for a prolonged period of time show that pedestrians do not remove trash from the beaches, nor do any other user group other than ORV users. There are passages within the DEIS that suggest predators are attracted to the refuse left behind by ORV users, but this is simply not the case in CHNSRA, and these lines should be stricken from the FEIS.

**Response:** It is recognized that different users have different habits or ethics when it comes to trash disposal, and the EIS states that recreational users (including both pedestrians and ORV users) may leave trash behind. The use of ORVs brings people into areas where sensitive species reside, including areas that may not often be reached by solely pedestrian means, due to distances. Seashore staff observations confirm that trash is left behind by some, not all, of these users, just as trash is left behind by some, not all, strictly pedestrian users. NPS acknowledges and appreciates the "beach respect" ethic and beach clean-up projects sponsored by local ORV groups.

**Concern ID: 24042**

**Concern Statement:** Commenters noted data in Table 36 of the DEIS they felt was incorrect, and offered suggestions for correcting the data.

**Representative Quotes:**

**Corr. ID:** 14947

**Organization:** Cape Hatteras Anglers Club

**Comment ID:** 137152

**Organization Type:** Recreational Groups

**Representative Quote:** Page 262 of DEIS TABLE 36. FISHING TOURNAMENTS, 2004-2008

Cape Hatteras Anglers Club

11/4/2004

11/3/2005

600

Public ocean beaches excluding 0.5 mile either side of Cape Point, 0.5 mile from Hatteras Inlet and Ocracoke Inlet, and 0.5 mile on the north side of Oregon Inlet; also excluding 0.2 mile on either side of ramps 1,4,23,27,30, 34, 43, 49, and 55, and the beaches of Pea Island NWR

Cape Hatteras Anglers Club

11/8/2007

11/6/2008

720 Hatteras Island

The content of Table 36 regarding the Cape Hatteras Anglers Club (CHAC) fishing tournament is incorrect in the following ways:

1. The 2005 tournament was authorized for 720 not 600,
2. The 2006 tournament which is omitted was authorized for 720.
3. The tournament location for 2004 was not limited to 0.2 miles from ramps as stated.
4. Tournaments for 2006 (omitted), 2007 and 2008 had the 0.2 mile ramp limitation.
5. Pea Island NWR has never been requested for the CHAC tournament yet is listed as an excluded "Tournament location within the Seashore". Pea Island NWR is not managed by NPS. but this reference implies that it is, and if so. Pea Island NWR must be listed as a beach that the public has available as a non-ORV beach on page xiii.
6. Since 2005 the tournament has been allowed to use 0.7 miles north of Ramp 43 for access to fish, but is omitted on Table 10.
7. Listing "Hatters Island " as the "Tournament location within the Seashore" for the years 2007 and 200 8 is not correct. The corrected language listed for 2004 and 2005 should have been listed here.

**Response:** The information for the Cape Hatteras Anglers Club in Table 36 has been revised as follows:

- Number of people authorized for the 2005 tournament has been changed from 600 to 720
- The November 4-5 2006 tournament information was added, including its authorization for 720 participants
- The 0.2-mile from ramps restriction was removed from the 2004 tournament information and added to the 2006, 2007 and 2008 tournament information
- Reference to Pea Island was removed
- Tournament location of "Hatteras Island" for the years 2007 and 2008 was replaced with the corrected location language for 2004 and 2005.

**Concern ID: 24043**

**Concern Statement:** Commenters stated that the data in the DEIS related to ORV use of the Seashore on holiday weekends was incorrect, and asked that this be addressed in the FEIS.

**Representative Quotes:**

**Corr. ID:** 12672

**Organization:** *Not Specified*

**Comment ID:** 140384

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 265. "Figure 25 shows the distribution of ORVs across these areas on Memorial Day and the Fourth of July in 2008." - Disagree - The ORV counts provided in this data fail to show that Bodie Island Spit and Cape Point were closed to ORV access on these dates due to resource protection closures. This, therefore, increased ORV congestion at ramps 4, 43, 44 and 49.

**Corr. ID:** 14977

**Organization:** *Not Specified*

**Comment ID:** 137568

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the following charts;

DEIS Chapter 3 page 265; On Memorial Day and the Fourth of July, the Seashore counts the number of ORVs on the beach by an aerial survey. Research Triangle Institute International (RTI) (RTI pers. comm.. 2009a) used this information, along with assumptions based on rental occupancy and patterns of use, to create a range of estimates for the total number of ORVs using the Seashore in a year. Although there are some data from various sources about the number of vehicles on the beach, none of the sources have the scope or reliability to provide a robust annual estimate of vehicles on the beach. A survey is being conducted according to a random sampling plan to provide an estimate of the number of vehicles on the beach between April 1, 2009, and March 30, 2010 with a 95% confidence interval. Data collection will be completed in March 2010.

Figure 25 shows the distribution of ORVs across these areas on Memorial Day and the Fourth of July in 2008. About 75% of the ORVs counted on those days were located around the points and spits (including all of Ocracoke as one count); over half of the ORVs were located around Cape Point and the Bodie Island Spit.

Figure 25: This pie chart for July 4 is flat out a lie.

From Cyndy Holda access mileage of open & closed beach in July 3;

ORV Access Mileage for July 3, 2008:

\*\*\*\*\*All mileages are approximate\*\*\*\*\*

Bodie Island Spit:

Ramp 4: 2.5 miles open north of Ramp 4

There was no access to BODIE Island spit, it was closed all the way back to ramp 4 where it meets the beach. The point was also closed. The nearest vehicles were over a mile away from both locations.

Ramp 43: 0.4 mile open north of Ramp 43; 0.1 mile open south of Ramp 43

Ramp 44: Closed

Ramp 49: 1.7 miles open east of Ramp 49; 1.2 miles open west of Ramp 49

According to this document, there was a 0.50-mile parking lot at ramp 43.  
There was a larger parking lot at ramp 49 2.9 miles long.

There was no access to Bodie Island Spit, Cape Point, or South Point Ocracoke Island on July 4.

**Response:** The following sentence on page 265 of the DEIS that refers to closures at the points and spits Memorial Day and Fourth of July 2008 has been removed from the FEIS.

The distribution of ORVs as indicated on the pie charts is correct and no changes were required.

### ***AE3000 - Affected Environment: Soundscapes***

#### **Concern ID: 24045**

**Concern Statement:** One commenter suggested using data from the Noise & Health Journal to address how noise affects stress levels.

#### ***Representative Quotes:***

**Corr. ID:** 6382

**Organization:** Audubon

**Comment ID:** 131203

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Noise and ORV use is stressful and disturbing to people and wildlife. Even when a person does not report any stress from noise, raised levels of stress hormones are usually present. These stress hormones have adverse affects on the heard. Scientific literature exists to support this statement. The Noise & Health Journal is a good source of details regarding human health and noise.

#### **Response:**

When analyzing the impacts of ORVs on the soundscape, NPS did consider the health effects of noise on humans and wildlife. The DEIS incorporated by reference a recent review of the scientific literature on the effects of noise on wildlife published in Trends in Ecology and Evolution (Barber et al in press) written by NPS acoustic biologists. The Barber et al article discusses the health effects of increased noise on humans and wildlife and references several studies that address increases in stress hormones and hypertension from noise.

The paragraph on page 508 of the DEIS has been revised in Chapter 4 of the Soundscapes section to read:

“Research has shown that human activities that generate high levels of anthropogenic noise (including vehicular traffic) can result in adverse impacts to animal physiology and behavior. Impacts to bird species include nest desertion and reduced pairing success. (Barber et al. in press). Noise can cause increased levels of stress hormones and hypertension and inhibit the ability of wildlife to perceive natural sounds, an effect referred to as “masking.” Acoustic masking can interfere with the ability of wildlife to communicate with each other, for example, when sounding a warning to indicate an approaching predator (Barber et al. 2010).”

### ***AE8000 - Affected Environment: Wetlands and Floodplains***

#### **Concern ID: 24046**

**Concern Statement:** One commenter stated that the DEIS did not accurately describe how and why ORVs impact wetlands.

**Representative Quotes:**

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140232

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Adjacent wetlands come in for their share of NPS remarks disgruntled with human visitors. On page 28 is a complaint of vehicles driving over wetlands to avoid standing water in trails and interdunal roads. The NPS failed to mention a few key facts:

- a. The sand trails had been established for many years.
- b. During the 1970's and 1980's, NPS routinely operated a caterpillar road grader to maintain the trails.
- c. The graders would use their blade to dig drainage ditches along each side of the trail. The ditch sand was used to raise the center road bed and packed firm by the blade and grader wheels.
- d. The trails were kept free of water pooling or quickly repaired.
- e. Standing rain water will soon become saline and corrosive to the underside of vehicles.
- f. Retired folks on limited income don't have tax dollars to buy replacement vehicles like NPS.
- g. Yes we are forced to drive around water holes.
- h. It has always been the NPS job to maintain the trails.
- i. This is just one of many instances in the DEIS where incomplete information is presented to bolster the NPS agenda.

**Response:** The DEIS describes how ORVs impact soundside wetlands and recognizes that driving around standing water in the vehicle routes causes the described impacts by driving over wetland vegetation and damaging or killing the vegetation (DEIS page 29 and in all impact assessments for wetlands and floodplains.) The “how” of the impact is the same for all action alternatives, although the impacts would occur to a lesser extent with compliance with the additional protective signage included under alternatives E and F. Why ORVs choose to travel around standing water is self-evident, but the field conditions, including the presence of water holes, cannot be totally controlled by the NPS, and therefore this impact is recognized for all alternatives since all have some level of soundside access.

**AL1010 - Alternatives: Alternative A (Substantive)**

**Concern ID: 24047**

**Concern Statement:** Some commenters requested that the NPS select alternative A, stating that it is simple for the public to understand and meets resource protection needs. They further stated that the Interim Strategy should have been the basis for the preferred alternative. Other commenters asked that alternative A be removed from consideration, as it would not meet the goal of the plan.

**Representative Quotes:**

**Corr. ID:** 726

**Organization:** *Not Specified*

**Comment ID:** 133142

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the finding that Alt A will lead to long term moderate to major adverse impacts, first that it neglects to recognize elements of the 1978 Draft Interim Plan included in this alternative provide buffers and restrictions, and second that while in affect the many species including non-indigenous ones thrived.

**Corr. ID:** 2545

**Organization:** *Not Specified*

**Comment ID:** 132031

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Ocracoke, meanwhile, is unburdened by beach villages, an ample beach to person ratio and relatively low wildlife concentration. In my opinion, this favors Alternative A as the most appropriate choice for Ocracoke Island. This plan is administratively simple to oversee and for public cooperation, and meets the needs of wildlife conservation. Please give serious consideration to this tailored approach to the issue of beach access- Alternative A for Ocracoke.

**Corr. ID:** 13090

**Organization:** *Not Specified*

**Comment ID:** 140935

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I am writing to request that the National Park Service removes alternative A from the list of possible management plans for Cape Hatteras National Seashore. As stated in the purpose section of the plan, the goal is to develop a management plan that stipulates ORV use in a manner that will maintain the parks' resources. Being written as non-action plan negates the ability of this alternative to successfully accomplish the task.

**Corr. ID:** 13763

**Organization:** *Not Specified*

**Comment ID:** 139741

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Alternative A (2007 FOSNI Interim Strategy) for the purposes of Species/Resource Management and the current ORV Management Policies are the only option in the DEIS that accomplishes what was envisioned in the 1930s when the park was created. Around 1952, fifteen years after he submitted the act to create Cape Hatteras National Seashore, then former Congressman Lindsay C. Warren made the following statement:

"When I introduced the bill for the Cape Hatteras National Seashore in 1937, I would have nothing to do with it unless the people were fully protected forever in their hunting and fishing rights, and unless there was a guarantee of a hard-surface road if the Government came into the picture, and unless all of the villages were exempt. At that time there was very little prospect for a paved road, but I extracted a promise from the NPS that they would favor such a road to be built, whenever possible, either through State or Federal Aid funds. Frankly, I think that this Park will mean more to the people of Dare County than anything that could ever happen to them. I do not say that because I was the author of the bill, but I say it because I had studied the history of all Parks, before I came into the picture back in 1937."

As stated above, the creation of the park took many years of negotiation with the residents of Hatteras and Ocracoke Islands. At the time residents were presented with two other options for development--namely, oil exploration and accepting outside developers. The residents' acceptance of the national seashore as their preferred option for development was based upon Conrad Wirth's promise that the parks' beaches would always be open to all people, that the park would not compete with the villages for tourists' dollars, and that the NPS would "stand ready to cooperate with you at all times in the development of your communities, if you want us to." That is, the residents saw the park as a way to retain their primary way of life while still taking advantage of the higher living standard offered by a modern national economy.

**Corr. ID:** 14633

**Organization:** *Not Specified*

**Comment ID:** 135723

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Before the court order, which came about because the park service never published the orv plan formed in 1978 after public hearings and much review, The Cape Hatteras National Seashore was operating under an "interim "plan established by the current Superintendent which was approved by Fish and Wildlife and produced more plover chicks in 2008 than the subsequent court ordered plan in its first year. WHY WAS THIS PLAN NOT USED AS THE BASIS FOR THE CURRENT RECOMMENDATION'S RATHER THAN THE OPPRESSIVE COURT ORDERED PLAN?

**Corr. ID:** 14700

**Organization:** OBPA

**Comment ID:** 137289

**Organization Type:** Unaffiliated Individual

**Representative Quote:** As described on page x Alternative A would restore the conditions existing before the consent decree and implement the plan drafted in 1978. TABLE ES-4. ANALYSIS OF HOW ALTERNATIVES MEET OBJECTIVES and all the subsequent discussion in the DEIS fails to rebut the presumption that a perfectly adequate response to the legal requirement for an ORV plan is to adopt No Action Alternative A. I request the PARK Service explicitly address what the objection to this course of action would be. The response should be based on the best available science and the documented bad results which were occurring under the Interim Management plan between 1978 and January 2006 when the National Park Service the Interim Protected Species Management Strategy/Environmental Assessment Strategy and the adoption of the "Consent Decree" in October of 2007. If there is no documentary evidence of "Significant Impact" to make the case for modification of the pre-October 2007 plan(s), then address why a period of operation under Alternative A should not occur to allow for it to be gathered.

**Response:** The alternatives under consideration must include the “no-action” alternative as prescribed by 40 CFR 1502.14. Two no-action alternatives, alternatives A and B, are included for analysis in this plan/EIS because alternative A is the most recent agency decision and alternative B reflects the on-the-ground management since the April 30, 2008 consent decree. The two no-action alternatives capture the full range of management actions that occurred and are currently occurring during the planning process for this plan/EIS. Also, the no-action alternative(s) provide a baseline of existing impacts continued into the future against which to compare the impacts of action alternatives. For these reasons, alternative A and alternative B are included in the range of alternatives.

Alternative A, Continuation of Management Under the Interim Protected Species Management Strategy (Interim Strategy), was not identified as the NPS’s preferred alternative because this alternative would not meet key objectives (such as those related to providing protection for threatened and endangered species and minimizing impacts to other natural resources at the Seashore) as well as the action alternatives (DEIS p. 95). While alternative A satisfies some of the plan objectives, the fact that it would designate nearly all Seashore beaches as ORV routes 24 hours a day seriously limits its ability to meet the natural resource or visitor use and safety objectives as well as the preferred alternative F. In addition, alternative A, if implemented as long-term management, would impede the attainment of the Seashore’s desired future conditions for natural resources as identified on page 7 to page 10 of the DEIS. The impact analysis in Chapter 4 of the DEIS documents the adverse effects of alternative A on natural resources. Alternative A also fails to provide areas of beach that are not designated as ORV routes to accommodate visitors who wish to enjoy the Seashore without the presence of vehicles. Thus, alternative A unreasonably interferes with the atmosphere of peace and tranquility and the natural soundscape maintained in natural locations within the Seashore.

As noted on p. 60 of the DEIS, alternative A was based primarily on the selected alternative in the July 2007 FONSI for the 2006 Interim Strategy and the 2007 Superintendent’s Compendium. Elements from the 1978 draft interim ORV management plan that were incorporated by inclusion in Superintendent’s Order 7 included ORV corridors, speed limits, seasonal closures and safety closures. Resource protection measures from the 1978 plan were not incorporated into alternative A, as the protection of bird species in the 1978 plan was minimal as there were no state or federally listed birds in the Seashore at that time. In general, species numbers declined at the Seashore during the life of the 1978 plan. The number of piping plover nesting pairs declined from 15 to 2 between 1989 and 2003 (DEIS p. 193). Seabeach amaranth declined from over 15,000 plants in 1988 to only one plant in 2004 (DEIS p. 222). The number of American oystercatcher nesting pairs declined from 41 in 1999 to 29 pairs in 2003 (DEIS p. 229). Also, recent estimates of colonial waterbird nests at the Seashore are clearly much lower than they were 30 years ago (DEIS p. 240).

**Concern ID: 24050**

**Concern Statement:** Commenters stated that alternative A is not a legitimate no action alternative, as it is part of an ongoing planning effort.

**Representative Quotes:**

**Corr. ID:** 14932

**Organization:** *Not Specified*

**Comment ID:** 136873

**Organization Type:** Unaffiliated Individual

**Representative Quote:** #7: The DEIS is Flawed and Illegal

The NPS 6 alternatives begin with Alternative A - No Action plan and Alternative B -No action plan. Both of these plans were the result of actions. Alternative A was the result of the interim plan being put in place and Alternative B was put in place by the consent decree. Because the DEIS should have had a Alternative No Action plan that reflected the regulations being enforced in 2004 that were adopted from the 1978 draft plan and updates through Superintendent's Compendium, I content that the entire DEIS is flawed and illegal.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140436

**Organization Type:** Conservation/Preservation

**Representative Quote:** Under Alternative A, "management of ORV use and access at the Seashore would be a continuation of management based on the selected alternative identified in the July 2007 FONSI for the 2006 Interim Strategy and the 2007 Superintendent's Compendium, as well as elements from the 1978 draft interim ORV management plan that were incorporated in Superintendent's Order 7, as amended in 2006." DEIS at 60. In October 2007, a lawsuit was filed on the Interim Strategy that resulted in the Consent Decree. Notably, Alternative A in the DEIS is actually Alternative D from the "Interim Protected Species Management Strategy /Environmental Assessment published on January 18, 2006, which, in fact was an action alternative. The Federal action to which the DEIS relates is the development of a long-term ORV management plan and associated special regulation in accordance with Executive Order 11644, as amended by Executive Order 11989, and 36 C.F.R. §4.10. Given that the current DEIS is all part of the same ongoing planning effort that now began more than five years ago, Alternative A cannot legitimately be viewed here as a no action alternative.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140438

**Organization Type:** Conservation/Preservation

**Representative Quote:** The true no action alternative that the DEIS should have considered is the no action alternative that was referenced in the "Interim Plan" assessment, the first step in NPS's effort to assess the impacts associated with management of ORV use as the Seashore. The cover letter to that document explained that "This document presents the evaluation of four alternatives for managing protected species at Cape Hatteras National Seashore in the interim period until a Long-term Off-Road Vehicle (ORV) Management Plan and associated regulations are developed." It then explained the no action alternative as follows:

Alternative A - Continuation of 2004 Management (baseline or no action): The no-action alternative would continue management as expressed in Superintendent's Order #07, which was issued in 2004. Under alternative A, the seashore would implement protective measures for recent piping plover breeding areas (areas used at some time during the past 3 breeding seasons); American oystercatchers and colonial waterbirds, if a territory or colony or nests established; sea turtle nests; and seabeach amaranth plants or seedlings. Measures vary for special status bird species according to the activity. Any species management closures would require the Superintendent's approval. Management would continue for predator removal, recreation use restriction, and public outreach.

It is this alternative that should have been identified as the no action alternative and used to establish the baseline for consideration of the various alternatives in the DEIS. By failing to use the baseline, the DEIS's analysis understates the significance of the impact of Alternative F and the other action alternatives on recreational, cultural, historic, and socioeconomic values. All six alternatives are in fact "action alternatives," when compared to the policies and practices in place when the ongoing ORV management planning process began.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140434

**Organization Type:** Conservation/Preservation

**Representative Quote:** Section 1502.14(d) of the CEQ's NEPA-implementing regulations requires that the alternatives analysis in an EIS to "include the alternative of no action." 40 C.F.R. 5 1502.14(d). The analysis of the no action alternative "provides a benchmark, enabling decision makers to compare the magnitude of environmental effects of the action alternatives." NEPA's Forty Most Asked Questions, CEQ, available at <http://ceq.hss.doe.gov/nepa/regs/40/1-10.HTM#3>. Rather than adopt a single no action alternative, the DEIS took the unusual step of adopting two such alternatives. Unfortunately, neither of these alternatives is appropriate in this instance or reflects the proper baseline for evaluating the environmental impacts of the various alternatives. The DEIS's choice of two no action alternatives that are not true no action alternatives and that already reflect movement toward the proposed action has the effect of grossly understating the impacts of Preferred Alternative F and the other alternatives on recreational, cultural, historic, and socioeconomic values. Accordingly, the NPS must reconsider its choice of no action alternative and baseline, adopt an appropriate no action alternative, and re-assess the environmental impacts of the proposed action and reasonable alternatives against an appropriate baseline.

**Response:** DEIS alternative A comprises Interim Protected Species Management Strategy (IPSMS) alternative D with some elements of IPSMS alternative A, as described in the FONSI for the IPSMS. The IPSMS and the ORV management plan/EIS are two separate management documents with different purposes. The Interim Strategy was

developed as an interim plan to guide species management until a separate ORV management plan and rule were in place.

At the time the DEIS was initiated, the IPSMS (which incorporated components of Superintendent's Order 7, the 2007 Superintendent's Compendium, and elements of the 1978 draft interim ORV management plan) represented the most recent NPS decision as to the management of the Seashore. Because the IPSMS directed management, it is appropriately analyzed as a no action (i.e. continuation of current management) alternative in the ORV management plan/EIS.

**Concern ID: 24624**

**Concern Statement:** One commenter requested that the NPS explain why if alternative A has already been analyzed and has a Finding of No Significant Impact (FONSI), this alternative is not being selected for implementation.

**Representative Quotes:**

**Corr. ID:** 12002

**Organization:** *Not Specified*

**Comment ID:** 134186

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS describes, Alternative A as No Action: Continuation of Management under the Interim Protected Species Management Strategy. Further described as, "management of ORV use and access at the Seashore would be a continuation of management based on the 2007 FONSI for the Interim Strategy?"

If you have a "Finding of No Significant Impact" for Alternative A; and alternative A is the least costly; and it has the least restriction to the public's use of the Park; NPS should recommend Alternative A. This calls into question earlier management strategies and why (assuming they had FONSI's) this EIS was performed and why there has been such a large change in direction by NPS. Perhaps there is a good reason that the EIS conflicts with previous FONSI's. If it isn't already covered in the DEIS, the reasons should be explained in the DEIS document.

**Response:** Alternative A provides a useful baseline of impacts from current management during a part of the planning period for the long-term plan/EIS. As described several places in the FONSI, management under Alternative A was considered to have no significant impacts during the 3 year period it was to be in effect before the long-term plan was developed and approved for implementation. The related biological opinion (BO) issued by the U.S. Fish and Wildlife Service also evaluated the impacts of the IPSMS based on the understanding that it was a short-term action. The purpose, need, and objectives for the Interim Protected Species Management Strategy are different than those of the long-term ORV plan/EIS. As a long-term management plan, alternative A would not meet the criteria of the Executive Orders or the NPS regulations for designation of ORV routes, nor would it meet the purpose and resolve the need for the long-term Plan/EIS. As discussed on p. 95 of the DEIS, alternative A would not meet the objectives of the plan to a large degree. Also it would have the potential for impairment of several shorebird species (DEIS pp. 429 - 433). NPS has looked carefully at the impacts from all the alternatives, and has considered that alternative A has fewer adverse impacts on ORV users and local economic interests than the other alternatives. After reviewing all the public comment on the DEIS, NPS has added some mitigation actions to alternative F, in part, to address these concerns.

**Concern ID: 25207**

**Concern Statement:** Commenters stated that the general methodology of the document was flawed because it is based on a premise that the existing condition violates federal laws, and that this premise is unproven.

**Representative Quotes:**

**Corr. ID:** 15045

**Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137883

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS is premised on an incorrect and unsupportable notion that the existing condition violates applicable law and cannot be improved. To the contrary, designated roads, trails, and areas are being supported, Endangered Species Act, Migratory Bird Treaty Act, and similar standards are being met, and species protection coupled with a greater degree of both pedestrian and motorized vehicle access can be even further improved through a cooperative and logical management solution that will bring common sense to planning and management of the unit.

**Response:** Without a regulation designating ORV routes, the NPS is out of compliance with its own regulation, 36 CFR 4.10, and the requirements of the Executive Orders 11644 and 11989 that relate to criteria for ORV route designation and allowing ORV use on lands of the national park system. The U.S. District Court for the Eastern District of North Carolina has ruled that operating an off-road vehicle is prohibited except where NPS has specifically designated that ORV use is permitted, and therefore ORV use is prohibited at the Seashore absent a special regulation issued in compliance with 36 CFR 4.10, *United States v. Matei*, 2:07-M-I075 (E.D.N.C. 2007); *United States v. Worthington*, 2008 WL 194386 (E.D.N.C. 2008). The NPS is also under a court order stemming from a later case to develop and approve an ORV Management Plan and final regulation. The Plan/EIS has been developed to bring the Seashore into compliance with the Executive Orders and other legal and policy requirements, as described by the purpose, need and objectives (DEIS pp 1-3). The impact analysis for the alternatives, including alternatives A and B which describe actions under the existing condition, provides information on the effects the different management actions would have. In addition to carefully considering the impacts, the NPS has considered that action alternatives, including the preferred alternative F, better meet the purpose, need and objectives than the existing conditions (alternatives A and B) do.

### ***AL1025 - Alternatives: Alternative B (Substantive)***

#### **Concern ID: 24051**

**Concern Statement:** Commenters requested that alternative B be removed from consideration in the FEIS. Some noted that this alternative was arbitrary and capricious as it has not gone through the NEPA process, and therefore lacks transparency.

#### ***Representative Quotes:***

**Corr. ID:** 14532

**Organization:** USA Citizen

**Comment ID:** 139399

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Alternative B should be completely removed from consideration in this document. A court ordered consent decree, with arbitrary and capricious rules, that were not vetted properly in the NEPA process do not belong in this document as a viable alternative. Unprecedented wildlife closures, no pass through corridors, closures disturbance penalties, and unsubstantiated night time driving restrictions are all new rules brought on by the consent decree. How do non-NEPA vetted rules now become part of every alternative (except alt A), including the preferred alternative?

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140437

**Organization Type:** Conservation/Preservation

**Representative Quote:** Further, Alternative B, "Continuation of the Terms of the Consent Decree Signed April 30, 2008, and amended June 4, 2009," clearly has no place in the DEIS as a no action alternative to establish a baseline for purposes of assessing the impacts of the various other alternatives. The Consent Decree, by its terms, states that the document shall have no precedence. Paragraph 34 of the Consent Decree specifically provides that "Plaintiffs, Federal Defendants, and Intervenor-Defendants stipulate and agree that this Consent Decree is entered into solely for the purpose of settling this case, and for no other purpose . . . ." Consent Decree at 17. Utilizing the Consent Decree, then, as a no action alternative is contrary to the agreement of the parties in that document, and entirely inappropriate.

**Response:** Alternative B is required as a "no action" alternative because it is the current management at the Seashore. CEQ NEPA regulations (40 CFR 1502.14(d)) require the alternatives analysis in the EIS to "include the alternative of no action". The Seashore has now had three breeding seasons of experience implementing the consent decree. The effects of management under Alternative B provide a useful baseline for comparison with the action alternatives, as intended by NEPA. NEPA does not require a "no action" or action alternative in an EIS to have gone through a previous NEPA process.

Paragraph 34 of the consent decree provides that it is not to be "cited or otherwise referred to in any other legal proceeding . . . except as necessary to effectuate the terms of this Consent Decree." This NEPA process is not a legal proceeding. Moreover, paragraph 36 of the consent decree provides that "[n]o provision of this Consent Decree shall

be interpreted as or constitute a commitment or requirement that Federal Defendants take action in contravention of NEPA." The ORV plan and special regulation require NEPA analysis, and NEPA and the CEQ regulations require analysis of current management as a no action alternative. . Analysis of management under the consent decree as a "no-action" alternative is thus consistent with these provisions of the consent decree. This analysis does not direct the decision on ORV management under the ORV management plan/EIS, and in fact NPS identified another alternative as the preferred alternative.

**Concern ID: 24053**

**Concern Statement:** Commenters felt that elements of alternative B encourage violation of the resource closures to encourage closures of a larger size. Other commenters felt that resources have not been harmed by closure violations under the consent decree.

**Representative Quotes:**

**Corr. ID: 10625**

**Organization: Not Specified**

**Comment ID: 136532**

**Organization Type: Unaffiliated Individual**

**Representative Quote:** That NPS enforcement has had no effect and made little or no effort to catch the perpetrators of consent decree violations simply enhances the chances that the perpetrators are either environmentalists trying to stir the pot or NPS personnel siding with those individuals who want to see the beaches closed. Not one resource violation under the consent decree has harmed the resource in any manner according to you, the superintendent.

**Corr. ID: 12002**

**Organization: Not Specified**

**Comment ID: 134193**

**Organization Type: Unaffiliated Individual**

**Representative Quote:**

Alternative B pits environmental interests vs. beach-driving interests and encourages both parties to do the wrong thing. Those supporting driving on the beach are encouraged to harm PIPL and those who want no-ORV access are encouraged to vandalize shorebird signs so that protected areas are increased in size.

**Response:** NPS believes that the great majority of ORV drivers at the Seashore take seriously the stewardship responsibility of all visitors to protect the Seashore's resources. NPS has no knowledge of any incidents or violations of resource closures committed with the primary intention of causing a closure expansion, and no evidence has been presented to support this comment.

The comment regarding the effort of law enforcement personnel contains inaccurate information and unsupported speculation. Enforcement, as well as education, are important tools for improving visitor compliance with ORV and resource protection regulations. Under the consent decree, deliberate acts that have disturbed or harassed wildlife or vandalized fencing, nests or plants and therefore required an automatic buffer expansion have made up a small portion of the total number of resource closure violations. NPS law enforcement staff have, in fact, made numerous violator contacts for resource closure violations during the same period. For example, from 2008 through August 25, 2010, park rangers issued 101 violation notices and 170 written warnings (total of 271 violator contacts) for entering resource closures, and 70 Violation Notices and 164 written warnings (234 violator contacts) for violating the night driving restriction. In contrast, from June 2008 through August 25, 2010, there were a total of 21 "deliberate violations" that vandalized fencing or nests and resulted in an automatic buffer expansion as required by the consent decree. Of these incidents, one incident (July 30, 2008) involved the unlawful take of a least tern nest that was crushed by an all-terrain vehicle (ATV). Another incident involved the apprehension of two perpetrators who illegally drove ATVs through a turtle closure, but did not appear to damage the nest. In the remaining deliberate violation cases, no direct resource damage occurred and no suspects were identified. There is no evidence to support the allegation that any of the vandalism incidents were caused by environmentalists, by NPS staff, or by any other particular user group.

The comment about resource violations not harming the resource in any manner is not valid and inconsistent with current information. In addition to the July 2008 incident noted in the paragraph above, on the night of June 23, 2010 a nesting loggerhead turtle was struck and killed on Ocracoke island by an ORV that was operating on the

beach in violation of the night driving restriction under the consent decree. In addition, there have been hundreds of other resource closure violations under the consent decree that have not involved vandalism or direct take of wildlife, including many observations of human and vehicle tracks unlawfully entering resource closures. Even if resource closure violations do not directly injure or kill wildlife, human disturbance in nesting areas can indirectly harm wildlife by causing behavioral responses that may lessen breeding success. There is no way to know the extent of indirect impacts from the many resource closure violations that have occurred, particularly those that were detected based on tracks and not direct observation of the violator.

Note: None of the action alternatives, including the preferred alternative, include the consent decree requirement for automatic buffer expansions in the event of deliberate violations of resource closures or buffers.

**Concern ID: 24054**

**Concern Statement:** Commenters stated that alternative B is not an appropriate no action alternative because it allows a use currently prohibited. In addition they stated that the protection measures for birds and turtles under this alternative were not adequate.

**Representative Quotes:**

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137724

**Organization Type:** Conservation/Preservation

**Representative Quote:**

Alternative B would continue current management under the interim species protection plan as modified by the consent decree. Presented as a "no action" alternative, this alternative is not a true no action alternative because it continues ORV use that is currently prohibited.

This alternative provides better protection to breeding shorebirds, colonial waterbirds, and sea turtles, but does not designate routes and areas for ORV use, designation of areas where ORVs would be prohibited for pedestrian use, and other components of an ORV plan. Alternative B provides insufficient protection for nesting shorebirds and colonial waterbirds. This alternative allows extensive areas of ORV use during the shorebird breeding season, and depends on monitoring in these areas for the areas to be closed. If monitors do not quickly detect breeding activity, there is the risk of abandonment or take of nests or chicks. Breeding season closures of key nesting areas to ORVs would provide increased protection, and reduce monitoring costs. Alternative B also provides insufficient protections for migrating and wintering shorebirds, including the threatened piping plover and candidate red knot as well as other species. In addition, at all the major wintering locations for piping plovers, the ocean shoreline is open to ORV use, resulting in significant disturbance to piping plovers that are using this habitat. Night driving restrictions are not adequate to protect nesting sea turtles that come ashore to nest before 10 pm when the closure goes into effect, raising risk of take, and insufficient protection for sea turtle nests and hatchlings, due to the possibility that nests could be missed due to ORV tire tracks eliminating sea turtle crawls before the nesting areas can be protected by the turtle patrols. Finally, this alternative does not designate adequate areas closed year round to ORVs, resulting in excessive recreational conflicts between pedestrians and ORVs.

The consent decree was an important improvement over the prior management of the Seashore. However, the management measures are interim protections until a final comprehensive ORV plan is put in place. NPS has appropriately rejected this alternative.

**Response:** The "no-action" alternative in an EIS describes the status quo (continuation of current management), whether the current management comprises lawful or unlawful activities. NPS Director's Order #12 Handbook: Conservation Planning, Environmental Impact Analysis and Decision Making (Handbook) states "The no action alternative must be fully analyzed in all EAs and EISs, even if another law prohibits the adoption of the no action alternative or the park is under legislative or other command to act. The no action alternative is usually a viable alternative, but even when it is not, it sets a baseline for comparing the impacts of existing actions with those proposed." (Section 4.5E.5) The Handbook also states "If choosing the true no action alternative (i.e., continuing as is) would violate laws or your park's own policies, you may want to add a "minimum management" alternative to your range. This should not substitute for the no action alternative, because you may lose valuable information on existing impacts by not evaluating the impacts of ongoing activities."

Because alternative B is the status quo, i.e. the “ongoing activities” that have been implemented in the Seashore since Spring 2008 and will continue to be implemented until approval of the long-term ORV Plan/EIS, it meets the CEQ and NPS requirements for a no-action alternative. Alternative B provides a useful baseline for comparison against the action alternatives. The minimum management alternative concept of the Handbook is oriented to NPS General Management Plans (GMPs). For a GMP, no action is continuing present management into the future without developing a General Management Plan, which would violate law and NPS policy, but provides a baseline for comparison. A GMP “minimal management” alternative would provide a plan to keep the park operational, but without a developed array of visitor, research, education and resource management opportunities. For the Cape Hatteras ORV Management Plan, alternatives A and B provide the baselines of present management during the planning process and Alternative D is analogous to the GMP “minimal management” alternative. It provides simplified management, but without the more complex provisions for ORV and pedestrian access of the other action alternatives that serve to mitigate impacts of species management on visitor experience and economics.

### ***AL1040 - Alternatives: Alternative C (Substantive)***

#### **Concern ID: 24055**

**Concern Statement:** Commenters suggested that this alternative could be modified to allow more areas open to pedestrians. Additional commenters stated that alternative C should not be selected because it provides insufficient areas closed to ORV year-round and that ML1 restrictions unnecessarily restrict pedestrian access.

#### ***Representative Quotes:***

**Corr. ID:** 90

**Organization:** *Not Specified*

**Comment ID:** 129758

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Of the suggested measures, Alternative C would make the most sense to me. I also think that areas that may be closed to driving at certain times of the year, such as the hook at Diamond Shoals, should be open to pedestrians. I think that restrictions to people (pedestrians) in these areas of the National Park would be dismissing of the idea for creating them... "for the benefit and inspiration of all the people of the United States...." (General Authorities Act), 1970 (84 Stat. 825)

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137728

**Organization Type:** Conservation/Preservation

**Representative Quote:** I. Alternative C: Seasonal Management

Although the prohibition on ORVs at Cape Point and the spits during the breeding season would benefit nesting shorebirds and colonial waterbirds, this alternative has several shortcomings that lead us to recommend against it. This alternative provides insufficient areas that are closed to ORVs for the entire year (11.9 miles), resulting in excessive recreational conflicts between pedestrians and ORVs and insufficient protection for migrating and wintering shorebirds from ORV-based disturbance at key habitats in the Seashore. Adverse impacts would occur to multiple species, including the threatened piping plover, candidate red knot, and other species that use the beach intertidal zones such as sanderling, dunlin, and black-bellied plover. In addition, the use of ML 1 pedestrian closures for the entire breeding season at certain locations, unnecessarily restricts pedestrian access when a more finely tailored management approach would allow pedestrian access for a longer period while still providing adequate protections for nesting birds.

**Corr. ID:** 15253

**Organization:** Environmental Protection Agency

**Comment ID:** 139042

**Organization Type:** Federal Government

**Representative Quote:** However, EPA understands the need of the NPS to appropriately balance access to CHNS from multiple users based on its enabling legislation and other regulations. If the impacts of implementing Alternative D are considered significantly adverse on other users and socioeconomic factors, EPA recommends implementation of Alternative C, or perhaps some other hybrid alternative, as a reasonable compromise to achieve more access and greater flexibility with regard to ORV designation than Alternative D. Alternative C would provide greater protections for sensitive species with larger seasonal buffers, lower carrying capacities, and much fewer new access ramps, parking lots, and new roads as compared to Alternative F. Alternative C also appears to have approximately similar socioeconomic impacts as the preferred alternative.

**Response:** NPS has modified alternative F to incorporate several changes in response to public comments about relative amounts of pedestrian and ORV access, and these changes address the concerns listed here for alternative C. In response to concerns regarding the need for more pedestrian access and insufficient areas closed to ORV year-round, modified alternative F proposes more mileage of year-round vehicle-free areas 26.4 miles that would be open to pedestrians only year-round, and 12.7 miles of routes open seasonally to ORVs less than six months per year, with 27.9 miles of routes designated for year-round ORV use (subject to resource closures). This compares to approximately 12 miles of vehicle-free areas, 29 miles of seasonal routes, and 27 miles of year-round ORV routes under alternative C. The increase in pedestrian-only areas comes mainly from changing some previously seasonal routes to year-round vehicle-free areas to benefit pedestrians desiring a vehicle-free experience, to address safety and erosion consideration in front of the villages, and to better protect migrating/wintering shorebirds. The 27.4 miles open to ORV year-round in new alternative F is about the same as previously proposed under alternative C, and the NPS believes that this mileage and the seasonal opportunities are sufficient areas for ORV use, given the constraints of resource protection and the objective of providing access for various recreational uses in the Seashore. With regard to the use of ML1 pedestrian closures for the entire breeding season at certain locations, alternative F as modified would eliminate ML1 type management. Standard buffers and monitoring equivalent to the ML2 measures described in Table 10 of the DEIS would be applied throughout the Seashore to allow pedestrian and ORV access for a longer period while still providing adequate protections for nesting birds. In addition, alternative F has been revised to provide that when pre-nesting areas are established, pedestrian shoreline access will be permitted below the high tide line until breeding activity is observed and then standard buffers will apply. The NPS believes that by making these modifications to alternative F, the concerns expressed regarding alternative C will be addressed.

### ***AL1055 - Alternatives: Alternative D (Substantive)***

#### **Concern ID: 24057**

**Concern Statement:** Commenters stated support for alternative D, but suggested that it be modified to allow for more pedestrian access. Other recommendations included allowing this alternative with an ORV corridor (contingent upon adequate protection of wildlife), increasing parking and dune walk overs, improving interdunal roads, including self-contained vehicle camping, promoting a water taxi service, and designating areas closed year round to ORVs and pedestrians for wintering shorebirds.

#### ***Representative Quotes:***

**Corr. ID:** 1378

**Organization:** Audubon

**Comment ID:** 131000

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Ideally, I feel that three items that were included in Alternative E should be included in Alternative D to optimize both minimal environmental impacts and recreational enjoyment:

(1) the interdunal road and ramp access would be improved, and more pedestrian access would be provided through substantial additions to parking capacity at various key locations that lend themselves to walking on the beach, (2) self-contained vehicle (SCV) camping would be allowed during the off-season at designated Seashore campgrounds under the terms of a permit, and (3) enhanced options for pedestrian access to Bodie Island Spit and South Point Ocracoke by promoting water taxi service when those areas are closed to ORVs.

**Corr. ID:** 13773

**Organization:** *Not Specified*

**Comment ID:** 140120

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Plan D needs to include additional parking areas since more beaches will be closed to vehicles.

**Corr. ID:** 15043      **Organization:** Southern Environmental Law Center

**Comment ID:** 137444      **Organization Type:** Conservation/Preservation

**Representative Quote:** The final ORV management plan should be based on environmentally preferred Alternative D in the DEIS, modified to allow pedestrian access subject to standard resource closures when shorebird or colonial waterbird breeding behavior is observed, to allow 100 foot ORV access corridors to Cape Point and South Ocracoke subject to standard resource closures when shorebird breeding activity is observed, to increase the number of parking spaces and dune walkovers, and to designate specific areas closed year round to ORV use for pedestrians and wintering shorebirds.

**Corr. ID:** 15069      **Organization:** *Not Specified*

**Comment ID:** 138033      **Organization Type:** Unaffiliated Individual

**Representative Quote:** I prefer Alternative D because it strikes a balance, allocating half the beach mileage to nonmotorized use all year. It gives the best assurance of bring back the birds and sea turtles, and it will encourage recreational use of the beach by visitors on foot. A fifty-fifty allocation has proven workable at Assateague Island National Seashore. I also favor the recommendation from North Carolina Audubon to provide more foot access routes between the highway and the beach.

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137749      **Organization Type:** Conservation/Preservation

**Representative Quote:** We recognize this corridor could result in disturbance to non-breeding birds, as well as adverse impacts to breeding birds if monitors do not promptly detect breeding behavior and implement standard buffers. However, we also acknowledge the value to some visitors of these locations for fishing from vehicles, and we are trying to strike a delicate compromise between adverse impacts and providing ORV recreational access. Our support for a corridor in these two areas is contingent on adequate protection for wildlife in the SMA boundaries, as modified by our suggestions.

**Corr. ID:** 15253      **Organization:** Environmental Protection Agency

**Comment ID:** 139038      **Organization Type:** Federal Government

**Representative Quote:** EPA agrees with the NPS designation of Alternative D as the environmentally preferable alternative. Alternative D includes the greatest number of shoreline miles closed to ORVs and the least number of miles designated as ORV routes. It also has the least number of new or relocated access ramps, new parking lots, and new ORV interdunal roads. It also provides the greatest level of protection for sensitive species through the establishment of SMAs that involves larger and longer species protection buffers and would not allow pedestrian access once prenesting closures are established. It employs the most restrictive seasonal night-driving regulations to be protective of sea turtle nesting and hatching during that time. It also is the least expensive of any of the action alternatives and requires the least amount of personnel to manage implementation due to its more predictable design of ORV route designation. Therefore, we recommend reconsideration of this alternative as a viable action alternative.

**Response:** Many of the changes proposed under alternative D have been incorporated into alternative F, which has been modified based on the review of public and agency comments . These suggestions, and how NPS incorporated them into the modified alternative F, are discussed below:

The desire for more pedestrian access - Alternative F as modified proposes a pedestrian access trail on Bodie Island and increased parking and associated pedestrian access(the same level proposed under alternative E), with dune walkovers or boardwalks for beach access. Under modified alternative F (from north to south), a new ORV ramp and parking area is proposed 0.5 mile south of Coquina Beach, new parking near ramp 4 and a foot trail is planned from that location to the northern portion of the spit “flats”, and the shoreline at the inlet proper and the Bait Pond shoreline would be vehicle free year-round, with seasonal ORV access along the ocean shoreline to the edge of the inlet. At ramp 23 a year-round vehicle free beach would extend south for 1.8 miles, with a new parking area at that location and a new ORV ramp to provide access to the ORV route south of that point. New parking areas would be constructed near soundside ramps 48, 52, 58 and 60. Pedestrian access to a vehicle free area on South Beach would be enhanced by allowing parking at the west end of the Cape Point Campground and in pullouts along the interdunal road between ramps 45 and 49. Ramp 59 would be relocated to just south of the MP 59 parking lot. Additional

parking would be added at several locations on both Hatteras and Ocracoke Islands.

Allowing an ORV corridor at Cape Point and South Point - This concern is addressed in revised alternative F by designating year-round ORV routes, subject to standard resource protection buffers, at these locations. In addition, the ORV corridor will be reduced from 50 meter to 35 meters during pre-nesting activities. Table 10-1 in the FEIS includes revised text describing ORV corridors at these locations.

Increased parking and dune walkovers- As noted above, there would be increased parking and pedestrian access points in a number of locations throughout the Seashore.

Improving interdunal roads -Modified alternative F includes new interdunal roads between ramps 45 and 49, a short seasonal route near Hatteras Inlet, and two seasonal routes in the South Point area, along with better maintenance of interdunal roads and pullouts or road widening to provide safe passage.

Self-contained vehicle camping – Off-season self-contained vehicle camping in park campgrounds, as described in alternative E, was not included in alternative F due to the staffing needs, operating costs, and permitting, law enforcement patrol, and maintenance workloads associated with keeping campgrounds open in the off-season for a limited number of campers. NPS believes that local commercial campgrounds provide appropriate opportunities for off-season vehicle camping.

Water taxi service - Implementation of a water taxi service would be encouraged to allow pedestrian access to spits, subject to resource closures under the revised alternative F. The NPS would consider applications for CUAs for beach and water shuttle services. The NPS would apply for funding to conduct an alternative transportation study to evaluate the feasibility of alternative forms of transportation to popular sites, such as inlets and Cape Point.

Designating areas closed year-round to ORVs and pedestrians for wintering shorebirds - this was already a component of alternative D, and under modified alternative F, there would be increased miles of vehicle-free areas for protection of wintering birds (to off-set the removal of the proposed “floating” non-wintering closures). In addition, from September 15 – March 14 the ORV route at South Point on Ocracoke would change from a shoreline corridor to an upper beach corridor to reduce vehicular disturbance of migrating birds using the shoreline. These vehicle-free areas would be open to pedestrians because it is not likely that the amount or type of use expected by pedestrians in the winter season would cause more than short-term negligible to minor adverse impacts to these birds.

#### **Concern ID: 24061**

**Concern Statement:** Commenters expressed concern that alternative D did not include safety closures. Concerns included ORVs driving on dunes where there was a narrow beach. They felt that this could be avoided with safety closures and provided suggested language for the FEIS.

#### ***Representative Quotes:***

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137751      **Organization Type:** Conservation/Preservation

**Representative Quote:** We are also concerned that the lack of ORV safety closures, DEIS at 73, 11 would result in adverse environmental impacts to dunes and vegetation from ORV use. We have observed repeatedly, under the current, more permissive safety closure policy, that in narrow areas, it is not unusual to see ORV tracks going behind ORV closure posts and over dunes or vegetation. This should not be surprising, as some people who use ORVs will drive through a narrow area at a lower tide, but then, when the tide has come in and the beach width is reduced, the vehicle has to drive through a closed area or over vegetation to avoid exiting the beach in the water.

To reduce these impacts, we suggest the following safety closure language, which is modified from alternative F (additions underlined and deletions struck out): Same as alternative C, plus:

An ORV safety closure would be implemented in the event of a (~~clear and~~  
~~imminent~~) threat of significant bodily injury or death, and/or damage to personal property, including vehicles and their contents. Triggers that could justify a safety closure include, but are not limited to:

- Deep beach cuts that block the beach from dune to surf with no obvious way around.
- Obstacles, such as exposed stumps, shipwrecks, or debris, that cannot be safely bypassed or that block the entire width of the beach and cannot be easily removed.
- Severe beach slope that puts vehicles in an unsafe gradient position and increases the chances of the loss of vehicular control.
- A high concentration of pedestrian users coupled with a narrow beach.
- INSERTED : A narrow beach where there is insufficient width to safely exit the beach in the vehicle corridor during normal (non-storm) high tides.

Triggers do not include:

- ~~A narrow beach by itself.~~
- ~~High tides that block access through portions of beaches occur periodically and predictably, and are an obvious, easily avoidable hazard~~
- Hazards blocking only a portion of the beach, where safe passage is available around the hazard.

ORV safety closures would preclude ORV access, while pedestrian and commercial fishing access would be maintained through most safety closures.

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137752

**Organization Type:** Conservation/Preservation

**Representative Quote:** 10 Alternative D allows vehicles on 27.4 miles of beach, DEIS at 101, which is 144,672 feet of beach. Assuming 1 vehicle every 15 feet (a 7 foot wide vehicle, plus 8 feet between a vehicle), 9,644 vehicles could park on the beach. 11 "ORV safety closures would not be designated; ORV users would drive at their own risk and would be expected to rely on their knowledge of beach driving to determine if an area is safe to access based on their assessment of current conditions." DEIS at 77; see also DEIS at 105.

NPS law enforcement staff will monitor ORV safety closures on a weekly basis. Sufficient reduction or elimination of the conditions prompting the closure, so there is no longer an imminent hazard, would constitute the trigger for reopening a closure.

DEIS at 105. We have modified the safety closure language to remove the narrow beach and high tide language, based on our experience noted above with the current policy, and made it clear that a narrow beach, where there is insufficient space to exit the beach in the ORV corridor during the high tide, is a sufficient grounds for an ORV safety closure. In addition, we have removed the language "clear and imminent" because what may be clear to some experienced beach drivers could be very different - and much more dangerous - to an inexperienced beach driver. The Seashore should protect both kinds of drivers.

**Response:** The NPS is also concerned about having adequate width for safe beach driving to ensure safe passage without having to resort to driving through closed areas or on dunes, and has revised the safety closure language to reflect this. The preferred alternative (alternative F) has designated areas known for hazardous conditions (such as some of the long standing safety closure areas) as vehicle-free routes year-round. The only exception in modified alternative F is from ramp 59 to around milepost 62, which the NPS changed from the DEIS to allow year-round ORV access. The NPS believes that this stretch of beach is sufficiently broad, particularly during summer months when the beaches tend to be wider, and would not require users to leave the main beach to safely cross the area.

**Concern ID:** 24063

**Concern Statement:** Commenters requested that alternative D reflect true wilderness, with no ORVs or pedestrians.

**Representative Quotes:**

**Corr. ID:** 3455

**Organization:** *Not Specified*

**Comment ID:** 135106

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with absence of true wilderness areas with no vehicles, no pedestrians and no roads or human trails. These should be included as a part of Alternative D.

**Response:** Designated wilderness areas under the Wilderness Act of 1964 allow pedestrian use and often contain primitive trails. Alternative D contains numerous miles of beaches that would only allow pedestrian use year round, with the more remote areas providing a wilderness-type experience for visitors. Alternative D provides Species Management Areas (SMAs) that prohibit all visitor use during the breeding season, which would prevent human disturbances to wildlife and allow natural processes to continue in these areas. All alternatives have some locations where breeding season closures overlap with non-breeding season closures, essentially excluding pedestrians and vehicles year-round. Designating large areas of the Seashore as permanently "people free" would not be appropriate, given the mandate of the NPS Organic Act and NPS management policies which encourage visitor use where appropriate and not in conflict with the conservation of park resources.

A study to explore the suitability of wilderness at the Seashore is outside the scope of this planning effort and will be addressed during the upcoming process to develop a new General Management Plan for the Seashore

**Concern ID: 24064**

**Concern Statement:** Commenters stated that alternative D should not be the environmentally preferable alternative because 40% of the Seashore beaches would be open to ORV year round and there is not a true no action, which would be the environmentally preferred.

**Representative Quotes:**

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137746      **Organization Type:** Conservation/Preservation

**Representative Quote:** Of the alternatives presented in the DEIS, Alternative D would result in the least environmental impacts. However, with 27.4 miles of the Seashore designated as open to vehicles year round - or 40% of Seashore beaches, DEIS at 101 - we question how this alternative can be called the Seashore's "environmentally preferred alternative," particularly in light of the failure to include a "no action" alternative of no ORV use which would be environmentally preferable.

**Response:** As described on page 83 of the DEIS, the prohibition of ORVs was considered in the full range of alternatives, but was not carried forward for further analysis because it would not meet the purpose and need of the plan. However, the environmentally preferable alternative must be identified from the alternatives that are fully analyzed. Of those six alternatives, alternative D is considered the environmentally preferable alternative.

Please see response to Concern ID 24084 for why "no ORV use" was not analyzed as a no action alternative.

**Concern ID: 24065**

**Concern Statement:** Commenters suggested that alternative D be modified so that the ML1 designation is more selectively used and that pedestrians be allowed in SMAs until breeding activity is observed.

**Representative Quotes:**

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137748      **Organization Type:** Conservation/Preservation

**Representative Quote:** However, in terms of achieving an appropriate balance of resource conservation and recreation, we believe alternative D is unduly restrictive. Pedestrians can be allowed in SMAs, until breeding activity is observed, at which time the standard buffer distances should apply. Given the role that ORVs play in increasing disturbance in remote areas that are key nesting habitats, prohibiting ORV use at the majority of the important breeding and nonbreeding habitats in the Seashore will reduce the number of pedestrians in those areas. As a result, disturbance from pedestrians will be lower. We believe that an appropriate balancing would be to allow pedestrian access to certain SMAs, until breeding behavior is observed by NPS staff, at which time appropriate buffer distances under Table 11, DEIS at 127, should be implemented.

Second, we agree that vehicles should be prohibited from SMAs during the breeding and non-breeding seasons. The DEIS, an extensive body of scientific literature, and the USGS protocols, clearly provide sufficient scientific basis to support the Seashore's alternative on this issue, given the statutory, regulatory, and policy provisions that govern the

management of the Seashore's beaches.

However, to achieve a more appropriate balance in terms of resource conservation and recreation, we have crafted the boundaries of the SMAs that are different from the Seashore's SMA boundaries in two major ways. First, for the east facing beach from ramp 44 south to Cape Point there would be an area between the high tide line and up to 100 feet landward for a corridor that is excluded from the SMA. Vehicles would not be allowed outside of the 100 foot corridor, either in the intertidal area or landward of the 100 foot corridor. Pedestrians also would be allowed in both corridors. The second would be a corridor on South Ocracoke from ramp 72 to the easternmost edge of Ocracoke Inlet (but not along the inlet shoreline). A 100-foot vehicle corridor should be established from ramp 72 westward for 1.5 miles being no less than 300 feet from mean high tide. These corridors would be subject to closure based on the standard buffers in Table 11 if breeding behavior is observed, but otherwise, the corridor would remain open to these two popular fishing areas.

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137747

**Organization Type:** Conservation/Preservation

**Representative Quote:** We support a modified version of this alternative. A Modified Alternative D should include: First, the FEIS should include more selective use of ML1 designation, rather than designating all SMAs as ML1. Currently, under alternative D, it appears that all SMAs, including intertidal areas, are closed to all pedestrian use during the breeding season, with the closures starting either at March 15 in shorebird areas, or April 15 in colonial waterbird areas.

We understand the Seashore's reasons for providing the Alternative D approach: it would eliminate ORV and pedestrian disturbance for the majority of shorebirds and colonial waterbirds that nest in the Seashore and provide increased protection for nesting sea turtles. In addition, this approach would reduce staff monitoring requirements, as without vehicle or pedestrian activities, the risk of abandonment or take of nests or chicks would be much lower, which would allow less frequent monitoring and reduced expenses for management activities. This approach also would provide increased predictability for the public.

**Response:** The NPS is aware of the restrictive nature of alternative D in the DEIS. As noted in the above comment, the level and types of access provided were based on increased resource protection coupled with simplified management and consistent closure times and dates for the public. One of the reasons that the NPS identified alternative F as the preferred alternative in the DEIS was to provide more options for public access than alternative D, while still providing adequate protection of natural resources. Although the NPS did not identify alternative D as the preferred alternative in the FEIS, the revised alternative F allows pedestrian access seaward of the prenesting areas until breeding behavior is observed at which time appropriate species protection buffers, equivalent to the ML2 buffers described in Table 10 of the DEIS, would be implemented. In addition, the revised alternative F no longer involves the use of Species Management Areas (SMA) or ML1 buffers as described in table 10 of the DEIS. Please refer to Table 10-1 in the FEIS for information on the species management strategies applicable to revised alternative F.

**Concern ID:** 24067

**Concern Statement:** Commenters asked that alternative D be modified to include a more specific carrying capacity that is lower than what the current capacity would allow.

**Representative Quotes:**

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137750

**Organization Type:** Conservation/Preservation

**Representative Quote:** Second, a Modified Alternative D should include a specific ORV carrying capacity, rather than only limiting vehicles to "a one-vehicle-deep parking configuration" which would allow a massive number of vehicles on the beach. DEIS at 77; see also DEIS at 108. Under this alternative, over 9,600 vehicles could be allowed on the beach, (Footnote 10) which would result in significant recreational conflicts and increased environmental impacts. The NPS should adopt a sharply lower carrying capacity than proposed in any of the alternatives in the FEIS.

**Response:** The NPS considered several comments and suggested approaches to carrying capacity in developing modified alternative F, which combines the one-vehicle deep parking provision of alternative D with the specific vehicle carrying capacity (260 vehicles/mile) from alternative F, to be applied at all designated ORV routes in the Seashore.

***AL1070 - Alternatives: Alternative E (Substantive)***

**Concern ID: 24068**

Concern Statement: Commenters stated that alternative E does not provide enough resource protection and alternatives E and F do not provide an adequate amount of pedestrian access points or vehicle-free areas.

***Representative Quotes:***

**Corr. ID:** 14561

**Organization:** Not Specified

**Comment ID:** 135726

**Organization Type:** Unaffiliated Individual

**Representative Quote:** This leaves Options E & F which are the closest to my preference but do not provide enough pedestrian access points and year around pedestrian only areas.

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137729

**Organization Type:** Conservation/Preservation

**Representative Quote:** Alternative E: Variable Access and Maximum Management

This alternative includes management measures inadequate to prevent harm and harassment of wildlife on the Seashore. It provides insufficient protection for breeding shorebirds and colonial waterbirds, including allowing ORV use in locations/periods when it should not be allowed (such as Bodie Island spit during the breeding season) and allowing an "ORV corridor with pass-through zone." It provides inadequate protection for migrating and wintering shorebirds from ORV based disturbance at key habitats in the Seashore. Adverse impacts would occur to multiple species, including the threatened piping plover, candidate red knot, and other species such as sanderling, dunlin, and black-bellied plover. The adverse impacts would be increased significantly over Alternative C, due to the earlier opening time (September 1 rather than October 15). Alternative E provides insufficient protection for nesting sea turtles, including allowing ORV use before 10 pm at night, allowing camping at spits and points, and allowing opening at 6:00 am, raising concerns that nests could be missed. The use of ML 1 pedestrian \ closures for the entire breeding season at certain locations is unnecessary when a more finely tailored management approach would allow pedestrian access for a longer period while still providing adequate protections for nesting birds. Finally, this alternative provides insufficient areas that are closed to ORVs for the entire year (14.5 miles), resulting in excessive recreational conflicts between pedestrians and ORVs.

**Response:** The NPS has included additional vehicle-free areas for the protection of resources and for the enjoyment of pedestrians desiring a vehicle-free experience in modified alternative F (the preferred alternative). Some of these areas were previously seasonal ORV routes under alternatives E or F. As modified to be year-round vehicle-free areas they will afford protection for migrating and wintering birds and late nesters as well as for summer breeding species. In addition, pedestrian access and parking for this access would be enhanced compared to the original alternative F or alternative E. Protection for sea turtles that has been included in revised alternative F addresses concerns related to night driving by restricting driving -from 9 PM to 7 AM, and ML1 protocols would now be replaced with standard buffers, equivalent to ML2 procedures described in Table 10-1 in the FEIS, that would be applied park-wide and would include more intense monitoring to provide protection for nesting birds.

***AL1085 - Alternatives: Alternative F (Substantive)***

**Concern ID: 24070**

Concern Statement: Commenters stated that they did not agree with the name or content of alternative F, as they feel it did not represent the views of the majority of the negotiated rulemaking committee members.

**Representative Quotes:**

**Corr. ID:** 3890

**Organization:** *Not Specified*

**Comment ID:** 137260

**Organization Type:** Unaffiliated Individual

**Representative Quote:** NPS presents Alternative F as if it were recommended by the recent Regulatory Negotiation process. However, upon close examination Alternative F is found to be a biased and highly restrictive management plan that is in complete opposition to majority recommendations of the recent Regulation Negotiation process. Alternative F strengthens and codifies the denial of public access provisions of the current consent decree. The public access denying provisions of the consent decree, put into effect April 30, 2008, have been extended and transferred to Alternative F. The majority of Regulatory Negotiation Committee stakeholders (19 vs. 5) and numerous public commentators did not recommend an extension of the restrictive provisions of the consent decree as part of a final ORV plan.

**Corr. ID:** 13414

**Organization:** *Not Specified*

**Comment ID:** 138582

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I do not agree Alternative F that reflects the work of the Advisory Committee.

Stated more specifically, Alternative F is not a committee based proposal and it should not be labeled as such. This statement is based upon the final report from the facilitators. In this report, the facilitators note that the advisory committee failed to come to agreement on any aspect of park management. In fact, the positions held by stakeholders were so diametrically opposed to one another that the facilitators didn't even try to summarize the advisory committee's work. Instead, the facilitators simply transmitted 6 addendums ranging from 20 to nearly 1,500 pages each. In sharp contrast the NPS selects elements from the addendums submitted by the 6 groups and combines the elements in ways the groups never intended.

**Response:** Names of alternatives are irrelevant to the decision making process and are merely provided as an aid to the reader. Many of the concepts used in the preferred alternative either originated from Advisory Committee members or were discussed at some point during Committee, subcommittee or work group sessions. The DEIS states clearly on page 80 that “the Committee did not reach a consensus on a recommended alternative” and that “in case of conflicting advice from Committee members about any particular issue, the NPS has made a management judgment as to which approach would make an effective overall ORV management alternative.” Since the name and origin of alternative F has created controversy, NPS has changed the name in the FEIS to Alternative F: NPS Preferred Alternative.

**Concern ID: 24071**

**Concern Statement:** Commenters stated that the DEIS was not clear on soundside access. Issues that needed clarification were the amount of soundside areas open to ORVs or pedestrians and the need for additional soundside ramps.

**Representative Quotes:**

**Corr. ID:** 8742

**Organization:** *Not Specified*

**Comment ID:** 133227

**Organization Type:** Unaffiliated Individual

**Representative Quote:** P. 263 Alt F fails to deal with the need for a soundside access ramp on Bodie. Relocating ramp 2 ½ mile So is ill advised. Better to enlarge parking and add handicap ramp at R 1.

**Corr. ID:** 12230

**Organization:** Coastal Conservation Association North Carolina

**Comment ID:** 140984

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The specifics of option F, the NPS preferred option, require at least some comment as commenting on all options would extend beyond the available space and time constraints. Overall, the DEIS suggests there would be 52 of 68 miles of the waterfront "open" to ORV access but it is not clear that this includes any calculation of sound side access for ORVs or pedestrians.

**Response:** Soundside access is described by alternative in table 8 of the DEIS, and access points are depicted on maps for all alternatives. For alternative F, soundside access is available to both ORV and pedestrian users, and soundside ramps would be officially designated as ORV routes and remain open with sufficient maintenance to provide clear passage, with additional signage and posting to prevent damage to wetland vegetation and other

resources. On Ocracoke Island, a new soundside access route would be developed south of ramp 72; this would be a seasonally open ORV route, as shown on map 7 for alternative F and described on table 8, page 103 of the DEIS. Under modified alternative F, the soundside shoreline of the Bait Pond at Bodie Island spit would be vehicle free year-round, with seasonal ORV access along the ocean shoreline to Oregon Inlet. Under a separate planning process, a new vehicle access and boat launch facility is being planned for the soundside access area just south of the Hatteras Coast Guard Station. No additional soundside ramps are proposed in modified alternative F because of the desire to minimize impacts to sensitive wetland vegetation and mud flats, and because the NPS believes that existing and proposed access under alternative F is adequate to meet the demand for use in this area.

**Concern ID: 24072**

**Concern Statement:** Commenters requested that the extent of past pedestrian uses should be considered.

**Representative Quotes:**

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 139202

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I question the Park's analysis that Plan F will increase pedestrian access to visitors. The history of past beach use has not been put in its proper context. In 2002 there was considerable more ocean beach available to pedestrians seeking recreational activities away from ORV routes than today and what is proposed in plans A, B, C, E, F. For example, just on Hatteras Island; there was an area north (approximately .5 mile) of Avon fishing pier to a spot north of ramp 38 that had been closed to ORV access but open to pedestrian access for considerable time (10 plus years). The entire ocean beach from 1 mile south of ramp 38 to ramp 43 had been open for pedestrian access only in excess of 20 years with portions open for pedestrian access only longer than that. The entire beach from ramp 49 to ramp 55 had been closed to ORV access but open to pedestrian access for at least 15 years. The initial reason these beaches were closed to ORV use is unclear as the beach conditions on many of these beaches were no different than beaches open to ORV access. Past superintendents kept these beaches as pedestrian access only beaches. Superintendent's order # 7 changed the status quo of how these beaches were being managed with respect to pedestrian and ORV access. This is essential information when assigning thresholds impacts while evaluating visitor use expectations and experience.

**Response:** Under NEPA, the baseline for analysis is represented by the no action alternatives. In this case, alternatives A and B serve as the baseline against which all impact topics, including visitor use and experience were compared against. These alternatives consider all areas of existing pedestrian access and the plan/EIS does not include previous or historical pedestrian access areas when determining impacts.

**Concern ID: 24073**

**Concern Statement:** Commenters suggested revisions they would like to see to alternative F including allowing fishing in more areas, establishing firm times for night driving restrictions, longer closure periods, expansion of resource closures for violations, and the addition of noise reducing devices for vehicles.

**Representative Quotes:**

**Corr. ID:** 14242

**Organization:** ENVISCI3330 Land Use Management

**Comment ID:** 140405

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I am in support of Alternative F, with the exception of large areas of open beach access to ORVs and maybe adding a noise reducing device to ORVs. In my studies at the University of Missouri in environmental science: land use, I have come to realize that land, if available, will be utilized by human beings. It is important to consider the appropriate uses of the land with regards to land productivity and its capability for certain uses.

**Corr. ID:** 14642

**Organization:** *Not Specified*

**Comment ID:** 139162

**Organization Type:** Unaffiliated Individual

**Representative Quote:** If Alternative F is used there should be an addition of a vehicle-free area extension for habitat or preservation action violations. This violation extension should also be incorporated in Alternative D.

**Corr. ID:** 14720

**Organization:** MPA/MSES 2011, IU-SPEA

**Comment ID:** 133212

**Organization Type:** Unaffiliated Individual

**Representative Quote:** While Alternative D is the most preferable, Alternative F could be a workable compromise given several modifications:

1. Allow fishing in certain parts of Hatteras Inlet;
2. Lengthen the calendar year closure periods;
3. Set firm times for the "dusk to dawn" driving limits.

**Response:** Alternative F has been modified to reflect input from agencies and public comment received during the 60-day comment period on the DEIS. As a result of these revisions, night driving restrictions would be established using firm times (9pm to 7 am) instead of "one hour after sunset until turtle patrol has checked the beach in the morning, at approximately a half-hour after sunrise. Establishing firm times would create more predictability for visitors while providing improved enforcement capability for law enforcement staff. As discussed under the response to Concern ID 24089, night driving restrictions related to sunset and turtle patrol efforts would have created inconsistency for both visitors and staff. The night driving restrictions under alternative F have been further modified to allow for night driving after September 15, only in areas where there are no turtle nests. While closure periods for turtles will not necessarily be lengthened, night driving restrictions would begin on May 15 or after the first nest is found, whichever occurs first. In modified alternative F, ML1 species management measures have been replaced by standard buffers and monitoring equivalent to ML2 measures described in Table 10 of the DEIS, throughout the Seashore in order to provide more predictable access for visitors. Dates have been standardized dates for seasonal ORV routes in resource sensitive areas (March 15 – September 14) so that those routes are vehicle-free to protect bird species involved in nesting, breeding, and foraging activities. Additionally, standard buffers would be implemented in areas of the Seashore that are open to ORVs year-round if breeding activity is observed or a nest is found in order to provide species protection. Fishing will be permitted at Hatteras Inlet, which is designated as vehicle free with ORV access permitted to the end of the interdunal road network.

Automatic buffer expansions for closure violations will not be included under alternative D or the modified alternative F. The NPS believes that the education provided by the proposed permit system and the ability to revoke permits for violations will be adequate tools to accomplish compliance with resources closures, without unfairly punishing law abiding visitors. While the DEIS does not have any specific noise-reducing device requirements for ORVs, all vehicles would be required to be in compliance with state registration and inspection requirements. The NPS feels this compliance adequately addresses proper ORV characteristic requirements.

**Concern ID: 24075**

**Concern Statement:** Commenters stated that alternative F would allow unacceptable impacts to the Seashore's wintering and migrating bird populations by not designating adequate areas free of ORV and by including new interdunal roads. In addition, they stated that colonial waterbirds would receive inadequate protection because of the late starting date for the prenesting surveys and that black skimmers may be at risk due to the proposed end date for prenesting surveys.

**Representative Quotes:**

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137737

**Organization Type:** Conservation/Preservation

**Representative Quote:** In sum, Alternative F consistently places recreation ahead of natural resource protection where conflicts exist. Alternative F fails to provide adequate and specific habitat free of ORV use to protect wintering and migratory shorebirds and fails to prohibit ORV use on an appropriate area to protect wintering and migratory shorebirds. Alternative F fails to provide timely protection for breeding colonial waterbirds which jeopardizes their ability to establish nesting sites and nest successfully. Alternative F fails to provide adequate protection for federally-listed sea beach amaranth, other native plants, and natural plant communities. Alternative F subscribes to the notion that the only way to experience Cape Hatteras National Seashore is from an off-road vehicle, which is a recreational pursuit of a minority of seashore visitors. Alternative F confines visitors who wish to experience the Seashore without vehicle and vehicle impacts to a few locations that will be overcrowded during many months of the year and provides no area for pedestrian only use where a visitor can experience the Seashore without vehicles on the landscape. As discussed below, a modified version of Alternative D can accomplish these objectives.

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137733      **Organization Type:** Conservation/Preservation

**Representative Quote:** In addition, the purported protection benefits of the 8.3 miles that are not open to ORVs are significantly undermined by the following provisions. First, at Hatteras Inlet Spit, despite one interdune road that already exists that ends very close to Hatteras Inlet, the alternative F mandates the construction of yet another new "interdune" road "extending southwest and northeast of the south end of Pole Road established to provide access to False Point and Inlet." DEIS at 100. It is unclear where this road would be placed, as the distance between the existing pole road and the high tide line in this area is as narrow as 30 yards. In effect, what could occur is that the intertidal area would be closed to vehicles, but vehicles would be allowed to drive just a few yards away through high quality resting habitat, resulting in ORV disturbance. In addition, this new interdune road would allow large numbers of ORVs to quickly and easily reach this remote location in ORVs that could park just a short distance from the ocean, which could allow high levels of pedestrian disturbance in high quality feeding and resting habitats. 9 Hatteras Inlet Spit has had observations of two piping plovers from the endangered Great Lakes breeding population, and is designated by the USFWS as wintering range critical habitat for the piping plover.

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137741      **Organization Type:** Conservation/Preservation

**Representative Quote:** Inadequate protections for colonial waterbirds  
Initiation of pre-nesting surveys on May 1 is too late to adequately detect breeding activity for colonial waterbirds. This will likely result in abandonment of otherwise suitable nesting areas resulting from off-road vehicle use and the associated human disturbances before colonies become established. It is clear, and has been demonstrated in other areas along North Carolina's coast, that initiation of nesting activities by colonial waterbirds can begin prior to May 1. Data from Pea Island National Wildlife Refuge and other mid-Atlantic sites indicate clearly that colonial waterbirds arrive prior to May 1.

Ending pre-nesting surveys on July 15 will not allow the detection of late-forming colonies of terns and skimmers. This also further limits habitat available for these species and results in short and long-term impacts. Reopening areas with suitable habitats for nesting Black Skimmers on July 31 could prevent this species from establishing colonies and jeopardizes nesting and nesting habitat availability for this species. Black Skimmers can and regularly do initiate nesting during the month of August. Alternative F allows pedestrians in the narrow corridor of Bodie Island spit where the best nesting habitat exists and where nesting is highly likely to occur, and it allows vehicles after July 31st, which will jeopardize nesting Black Skimmers.

Implementation of Alternative F will prevent otherwise suitable habitat from being utilized by nesting waterbirds in areas open to off-road vehicles. It will have direct impacts that will limit nesting areas that are available to these species and it does not provide for adequate, timely detection of breeding activities and the subsequent protection of nesting areas. Implementation of Alternative F will result in depressed populations of these species and failure to recover these species.

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137734      **Organization Type:** Conservation/Preservation

**Representative Quote:** DEIS at 100. The intertidal beach in this area is a known feeding location for piping plovers. In addition, the Seashore proposes a new "interdune" road "established parallel to the beach extending from ramp 59 for 0.3 mile northeast toward the inlet, with parking at the terminus." DEIS at 100. This new interdune road would allow large numbers of ORVs to quickly and easily reach this remote location and park just a short distance from the ocean, allowing high levels of pedestrian disturbance in high quality feeding and resting habitats. As with Hatteras Inlet Spit, this location has had an observation of a piping plover from the endangered Great Lakes breeding population, and is designated by the USFWS as wintering range critical habitat for the piping plover.

**Response:** Concerns relating to having sufficient vehicle-free areas to provide protection for wintering and migrating shorebirds were considered and additional year-round vehicle-free areas were incorporated into modified alternative F, as described in the response to Concern ID 24068. In addition, concerns about the number of ramps and interdunal roads were considered, and the number of proposed new ramps was reduced, the proposed interdunal

route north of Ramp 59 was eliminated, and the number of “connector routes” between the new interdunal road (from ramp 45 to 49) and South Beach was reduced to address concerns about construction in sensitive dune environments. Finally, regarding concerns about the start and end dates for prenesting surveys under alternative F, observations by Seashore staff in recent years have shown that May 1 is an adequate date to capture all early nesting colonial waterbird activity. Although pre-nesting surveys would continue until July 15 for colonial waterbirds, if black skimmer or other species breeding activity occurs later in the season at any location, alternative F provides for monitoring and implementation of buffers based on the observed behavior, as described in the sections of Table 10-1 that follow “Pre-nesting Closures.” In addition, the “Pre-nesting Closures” section of Table 10-1 has been revised to states that “Pre-nesting closures would be removed if no breeding activity is seen in the area by July (or August 15 if black skimmers are present), or 2 weeks after all chicks have fledged, whichever comes later.”

#### **Concern ID: 24076**

**Concern Statement:** Commenters requested the NPS adopt a modified alternative F, following the recommendations of the United Four Wheel Drive Associations.

##### ***Representative Quotes:***

**Corr. ID:** 15045

**Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137886

**Organization Type:** Unaffiliated Individual

**Representative Quote:** For the following reasons outlined below we request the agency adopt in its final decision a modified Alternative F, specifically reestablishing open and seasonal ORV use areas pursuant to maps supplied by UFWDA; removing the DEIS prohibition of access by street-legal motorcycles; prohibit nighttime beach driving during sea turtle nesting and hatchling season only during the hours from 10:00 p.m. until 6:00 a.m. during the dates from May 27 and August 25; during turtle hatch season limit closure to surf line from 1 hour before sunset until dawn, monitored by Turtle Night Nest Watch Team, utilizing keyhole pattern fence to the surf line at night and implement daytime closures that are limited to 10 meters square; Seasonal ORV beach closures for the villages of Frisco, Hatteras, and Ocracoke limited only from May 15 to September 15; addition of access ramps pursuant to maps supplied by UFWDA; provide pedestrian and ORV corridors or bypasses through, around, or below high tide line in all Species Management Areas (SMAs) during the entire breeding and nesting season within guidelines to maintain access; move chick buffers for Piping Plover unfledged chicks as the brood moves rather than expand buffer as proposed. The preceding modifications as well as those suggestions and rationale appearing as part of the UFWDA et al. Addendum to Final Report of the Proceedings of the Negotiated Rulemaking Advisory Committee for Off-Road Vehicle Management at Cape Hatteras National Seashore are incorporated herein and attached hereto.

**Response:** The NPS explored the options presented for a modified alternative F, as suggested by the United Four Wheel Drive Association. ML1 species management protocols have been eliminated in the revised alternative F, which will allow for reduction in the buffer sizes of some species (colonial waterbirds, least terns, and American oystercatcher), while increasing the monitoring for these species to ensure adequate protection. For complete responses to the specific suggestions recommended by the Association please see the responses to Concern IDs 24192 (use of corridors), 24194 (buffer distances), 24150 (protection of non-federally listed species), 24143 (turtle relocation), and 24263 (ecosystem methodology), 24089 (night driving), 24120 (access ramps), 24193 (turtle closures), 24102 (motorcycles), and 24198 (seasonal closures).

#### **Concern ID: 24077**

**Concern Statement:** Commenters expressed concern that under alternative F, the access stated in the DEIS would not be guaranteed because it would be subject to resource closures and that the DEIS does not reflect the potential for these closures.

##### ***Representative Quotes:***

**Corr. ID:** 3890

**Organization:** Not Specified

**Comment ID:** 137265

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS has failed to inform the public of the extent of expected closures to the most popular recreational sites of the national seashore. Experience with the consent decree closures for the past two years (2008, 2009) provide a clear indication of the extent to which the national seashore will be closed to public

access-ORV and pedestrian. In recent court testimony the National Seashore Superintendent indicated the extent of the closures, but nowhere does that data appear in the DEIS. The public should know what to expect when Alternative F is promulgated.

The Bodie Island Spit was closed a total of 136 days in 2009. Cape Point was closed 101 days in 2009. The Hatteras Island Spit was closed 125 days and south Ocracoke was closed 80 days. These are some of the most popular recreational use areas at the national seashore which will not be accessible to the public during late spring and summer months.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140444

**Organization Type:** Conservation/Preservation

**Representative Quote:** DEIS's failure to consider the impact on public access in the determination of buffer distances is only exacerbated by its failure to inform the public about the full extent of the closures that can be expected to occur under Preferred Alternative F. The NPS possesses specific data relating to closures from the implementation of the Consent Decree during 2008 and 2009 that will provide a strong indication of the extent to which Preferred Alternative F will result in the closure of the Seashore to public access, not only for ORV use, but for pedestrian use as well. The DEIS does provide some data for 2008: "From May 15 through August 21, 2008, an average of 10 miles of oceanfront beach at the Seashore was closed to both pedestrians and ORVs. The largest amount of beach closures was reported on May 29, 2008, when 12.8 miles of beach were closed to all recreational use to protect piping plovers exhibiting breeding, nesting, and/or foraging behavior." DEIS at 267. As the NPS is aware, and as the Superintendent for the Seashore recently testified, the following closures occurred in 2009: Bodie Island Spit - 136 days; Cape Point - 101 days; Hatteras Island Spit - 125 days; and south Ocracoke - 80 days. These closures affected some of areas of the Seashore that are most used by the public for recreation, during the late spring and summer months when recreational use is most desirable. Despite the fact that this record of closure provides valuable data for public review and comment, it appears nowhere in the DEIS. This would have been important information to share with the public to accurately inform the public review process.

**Response:** Table 7 of the DEIS states that "when shorebird breeding activity is observed, standard buffers would apply, which depending upon the circumstances could close the access corridor" which indicates that ORV and/or pedestrian access to the points and spits could be restricted during breeding season. Table 37-1 has been added to the FEIS, under Affected Environment Visitor Use and Experience, to display closure dates during 2007 - 2009 for the inlets and Cape Point under alternative B. Although previous details on closures at the Seashore provide a historical perspective of beach access, the exact location, size, and timing of closures are dependent on variables such as species activity and weather that cannot be accurately predicted. Alternative F has been revised to allow for increased pedestrian access seaward of prenesting closures. However, standard buffers would be implemented when breeding activity is observed, which could limit pedestrian access in some places.

**Concern ID:** 24080

**Concern Statement:** Commenters stated that implementation of alternative F would likely lead to additional potential soil and wetland impacts from proposed construction activities. Commenters also indicated that funding may not be available to implement this alternative due to high costs associated with the amount of management flexibility contained in alternative F.

**Representative Quotes:**

**Corr. ID:** 15253

**Organization:** Environmental Protection Agency

**Comment ID:** 139035

**Organization Type:** Federal Government

**Representative Quote:** EPA's primary concern about the preferred alternative (Alternative F) is that it designates the second-highest amount of shoreline miles for ORV use and includes the greatest number of new (or relocated) access ramps, parking areas, and new roads and trails among the action alternatives. There appears to be a significant number of existing access points and roads on CHNS, and it is unclear from the Draft EIS of the need for this additional access. These trails and roads will likely lead to additional potential impacts to soils and wetlands, particularly from ORV use in and around vegetated wetlands on the soundside and along interior ORV routes. Alternative F also allows for greater flexibility in the establishment and enforcement of buffer zones during the breeding season, night-time driving restrictions, and has higher carrying capacities in certain areas than other alternatives, which could lead to the disruption to sensitive and endangered wildlife. Alternative F will also require

significantly more resources and operating costs to fully manage the greater flexibility that it allows while attempting to ensure environmental resources are adequately protected. EPA has concerns that the NPS will not have the ability to fully enforce and maintain the protection of sensitive resources if Alternative F is implemented.

**Response:** In response to EPA's and other comments, NPS has reduced the number or size of new (or relocated) access ramps, parking areas, and new roads, which would reduce the amount of construction required and would lessen the potential for soil and wetland impacts.

NPS has also adjusted alternative F to provide for fixed hours of night-time ORV closure (9:00 p.m. - 7:00 a.m.). The revised preferred alternative F also changed the potential for reopening an area to night driving after Sept 15 from "areas with a "low density" of sea turtle nests to areas with "no nests."

NPS has adjusted carrying capacity to 260 cars per mile on all ORV routes, combined with parking limited to one car deep and maintaining two lanes of traffic at all times. If short-term overcrowding occurs, an emergency closure would be implemented.

NPS believes it will have the funding required to implement the preferred alternative. The cost of the ORV permit required under the action alternatives would be based on cost recovery for the additional staffing and resources needed, above the existing base-funded operations, to implement the ORV management plan.

### ***AL1087 - Alternatives: Range of Alternatives***

#### **Concern ID: 24083**

Concern Statement: Some commenters stated that the range of alternatives should have considered maximizing access. They stated that all of the alternatives in the DEIS restrict access and only address two different scenarios for buffer sizes, and therefore a full range was not considered. Other commenters stated that the range of alternatives should have included one that puts a greater emphasis on pedestrian access and wildlife management and less on ORV use.

#### ***Representative Quotes:***

**Corr. ID:** 9198      **Organization:** National Parks Conservation Association

**Comment ID:** 131689      **Organization Type:** Unaffiliated Individual

**Representative Quote:** All of the alternatives presented in the draft environmental impact statement privilege ORV use over all other visitors. Overall, this approach is unbalanced and fails to conserve and protect the wilderness, birds, and turtles that make this area nationally significant.

**Corr. ID:** 11416      **Organization:** *Not Specified*

**Comment ID:** 134279      **Organization Type:** Unaffiliated Individual

**Representative Quote:** NPCA seeks an ORV management plan that places greater emphasis on pedestrian access and wildlife management, especially with regard to endangered sea turtles and shorebirds.

**Corr. ID:** 13810      **Organization:** cca-nc

**Comment ID:** 139816      **Organization Type:** Unaffiliated Individual

**Representative Quote:** While there are preferred environmental and NPS options, there is no pro-access preferred option. The CHNSRA was established specifically for the American public to enjoy the seashore. To propose no option which provides a maximum access option certainly violates the spirit and perhaps the letter of the laws establishing this national park. Without serving the visiting public, The NPS has failed in its responsibility to our citizens. All the options presented in the DEIS seek to restrict public access well beyond any reasonable or legal requirement.

**Corr. ID:** 14714      **Organization:** Outer Banks Preservation Association

**Comment ID:** 133687      **Organization Type:** Unaffiliated Individual

**Representative Quote:** While I am appreciative of all of the hard work that went into developing the DEIS, I am greatly disappointed at the lack of exploration into alternatives that is apparent when reading the DEIS. Each

alternative that is offered for choice is excessively restrictive without providing any substantial benefit to resource or wildlife management.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140440

**Organization Type:** Conservation/Preservation

**Representative Quote:** The NPS failed to properly analyze a range of alternatives to the proposed action in the DEIS with respect to buffer distances, a key element of the ORV management plan. The DEIS identified two no action alternatives and four action alternatives. Each of the four action alternatives would apply identical "standard buffers" to limit access and potentially close access corridors. DEIS at 444 (Alternative C), 452 (Alternative D), 459 (Alternative E), 468 (Alternative F); see DEIS at 73 ("The buffer distances identified as common to all action alternatives are intended to provide adequate protection to minimize the impacts of human disturbance on nesting birds and chicks in the majority of situations, given the level of visitation and recreational use in areas of sensitive wildlife habitat at the Seashore and issues related to non-compliance with posted resource protection areas."). The DEIS did not identify or analyze a single action alternative that would apply different buffer distances than those specified in Table 10 of the DEIS. DEIS at 121-26. Among other reasonable alternatives, the DEIS should have analyzed the alternative method of establishing buffer distances and protection measures specifically outlined by Appendix G of the Piping Plover Recovery Plan, discussed further herein. The NPS's failure to consider any such reasonable alternatives violates the letter and spirit of NEPA and CEQ's implementing regulations. The NPS further circumscribed any meaningful evaluation of reasonable alternatives by making other key elements of an ORV management plan "common to all action alternatives." These include the following:- ORV routes and areas would be officially designated in accordance with the executive orders.- Year-round ORV routes and areas would be designated only in locations without Sensitive resources or high pedestrian use. - Year-round non-ORV areas would be designated. - A new standard set of species management and monitoring measures would include "species management areas" (SMAs) and two levels of species management effort. SMAs include areas at the spits and points in addition to other sensitive resource areas. DEIS at x. The DEIS's alternatives analysis, if done properly, also would have identified and considered alternatives that included variations on each of these key elements. By considering only alternatives that assumed and were identical as to each of these key criteria, the NPS improperly and unlawfully confined its analysis.

**Response:** NPS Director's Order 12 requires that a full range of alternatives be analyzed in an EIS and that the alternatives meet the project objectives to a large degree. The six alternatives analyzed in the DEIS contained considerably different buffer distances. For example, buffers for piping plover ranged from 50 to 1000 meters and buffers for American oystercatcher included "behavior-based" buffers, 150-foot buffers, 150-meter, 200-meter, and 300-meter buffers. The action alternatives contained two different buffer distance scenarios based on two different management strategies. A limited number of buffer types were included in the action alternatives because proposed buffers were determined by minimum distances that would provide adequate species protection to best meet the objectives for threatened, endangered, and other protected species as documented in table 12 of the DEIS, entitled "Analysis of How Alternatives Meet Objectives". The inclusion of inadequate buffer distances in the action alternatives would not meet the natural resource protection objectives of the plan or the provisions of the Endangered Species Act and other relevant law and policy nor allow progress towards achieving desired conditions for shorebirds at the Seashore.

The NPS considers alternative A to be similar to a "maximum access" alternative as suggested by the commenter. This alternative provides for ORV use in most areas of the Seashore 24 hours a day, subject to temporary resource closures, safety closures, or administrative closures. A "maximum access" option involving removing additional ORV restrictions from alternative A, would be a form of unrestricted ORV use, which was dismissed as an alternative because it would not meet the purpose, need, and objectives of this plan/EIS (DEIS p. 85). Furthermore, a "maximum access" alternative as described by commenters would not meet the criteria of Executive Order 11644 for the location of ORV areas and trails.

Although there are several elements that are common to all action alternatives, which is common and accepted in NEPA practice, the action alternatives contained numerous different alternative elements, as indicated on tables 7 and 8 in the DEIS. NEPA regulations require agencies to evaluate a range of alternatives, including the no-action alternative(s). Therefore, the NPS has fulfilled the requirement of Section 1505.1(e) of the CEQ NEPA regulations by evaluating in detail six different alternatives with numerous differing alternative elements as well as the full range of alternatives that includes those considered but dismissed from further analysis (DEIS p. 83-90).

Alternative F has been revised to provide some seasonal ORV routes with more months of vehicle-free areas. For example, on village beaches there would be seasonal ORV routes for Rodanthe-Waves-Salvo, Avon, Frisco, and Hatteras that would be open to ORVs November 1 through March 31 (7 months closed to ORVs, 5 months open), with a minimum beach width criteria that would prompt a safety closure of portions of village beaches not meeting the criteria. Beaches fronting Buxton would be vehicle free year-round. Also, other seasonal ORV closures have been changed to March 15 through September 14 to provide a full six months for the vehicle free period.

**Concern ID: 24084**

**Concern Statement:** Commenters stated that the no action alternative was incorrect and did not represent a "true" no action alternative. The reasons for this varied with some commenters stating that no ORVs should be the no action and some stating it should be ORV use with no regulation to represent a worst case scenario. One commenter stated that the discussion of impacts should be quantitative instead of qualitative.

**Representative Quotes:**

**Corr. ID:** 12002

**Organization:** *Not Specified*

**Comment ID:** 134149

**Organization Type:** Unaffiliated Individual

**Representative Quote:** 1.NO-ACTION ALTERNATIVE. From my experience, Congress intended that the no-action alternative be technically analyzed as a worst-case condition so other alternatives could be compared to no-action. In this case, no action should be what would happen if there were literally no ORV management and vehicles drove everywhere. NPS should then discuss impacts associated with no action. These impacts should be quantitative; and they should be compared to quantitative impacts associated with other plans. For example, for Piping Plover you should state the impacts to the species for open access ORV use. What is the National implication to the overall species? (Probably very little - the CAHA population is quite small). What is the regional implication? (Probably would result in the loss of PIPL at the Seashore). It is then possible to compare the numbers of PIPL that could be expected under various alternatives. This is the No Action Plan as Congress intended.

Your current method of comparing plans is descriptive rather than quantitative and the basis for the differing description of impacts associated with each alternative is not clear.

By examining experience at Cape Lookout National Seashore, with much less visitation and minimal ORV use, you should be able to make an estimate of what the outcome to the species would be under Alternative F under this DEIS.

With boundaries (worst case - a true no-action; and best case-Alternative F) set, you should estimate quantitatively what the impacts are for various alternatives. How will productivity rates improve from Alternative A to Alternative F- How will populations fare under all alternatives-

The lack of qualitative analysis indicates a lack of rigor in the scientific analysis and questions the validity of the DEIS. It presents the appearance of opinions rather than science.

**Corr. ID:** 13807

**Organization:** American Bird Conservancy, Center For Biological Diversity, et al

**Comment ID:** 137415

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The final EIS should include a true "no action" alternative of no ORV use on Seashore which will provide an appropriate baseline for assessing and evaluating environmental impacts of the action alternatives.

**Corr. ID:** 14433

**Organization:** *Not Specified*

**Comment ID:** 136733

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Although I've read the explanation of why the "No Action" plan does not prohibit ORV access, I believe that complete prohibition should have been presented. A fortiori, virtually unrestricted ORV access should not be the line from which increased conservation and management policies should have to prove their worth.

**Response:** Although prior CEQ regulations implementing NEPA required a worst-case analysis, current regulations do not. Furthermore, there has never been a requirement to define the "no-action" alternative as a "worst case condition."

NEPA does not require that NEPA documents discuss only quantifiable impacts. The NPS Director's Order #12 Handbook states, "If you can meaningfully and accurately quantify the magnitude of this impact, this is the best way to present the information. If you have little confidence in an absolute number, you may want to use a range of reasonable impacts; rather than conveying false confidence, documents should give the decision-maker and the public a true picture of how well you can predict an impact. You must support qualitative and quantitative impact analyses with the scientific literature and/or other experts' testimony. Such references should be cited liberally in the impact section." (Section 4.5.G.1) To the extent that impacts can be quantified, they have been quantified in the DEIS. When they cannot, they have been discussed qualitatively.

As discussed above under Concern ID 24020, ORV use is to be allowed only if NPS can determine that off-road vehicle use on the routes to be designated will not adversely affect the natural, aesthetic, or scenic values of the Seashore (including listed and non-listed park wildlife). To the extent there is a scientific burden of proof, it must be met to allow ORVs, not to restrict them. Because quantitative data simply are not available for many of the sorts of impacts and resources at issue, it would probably be impossible for NPS to allow any ORV use in the Seashore without relying on qualitative analyses.

As discussed on p. 59 of the DEIS and in the No-Action Alternatives section of the FEIS, to provide continued visitor access through the use of ORVs, the NPS must promulgate a special regulation authorizing ORV use at the Seashore. The purpose of the Plan/EIS is to develop such a regulation. Without a special regulation, continued ORV use would conflict with NPS regulations (36 CFR 4.10). The consent decree recognizes this and sets a deadline for the ORV plan and regulation. As the district court has recognized in another case, absent an ORV plan and regulation, as a legal matter ORV use is "prohibited." If NPS does not promulgate a regulation, continuing its past inaction, this legal prohibition would remain, and the result could be that the district court would expressly ban ORV driving on the Seashore. "No ORV Use" thus could represent a result of NPS past inaction continued into the future, and thus might satisfy the first purpose of a no-action alternative (i.e. to represent the agency's past and current actions or inaction on an issue continued into the future). NPS does not believe, however, that a "no ORV use" alternative would fully serve the function of a no-action alternative, because it would not satisfy the second purpose of a no-action alternative (i.e. to set a baseline of existing impacts continued into the future against which to compare the impacts of action alternatives). ORV use has occurred continuously before and since the Seashore was authorized and established. Given this history, a complete ORV prohibition cannot be considered as the "current management direction or level or management intensity" or as "continuing with the present course of action," which is how CEQ describes this role of the No-action alternative under NEPA.

As discussed on p. 83 of the DEIS and in the Alternative Elements Considered but Dismissed from Further Consideration, Prohibit the Use of off-Road Vehicles section of the FEIS, the NPS did consider prohibiting ORV use at the Seashore as an action alternative. However, the purpose of this plan is to "develop regulations and procedures that carefully manage ORV use/access in the Seashore to protect and preserve natural and cultural resources and natural processes, to provide a variety of visitor use experiences while minimizing conflicts among various users, and to promote the safety of all visitors." ORV use, if effectively managed, provides convenient access for many appropriate visitor activities at some popular beach sites, including, for example, activities that use vehicles to transport substantial amounts of gear for the activity. Prohibition, rather than management, of ORV use could substantially diminish such visitor experience opportunities. Therefore prohibition of all ORV use would not meet the plan need. Also as discussed in the DEIS and FEIS, ORV use is a historical use at the Seashore that has been accounted for in Seashore planning documents. Because a complete prohibition of ORV use does not meet the purpose, need, and objectives of this plan/EIS and because ORV use is a use that is accounted for in Seashore plans, elimination of all ORV use at the Seashore was not carried forward for further analysis as an action alternative.

### ***AL1115 - Alternative Elements: Nighttime Restrictions***

#### **Concern ID: 24087**

**Concern Statement:** Commenters stated that the night driving restriction should be removed from the alternatives. They stated that there is no scientific evidence that shows night driving has any impact on turtle nesting or hatchling

survival and people on the beach at night would be a deterrent to predators, without impacting the wildlife. Commenters asked for night driving to be allowed year round, subject to obtaining a permit.

***Representative Quotes:***

**Corr. ID:** 249

**Organization:** *Not Specified*

**Comment ID:** 130590

**Organization Type:** Unaffiliated Individual

**Representative Quote:** There should be no night-time restrictions of driving or of beach fires. There is no evidence that such use of the Seashore beaches effects turtle populations in any manner. Restriction of beach access during night time hours will not preclude the need for law enforcement coverage. It will not increase law enforcement's ability to address problems during daylight hours because there never has been, nor is there now, night time coverage that can be shifted to daylight hours. Finding an on-duty NPS law enforcement ranger within the Seashore after 11pm is something that happens very infrequently. Extremely limited and inadequate law enforcement coverage has existed within the Seashore for many years. The solution is to hire more rangers. One of the Seashore's primary visitor activities, fishing for red drum and striped bass, is best done during hours of darkness. Many visitors come to the Seashore primarily to enjoy a beach fire. These activities should not be restricted without definite proof they significantly reduce turtle usage of the Seashore beaches. Turtle closures provided for in the NPS preferred alternative are much too large. All turtle closures should provide for pedestrian and ORV passage at all hours of the day and night. During the "hatch window" passage should be provided at all hours, either between the nest and the dune line or in front of the nest with NPS volunteers overseeing the nest to insure that vehicle passage will not interfere with hatching turtles.

**Corr. ID:** 946

**Organization:** *Not Specified*

**Comment ID:** 132298

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Night driving restrictions are apparently instituted to protect the nesting Sea Turtles. With a permit requirement that had an education part (NO FEE), this restriction should not be necessary. In any case, access should be granted 1 hour prior to sunrise, at a minimum.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140248

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Examination of the NPS annual records proves that those two controls are ineffective.

In the past 10 years of data no adult turtle was ever impacted or killed by night vehicle operation. Turtle egg or hatchling impacts have been 0.01% of the resource from night driving. Missed nests have never been a serious problem at CHNSRA being of the order of 1%. Further reductions in missed nests could be accomplished by use of trained dogs or enlistment of night ORV operators to assist in location of new nests. Prohibition of night driving is not warranted by the science.

**Corr. ID:** 15045

**Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137929

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I. Decisions are arbitrary and capricious based on the parks own statistics. The DEIS, Alternative F, proposes a night driving ban in effect for sea turtle nesting habitat from May 1 to Nov 15. DEIS at 81 and 82. Yet only twice in the past 11 years have turtle nests been recorded within the unit prior to May 27. Even if a no-impairment standard is implied May 1 is too early.

Similarly, a nighttime driving ban is proposed to be in effect for sea turtle nesting habit through Nov. 15. This limitation is arbitrary as it is not statistically supported. All other protection measures would still be employed while allowing driving. In the past 11 years, only 1% of turtle nests remained after August 28 of each year. Utilizing a reopening date of September 16 is still too late compared to statistics showing only 1% of nests remain as of August 28 of each year. Labor Day is traditionally a very high use visitor weekend and thus provides the North Carolina economy with a disproportional amount of revenue compared to a non-holiday weekend. Proposing a beach closure at night that extends into the Labor Day weekend, occurring the first Monday in September, disproportionately impacts the local economy as compared to the low probability of the actual nest protection that could be achieved.

**Corr. ID:** 15095

**Organization:** *Not Specified*

**Comment ID:** 139591

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I'd like to address night driving issues on page 369 of the DEIS Alternative F says, "May 1 to November 15, designated ORV routes and potential sea turtle nesting habitat (ocean intertidal zone, ocean backshore and dunes) would be closed and non-essential ORV use one hour after sunset until turtle patrol has checked the beach in the morning, at approximately a half-hour after sunrise." Last night, David Scarborough commented that there was no need for night driving restrictions, as it does not meet the requirements of a major adverse impact as defined on page 369 of the DEIS. All you need to do is to look at the history here, recorded in the annual sea turtle reports, and you'll find the following: "From 2000 through 2003, four years, with night driving and wood -- two by two wooden stakes at closures, the false crawl ratio was 0.75 to 1. 2004 and 2005, was white Carsonite stakes at closures, the false crawl and nest ratio jumped to 1.62 to 1." Neither National Park Service, the U.S. Fish and Wildlife, or North Carolina Wildlife Resource Commission flinched at this dramatic increase. Only I showed this problem to you, Mike, and you made the change. 2006 and 2007, you started using brown Carsonite stakes and closures, while night driving was still allowed and the false crawl and nest ratio dropped to 0.98 to 1, without the unexplained 24 false crawls in the hook bird closure at Cape Point. In 2008 and 2009, with brown Carsonite stakes and no night driving because of the Consent Decree, the false crawl ratio was 0.95 to 1. That's the lowest false crawl ratio to nest, in the last 10 years, has been with night driving, and wooden stakes. It's clear that the Cape Hatteras National Seashore recreational area false crawls have increased by the use of Carsonite stakes and not reduced by a ban on night driving. I repeat. Not reduced by a ban on night driving. It's also worth noting that the false crawl ratio in front of villages on Hatteras Island in the last 10 years as been 0.67 to 1. U.S. Fish and Wildlife false crawl expected ratio on undeveloped islands is 1 to 1. Please use science from here at Cape Hatteras and not from Florida.

**Corr. ID:** 15141

**Organization:** *Not Specified*

**Comment ID:** 139036

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the plan to prohibit night ORV beach access in the May 1 through September 15 time frame. Night ORV and pedestrian access should be managed using the guidelines that were followed prior to the Consent Decree.

**Response:** Based on public and agency comments regarding the duration (both calendar and daily) of night driving restrictions and the ambiguity of the "low density" terminology for periods from September 16 to November 15, the NPS has revised alternative F with regards to night driving restrictions. Under the revised alternative F, all non-essential vehicle use will be restricted or prohibited from 9:00 pm until 7:00 am from May 1 until November 15. From September 16 to November 15, ORV routes with no turtle nests remaining will reopen for night.

Alternative F has also been revised to allow daytime pedestrian access through the intertidal zone below nests once turtle closures have been expanded during the hatching window; however, pedestrians will not be allowed to walk up into the closure or to remain in the area below the closure. The calendar duration of night-time driving restrictions better match the actual nesting season of the turtles at the Seashore while also protecting hatchlings. Beginning the night driving restrictions at 9:00 pm and ending them at 7:00 am balances resource protection with public access including allowing park staff to complete turtle patrols in the morning to identify and protect nests prior to the onset of ORV use each day.

Driving on the beach at night does impact nesting sea turtles and hatchlings both directly and indirectly. Because visibility is reduced at night, there is also the potential for nesting, live stranded, or hatchling turtles to be hit by ORVs operating at night. (NMFS and USFWS 1993; Cohen et al. 2010). In addition, because there are not the resources to monitor the entire beach 24 hrs per day, the number of recorded incidents resulting from human activities, especially at night, likely underestimates the actual number of incidents that occur. In areas that people would not normally access due to distance, the Seashore has documented vehicle lights, people with lights and cameras causing false crawls; false crawls that would likely not have occurred if ORVs had not brought the people to those locations. In 2007 an adult female was documented crawling parallel to the ocean towards vehicle headlights after nesting. When park staff asked the vehicle owner to turn the lights off the turtle headed directly into the ocean. False crawls or turtles being attracted to and nesting adjacent to fire pits have also been documented in the Seashore, and while the majority of beach fires occur in the village areas, ORVs provide access to remote areas of the beach that would otherwise not experience beach fires that impact turtles. Hatchlings have been documented crawling towards and into beach fires, including an incident where hatchlings crawled approximately 300 m into a

beach fire in 2008. Evidence that hatchlings have been caught in tire ruts left behind by vehicles have been documented. Vehicles running over nests at night prior to morning turtle patrols discovering and protecting the nests have been documented at the Seashore – some with recorded damage to eggs.

Though it is the only known recorded incident at the Seashore where an adult nesting turtle was struck and killed by an ORV, the recent death of a an adult nesting turtle that likely occurred during the early morning hours of June 24, 2010 indicates that the potential does exist for vehicles driving at night to strike and kill nesting turtles.

When night driving was allowed prior to the consent decree predation by fox, ghost crabs, and other predators still occurred and indicates that the presence of ORVs and pedestrians on the beach at night does not act as a deterrent to predators.

As indicated in the EIS (page 373) false crawls are known to be caused by many different factors, both natural and human, and even when witnessed, and most are not, it can be difficult to attribute a cause to it (e.g. suboptimal sand conditions, noise, light pollution etc.). It is not known if the type of posts used to mark resource closures contributes to false crawls or not and there is no scientific data to back up claims for or against the argument. From 2000 to 2003 when wooden stakes were used false crawl to nest ratios ranged from a high of 1.17:1 to a low of 0.55:1, and during other years of high false crawl to nest ratios white carsonite stakes were not used exclusively. Given all of the natural and human factors that can cause false crawls, it is not possible to attribute a high or low false crawl rate during any given year to a single factor such as the color of carsonite stakes used to mark resource closure areas.

#### **Concern ID: 24089**

Concern Statement: Commenters suggested variations for the proposed night driving restrictions including:

- the NPS clarify what constitutes a "low density of turtles nests" where night driving would be permitted to better analyze the impacts of this alternative.
- night driving restrictions be in place whenever and wherever turtle nesting is occurring.
- night driving be allowed if vehicles use red tape for their headlights.
- night driving restrictions from dusk to dawn
- night driving restrictions June 1 to September 15, 1 hour after sunset to one hour after sunrise
- night driving restrictions from 10 pm to 5 am
- allow vehicles to remain parked at night
- begin night driving restrictions 1/2 hour after sunset (instead of one hour)and remove language that says the beach will open "approximately one-half hour after sunrise" as this may not be possible in remote areas
- begin night driving restriction on April 1

#### ***Representative Quotes:***

**Corr. ID:** 10

**Organization:** *Not Specified*

**Comment ID:** 126151

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The ban on night driving on the beach should be flexible enough to allow ORV on the beach after dark and still protect turtles. This could be accomplished by allowing ORV to remained parked after dark on all open areas. The most popular spots, cape point, south point and others should have a small corridor to allow limited traffic after dark.

**Corr. ID:** 11206

**Organization:** *Not Specified*

**Comment ID:** 135449

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I oppose the NPS turtle protection plans as described in Alternative F. The NPS plan calls for round the clock closure from nest to surf line (p. 125 of DEIS). I support the Coalition position for closure to surf line from 1 hour before sunset until dawn with monitoring by Turtle Night Nest Watch Teams. The NPS proposes a ridiculous nest closure size of 105 meters wide (p. 125) whereas the Coalition proposes a more realistic closure size of 10 meters square during the day like that used successfully on Pea Island. The NPS also proposes using a U shaped light filter fence to orient hatchlings. I support the Coalition proposal to use the successful Pea Island style keyhole pattern fence to the surf line at night.

**Corr. ID:** 13400      **Organization:** *Not Specified*  
**Comment ID:** 139926      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Nothing in the DEIS goes to solve the problem of people and wildlife, and instead would rather just prohibit access, instead of managing the two as it is their mission statement to do. In regards to night driving, I recommend that red tape be mandated for use by people wanting to use ORVs at night. This could mitigate any potential impacts to sea turtles. Not to mention the fact that there have been no studies done to date to qualify or quantify effects on nesting sea turtles at CAHA regarding use of the beach at night.

**Corr. ID:** 13400      **Organization:** *Not Specified*  
**Comment ID:** 139988      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** -Mandate red tape for night-time ORV use during the sea-turtle nesting season

**Corr. ID:** 14515      **Organization:** *Not Specified*  
**Comment ID:** 134641      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Night Driving Restrictions based on when and where turtles nest not arbitrary dates. The night driving restrictions start on may 1st. Last year the first turtle nest was may 22nd.

**Corr. ID:** 14571      **Organization:** *Not Specified*  
**Comment ID:** 135712      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** We do not support the night time access ban. A more reasonable approach would allow access from one hour before daylight until one hour after sundown. This would allow fishermen access to the prime fishing hours of dawn and dusk.

**Corr. ID:** 14819      **Organization:** *Not Specified*  
**Comment ID:** 136305      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** I AGREE ON NIGHT CLOSING. BUT SHOULD BE HOURS FROM 10:00 PM TILL 5:00 AM

**Corr. ID:** 15051      **Organization:** *Not Specified*  
**Comment ID:** 138197      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Night driving on the beaches should be prohibited from dusk to dawn, especially during the turtle breeding/nesting season.

**Corr. ID:** 15074      **Organization:** Southern Environmental Law Center  
**Comment ID:** 137784      **Organization Type:** Conservation/Preservation  
**Representative Quote:** Regarding protection for turtle nests that have not hatched by September 15, we are very concerned about the language that "selected ORV routes with no or a low density of turtle nests remaining (as determined by the NPS) would reopen to night driving, subject to the terms and conditions of a required permit." DEIS at 82. We do not know what "low density of turtle nests" means, which prevents adequate disclosure of the impacts of this provision. Moreover, given the known, significant risks to sea turtle hatchlings from nighttime ORV use, we strongly oppose any night driving near or behind turtle nests. In support, we note that filter fence does not always serve its intended purpose, as the material can be pushed over by blowing sand, or there can be a gap between the sand and the fence. Thus, while the material may help in certain instances, it does not ensure that the hatchlings will be protected from light, nor does it ensure that the hatchlings will not end up in ORV areas and crushed or stuck in tire tracks. That threat is amplified if ORVs are allowed to pass behind or near nests. While we do not object to ORV routes (that are not part of SMAs) being reopened to ORVs if turtle nesting and hatching have been completed, we strongly urge the Seashore to remove "or a low density of" from the provisions governing turtle management. As long as there are sea turtle nests, night driving restrictions need to be in place to protect all nests.

**Corr. ID:** 15074      **Organization:** Southern Environmental Law Center  
**Comment ID:** 137782      **Organization Type:** Conservation/Preservation  
**Representative Quote:** We support the provision that the beach not be re-opened "until NPS turtle patrol has checked the beach (by approximately one-half hour after sunrise) .... " We have several concerns about this

however. Based on our observation of turtle patrols at the Seashore for many years, we question if the staff will be able to complete the turtle patrol by one-half hour after sunrise.

While that may be possible for some areas, more remote areas will be difficult to monitor during that time period. If a nest has to be moved, or if multiple nests are found, we strongly question whether the one-half hour after sunrise timing would be met. Moreover, if turtle patrol starts too early in the morning, there is a possibility that late-nesting turtles could be missed by turtle patrol, due to the turtle emerging from the water after the turtle patrol has observed the area. The words "(by approximately one-half hour after sunrise)" should be removed from the language.

**Corr. ID:** 15074 **Organization:** Southern Environmental Law Center

**Comment ID:** 137781 **Organization Type:** Conservation/Preservation

**Representative Quote:** We support the provision in the DEIS that "From May 1 through September 15, all potential sea turtle nesting habitat (ocean intertidal zone, ocean backshore, and dunes) would be closed to non-essential ORV use at night until NPS turtle patrol has checked the beach in the morning (by approximately one-half hour after sunrise) to provide for sea turtle protection and allow enforcement staff to concentrate their resources during the daytime hours," DEIS at 82, with one important modification: the closure time should be changed to sunset.

We strongly urge the Seashore to change the timing of this provision to one-half hour after sunset, rather than 1 hour after sunset, to reduce the chance that sea turtle nesting could be adversely impacted by ORV use. All ramps should be physically closed to recreational vehicle use (such as by a pressure operated gate), one-half hour after sunset to ensure full compliance with the beach driving time limitation.

We would strongly oppose any requirement to allow beach driving until 10:00 pm during the nesting season. The majority of sea turtle nesting occurs between sunset and midnight; accordingly, allowing beach driving until 10:00 pm could significantly increase the risk of false crawls, aborted nesting attempts, missed (non-detected) nests due to the crawl tracks being obliterated by ORV tracks, and resulting risk of take of nests or hatchlings. Allowing nighttime driving, or even driving to 10:00 pm, would violate the statutory, regulatory, and policy provisions governing the Seashore, likely lead to take of nests or hatchlings, and result in the impairment of Seashore values.

**Corr. ID:** 15074 **Organization:** Southern Environmental Law Center

**Comment ID:** 137763 **Organization Type:** Conservation/Preservation

**Representative Quote:** Night driving restrictions to protect nesting sea turtles extend from May 1 to November 15 in the action alternatives, The Moderate protections recommend night driving restrictions begin April 1.

**Response:** Based on its legal mandates, as well as taking public comments on the proposed night driving restrictions into consideration, the NPS has revised alternative F to try and achieve an appropriate balance between resource protection and public access.

Under the revised alternative F, from May 1 to November 15 designated ORV routes in potential sea turtle nesting habitat (ocean intertidal zone, ocean backshore, and dunes) would be closed to non-essential ORV use from 9:00 p.m. until 7:00 a.m. However, from September 16 to November 15, ORV routes with no turtle nest remaining will reopen for night driving. On ORV routes with any remaining turtle nests, the night driving closure will remain in effect. The Seashore will use 105 m wide buffers (i.e., 52.5 meters on either side – left or right - of the nest, with 10 meters behind, or landward, of the nest) around turtle nests as described in table 10-1.

Beginning night driving restrictions on May 1 reduces the chances of impacts to early season nests. Only reopening beaches with no nests to night driving after September 15, removes the ambiguity of defining "low density of nests", continues to protect hatchlings from night driving impacts, while also not unnecessarily restricting public access to areas of the Seashore where there are no turtle nests, especially during the fall fishing season. As noted, resource protection is not the only factor the NPS has to consider during the management of its resources and restricting night driving between the hours of 9:00 pm and 7:00 am provides an easily understood, enforceable restriction that provides a balance between conservation and public access by encompassing the majority of the nesting and hatching periods at night while generally allowing turtle patrol staff time to find and protect nests prior to ORVs being on the beach each day. Protection of hatchlings from night driving light impacts prior to 9:00 pm later in the season when sunset occurs earlier would still occur by use of filter fencing and expanded buffers.

Opening the beach to ORV use prior to 7:00 am would not allow staff ample daylight hours to patrol the entire Seashore for turtle nests prior to ORV use, or would force them to start before daylight, which may cause them to miss turtle nests or late nesting turtles.

Regarding other restrictions and management policies suggested by public comments: Placing red filters or tape over vehicle headlights reduces the visibility of the driver at night, and the NPS will not require the public to alter their vehicles in a manner that potentially compromises their safety. Additionally, standards for any red filters would need to be developed to ensure their adequacy at protecting sea turtles/hatchlings from light impacts and the NPS does not have the ability to inspect all vehicles on the beach at night to enforce compliance. Allowing vehicles to remain parked on the beach in resource sensitive locations for the duration of the night would be difficult to patrol and enforce, and could place an unrealistic expectation on visitors parked in such locations to strictly comply with the night driving restrictions. The NPS does not have the resources to patrol the entire park at night to enforce compliance, and placing more park vehicles on the beach at night would potentially result in additional compliance problems that would cause the same adverse impacts as other non-essential ORVs.

**Concern ID: 24091**

**Concern Statement:** One commenter stated that the DEIS described night driving restrictions differently in different sections of the document, and requested clarification.

***Representative Quotes:***

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140453

**Organization Type:** Conservation/Preservation

**Representative Quote:** In fact, it is unclear how restrictive Alternative F's night-driving restrictions really are, because the DEIS itself states them inconsistently. At page 358, the DEIS states that "Under alternative F, all nonessential ORV traffic would be prohibited from all areas (other than soundside access areas), from one hour after sunset until approximately one-half hour after sunrise from May 1 to November 15.

From November 16 to April 30, ORV use would be allowed 24 hours per day in designated ORV routes for vehicles with a valid ORV permit. Furthermore, the NPS would retain the discretion to limit night driving to certain areas or routes, based on resource protection considerations." Yet, at pages 81-82, the DEIS states that "Designated ORV routes would be open to ORV use 24 hours a day from November 16 through April 30. From May 1 through September 15, all potential sea turtle nesting habitat (ocean intertidal zone, ocean backshore, and dunes) would be closed to non-essential ORV use from 1 hour after sunset until NPS turtle patrol has checked the beach in the morning (by approximately one-half hour after sunrise) to provide for sea turtle protection and allow enforcement staff to concentrate their resources during the daytime hours. From September 16 through November 15, selected ORV routes with no or a low density of turtle nests remaining (as determined by the NPS) would reopen to night driving, subject to the terms and conditions of a required permit." Although it appears that the description at pages 81- 82 is the intended one, and it is clear that one way or the other the night-driving restrictions in Alternative F are more restrictive than those in the Consent Decree, the DEIS's inconsistency is troubling and makes it difficult for the public to respond appropriately to this element of the NPS's proposal.

**Response:** The description of night time driving restrictions on pages 81-82 in the DEIS is correct. The revision of alternative F included changes to the night driving provisions. The description on page 358 of the DEIS has been clarified in the FEIS by adding the additional statement that from September 16 through November 15, ORV routes with no turtle nests remaining (as determined by the NPS) would reopen to night driving, subject to the terms and conditions of a required permit.

## ***AL1120 - Alternative Elements: Permits***

### **Concern ID: 24094**

**Concern Statement:** Commenters asked for clarification on what cost-recovery for a permit system might include and what that fee could be, stating that based on the information in the DEIS, these permits are likely to be cost prohibitive. They further stated that the information provided about cost-recovery in the DEIS was confusing and not informative.

#### ***Representative Quotes:***

**Corr. ID:** 14967

**Organization:** *Not Specified*

**Comment ID:** 137330

**Organization Type:** Unaffiliated Individual

**Representative Quote:** How is the general public expected to understand how the ORV permit fee is to be determined? In the first 258 pages of the DEIS NPS Director's Order and Reference Manual 53 appears only on page 107 which happens to be an exact repeat of page xxiii. In a search of the remaining 552 pages this language appears only three times in the section relating to Impacts of Alternative F: and does not reveal any of the content of this Director's Order or Manual 53. Thus, there is absolutely no explanation of how the weekly and yearly ORV permit fees will be set. No explanation of how the proceeds will be spent or who will spend them. Page xxx of the DEIS indicates that Alternative F might cost \$3,717,000.00 or \$71,284.93 per week for staffing and materials. Of this figure, \$2,078,300.00 is projected for protection costs. The DEIS does not state if these costs are the total Seashore figures or are reduced for protection costs related to non ORV issues like: Hwy. 12 radar, lighthouse security, lighthouse visitor health issues. Hwy 12 accidents, Pea Island protection, pedestrian heart attacks on the beach, campground security or a whole host of other non ORV related duties of NPS enforcement rangers.

Without knowing the probable cost, or even an estimate, of an ORV permit, how is the public expected to weigh the cost of purchasing a permit with the benefit of the greatly limited access proposed by Alternative F? This is asking the taxpaying citizens of America if they want the NPS to charge an unknown amount of money to visit public property created by the U S Congress as a Recreational Area which may not even be accessible.

**Corr. ID:** 14971

**Organization:** *Not Specified*

**Comment ID:** 138954

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS does not provide any estimate of these costs but if you consider the fact that the annual cost estimate for Alternative F is \$3 -7 million (Footnote 9) the cost of a permit could be cost prohibitive for the average visitor. Furthermore, since the purchase of a permit will not guarantee access if the peak use limit has been reached, it is very possible that many visitors will be unable to justify an expenditure for something they may not be able to use.

**Corr. ID:** 15063

**Organization:** Rodanthe-Waves-Salvo Civic Association

**Comment ID:** 138989

**Organization Type:** Civic Groups

**Representative Quote:** The Draft Environmental Impact Statement states, at page 107, an "ORV permit fee would be based on cost recovery..." and refers the reader to a 309-page document to figure out what costs would be recovered and therefore what the charge might be. This is not informative.

**Response:** As a cost recovery program administered under NPS Director's Order 53, the actual price of the ORV permit will be derived by determining all the additional operational costs (staffing, supplies, equipment and other non-personnel services costs), above and beyond base funded operations<sup>1</sup>, that will be necessary to administer and manage the ORV program, divided by the estimated number of permits by type (annual and 7-day) that will be sold, to determine the cost per permit by type. The costs that are above and beyond those currently covered by base operating funds include staffing to issue permits and enforce permit requirements; additional staffing needed to implement new ORV management activities related to law enforcement, resource management, maintenance, and education outreach; ORV informational materials, signs, and supplies; and other program support costs necessary to administer and implement the plan and special regulation. The initial price will inherently involve some subjective analysis because of the uncertainties about the total number of permits and the number of permits by type that might

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<sup>1</sup> Base operating funds is the part of the annual appropriation from Congress for Operation of the National Park System (ONPS) which is allocated by the NPS to each park to fund salaries and other expenses such as utilities to operate the park.

be purchased. However, based on prices at Cape Cod (CACO) and Assateague Island (ASIS) National Seashores for similar types of permits, as a starting point it is reasonable to expect the price to be within the following range:

- Annual permit: \$90 - 150 (ASIS VA & MD Day Only Permit, \$90; CACO annual ORV permit \$150)
- 7-day permit: 50% - 33% of the annual price (up to 50% if the annual price is lower in the price range; as low as 33% if annual price is higher in the price range)

The ORV permit is not intended to guarantee access all the time to all areas designated as ORV routes. ORV routes are subject to resource, administrative and safety closures and to user capacity limits. However, past experience indicates that even during the breeding season many miles of seashore beach would remain open to ORV use, and user capacity limits would likely come into play only in a few highly popular areas during major holiday week-ends.

### Concern ID: 24095

**Concern Statement:** Commenters provided suggestions for requirements to obtain a permit for ORV use such as watching an educational video, having permit holders report turtle crawl activity, and having permittees check in before use.

#### *Representative Quotes:*

**Corr. ID:** 80 **Organization:** California State Polytechnic University, Pomona

**Comment ID:** 129743 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Without further scientific studies the beaches should be placed in limited access to only permitted individuals. These individuals could be checked in and have maps of specific areas of interest that cannot be disrupted. Checkpoints could present a very effective way of monitoring.

**Corr. ID:** 249 **Organization:** *Not Specified*

**Comment ID:** 143010 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Any educational component should be no more than receipt of NPS brochure along with the permit.

**Corr. ID:** 732 **Organization:** Coastal Conservation Association

**Comment ID:** 133159 **Organization Type:** Unaffiliated Individual

**Representative Quote:** I agree the beach permit should have an educational element to it. This element should be in the form of a pamphlet guide outlining safe and preferred beach driving procedures. These procedures should encourage using existing track sets on the upper and/or lower beach, encouraging drivers to remain off the middle section of beach as much as possible. This would hopefully allow for increased numbers of ghost crabs to have safe, livable beach habitat, and would also improve the aesthetic value of the beach in general. Assateague is a good example of this. Wide areas of beach have few tracks in the middle.

**Corr. ID:** 13877 **Organization:** *Not Specified*

**Comment ID:** 136553 **Organization Type:** Unaffiliated Individual

**Representative Quote:** If a special use permit is deemed required, a requirement could be the reporting of any turtle crawl activity.

**Corr. ID:** 14642 **Organization:** *Not Specified*

**Comment ID:** 139143 **Organization Type:** Unaffiliated Individual

**Representative Quote:** - Required all those applying for an annual/seasonal Oversand Vehicle Permit to view a short 8-15 min video highlighting the species and natural processes the park is attempting to preserve, general beach driving rules and why with a warning that permits will be revoked for many beach driving violations.  
- Highlight the negative effects on wildlife and their habitat due to the increase in humans at NPS areas.

**Corr. ID:** 14877 **Organization:** *Not Specified*

**Comment ID:** 136500 **Organization Type:** Unaffiliated Individual

**Representative Quote:** I support education for beach-users including a permitting process for ORV- drivers, that would require attendance at informational sessions about the protection needed by the birds and turtles on the beach.

**Corr. ID:** 15043      **Organization:** Southern Environmental Law Center  
**Comment ID:** 137455      **Organization Type:** Conservation/Preservation  
**Representative Quote:** ORV management should include a permit system with a mandatory education component.

**Response:** Alternative F as revised in the FEIS would require all ORV permit applicants to complete a short educational program at the Seashore, which would involve a short video or printed educational materials. To ensure that each applicant completes the program, alternative F has been revised to require that applicants watch the video or read the educational materials in person at a designated location at the Seashore. Although all of the details of the educational materials have not yet been finalized, the subject matter would include natural resource protection, safety, ORV driving tips, rules and regulations, and information about permit revocation for violations. To reduce the burden on NPS staff and the public, the testing requirement has been removed from alternative F; however, the requirement that the permit applicant sign the permit to acknowledge understanding of the rules and regulations governing ORV use at the Seashore remains. The language on pages xxiii, 73, 82, and 107 (table 8) of the DEIS has been revised to delete the test requirement and the availability of permits online.

Although the Seashore encourages the public to report certain species activities, including turtle crawls, *requiring* the public to report turtle crawls would not be appropriate as part of an ORV permit program.

**Concern ID: 24096**

**Concern Statement:** Commenters suggested fee structures for a permitting system, with requests for fees to go to resource protection, law enforcement, and all other costs to manage the program.

**Specific suggestions for a fee structure included:**

- no fee
- \$50 a week, \$150 a year
- \$5 a day, \$10 a week
- \$10 a year
- \$100 a year
- make it so expensive to reduce ORV traffic volume or discourage use
- certain populations be exempt from permit fees (or have discounted fees) including local residents and members of the North Carolina Beach Buggy Association (NCBBA) be exempt from any permitting system.

**Representative Quotes:**

**Corr. ID:** 15063      **Organization:** Rodanthe-Waves-Salvo Civic Association  
**Comment ID:** 147028      **Organization Type:** Civic Groups  
**Representative Quote:** The draft statement calls for an annual and weekly permit. The civic association board recommends, in addition to a free annual and weekly permit, a free one- or two-day permit also be made available for those visitors passing through this national seashore.

**Corr. ID:** 12      **Organization:** *Not Specified*  
**Comment ID:** 126140      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Why not just charge an access fee (seasonal, monthly, weekly and daily) make it steep enough to discourage the curious. Issue decals, patrol the beach and right large fines for violations. This would pay for the patrol effort, provide additional revenue to maintain ramps and other beach maintenance items and most importantly reduce the volume of traffic on the beach.

**Corr. ID:** 12      **Organization:** *Not Specified*  
**Comment ID:** 126142      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Locals could be provided a significant discount to the fee structure

**Corr. ID:** 52                      **Organization:** OBPA  
**Comment ID:** 128850           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Additionally, I do not mind paying for this right of access. Every visitor should apply/pay for a park ORV pass \$ 5.00 per day, 10.00 per week, 50.00 per year. This will provide a means to educate the users and make them more aware of the wildlife and fines/penalties for breaking use restrictions.

**Corr. ID:** 207                      **Organization:** California State Parks  
**Comment ID:** 130516           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** If people want to drive on the beach, they should pay a fee which would support the monitoring of shorebird populations and enhancement of habitat for them.

**Corr. ID:** 249                      **Organization:** *Not Specified*  
**Comment ID:** 130594           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** ORV permits should not be required unless they are readily and easily accessible to all visitors. Present NPS staffing and facilities are inadequate to handle an ORV permit requirement. Any cost for these permits should be negligible, no more than \$10.00 for an annual permit.

**Corr. ID:** 867                      **Organization:** Fishing Fleet  
**Comment ID:** 132550           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** -create a ten day pass to non-locals sold only in tackle shops.  
-Dare and Currituck should be able to acquire year long passes for the same amount as the ten day pass. The pass should be looked at as a means to create funds to help solve the environmental situations we are dealing with right now.

**Corr. ID:** 3930                      **Organization:** OBPA  
**Comment ID:** 130905           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** First off, it needs to be a PERMIT system only !!  
for the purpose of SURF FISHING only open all year 24 hrs a day.  
This would stop most people who come down just for a quick ride that tear up the beaches as well as do do-nuts and bring ATVs to ride. You could charge 100.00 per vehicle PER YEAR and either give out a sticker or a metal plate like they do in Delaware. Fees could vary for instate, out of state and Dare County land owners  
You could also come up with a plan for a FREE permit for Commercial fishermen, guides etc as well as a GROUP fee for the rental companies to offer a renter, this way NO ONE loses out on revenue which as you know keeps Hatteras Island open.

**Corr. ID:** 5757                      **Organization:** *Not Specified*  
**Comment ID:** 133383           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** I commend the establishment of a fee structure as well. This fee should be set at a rate (based on an estimate of the maximum vehicle use during summer weekends at CAHA) to offset the costs of hiring additional seasonal law enforcement personnel to monitor the beach use and implement control measures.

**Corr. ID:** 10625                      **Organization:** *Not Specified*  
**Comment ID:** 136520           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** I feel that any permitting system discussed in the DEIS options must freely accommodate members of the North Carolina Beach Buggy Association (NCBBA). For over 40 years, members of this group have worked tirelessly, on a volunteer basis, to safeguard the resources and recreational opportunities of the seashore.

1. Active dues-paying members of the North Carolina Beach Buggy Association (NCBBA) should be exempt from the need to purchase and display a permit and complete a training class as a requirement of the permit.
2. The NCBBA license plate with a membership sticker for the current year would fulfill the vehicle identification requirement of the permit instead of a NPS-issued permit.
3. The NCBBA Code of Ethics, to which all members agreed to abide, and the NCBBA Beach Driving Guidelines Pamphlet would fulfill the training requirement of the permit. Perhaps these documents could be used as a basis for the beach driving training provided to others.

**Corr. ID:** 13562

**Organization:** OBPA

**Comment ID:** 138985

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I am not opposed to a permit requirement to access the beaches. But, permits should be readily available from all park rangers and all ranger stations. I also think the fee for a permit should be under \$50 per year and should not be used as a mechanism to earn income. The permit should be a mechanism for those who truly want to be on the beach and will care for it. This should deter the once a year weekend warrior just wanting to see if his/her 4x4/suv really does work.

**Corr. ID:** 13766

**Organization:** *Not Specified*

**Comment ID:** 135539

**Organization Type:** Unaffiliated Individual

**Representative Quote:** A Vehicle permitting system is something that can be accommodated but with a provision that allows for a Permanent Resident to have a year round permit at no cost. This would be similar to the Hatteras Ferry Pass permanent residents now have.

**Corr. ID:** 13864

**Organization:** *Not Specified*

**Comment ID:** 143011

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Finally, it should be stated that any fees collected through a permit system must be used to maintain or increase ORV access.

**Corr. ID:** 14816

**Organization:** *Not Specified*

**Comment ID:** 136320

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The proposed Cost Recovery Fee Permit for vehicular use to access beach areas which may be too distanced for many citizens to reach on foot is in conflict with the U.S. government's original plan for U.S. Public Parklands.

The U.S. Park Service is mandated to protect and preserve historical and cultural aspects related to public lands. Historically, island village inhabitants accessed distant beach areas by horse transportation. Motor vehicles have replaced horses for transportation. For government to charge a fee for historical and cultural activity of island inhabitants is an act toward destruction of historical and cultural activities of historical villages held by the confines of U.S. Parkland. Any plan for a Permit to use a vehicle for access to beach areas must omit any Fee for said Permit in order to preserve and protect the critical history and culture of the islands villages.

**Corr. ID:** 14831

**Organization:** *Not Specified*

**Comment ID:** 137136

**Organization Type:** Unaffiliated Individual

**Representative Quote:** It's past time that the Cape Hatteras National Seashore joins the other National Seashores and charges a fee for permission to drive on the nation's beach. The cost to manage this program must include the cost to repair the damage that reckless drivers have caused for 30 years.

- Set a weekly and an annual fee for permits. In other National Seashores today it's \$50 a week, \$150 for a year. Consider it a parking fee: anywhere else we pay maybe 25 cents an hour or \$7 for the day.

**Corr. ID:** 15041

**Organization:** *Not Specified*

**Comment ID:** 137985

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In conclusion, I would like to suggest a combination of the alternatives proposed in the environmental impact statement. Since we already pay for fishing and hunting licenses, which are essentially permits that allow us to do the things we love to do, I am not opposed to the idea of permits for beach access. As long as the costs of said permits remain reasonably tied to reality, and the actual expenses that the National Park Service will incur as a result of the enforcement of the eventual ORV management plan when all of their other sources of income are also taken into consideration, and said permits are not used as a de facto method of restricting access to only the wealthy, I will continue to come to the Outer Banks.

**Response:** The NPS is proposing to implement a fee-based ORV permit system as an enforcement and educational tool and not for the purpose of limiting the number of ORVs on Seashore beaches. The NPS believes that carrying capacity requirements, rather than permit limits, would be the proper mechanism for addressing safety and visitor

experience concerns associated with the density of ORVs in particular areas of the Seashore because it is not possible to predict when and where visitors will use their permits to access the beach.

The cost of the ORV permit would be based on a cost recovery system in accordance with guidance in NPS Director's Order 53 and the associated reference manual. The fees collected from ORV permit issuance would be used to cover the costs of implementing the elements of the ORV management plan, which include costs incurred from resource management, education and outreach, law enforcement, and other related management actions associated with implementing the plan. Fees collected from ORV permits would be used only to recover costs to implement the elements of the ORV management plan that are not covered by existing base funding and not for other purposes. As a unit of the National Park Service, the Seashore is open on the same basis to all members of the public, regardless of where they live. Therefore, the cost of ORV permits would be the same for all ORV users and would not vary based on their state, county, or village of residence or their membership in a particular organization. Please refer to the response to Concern ID 24094 for additional information on estimated costs for ORV permits based on the cost recovery system.

**Concern ID: 24097**

**Concern Statement:** Commenters suggested that the permit system be tied into the saltwater license provided by the North Carolina Department of Marine Fisheries to reduce duplication in effort.

**Representative Quotes:**

**Corr. ID:** 13864

**Organization:** *Not Specified*

**Comment ID:** 136533

**Organization Type:** Unaffiliated Individual

**Representative Quote:** We suggest that if ORV permits are required in the seashore, that the administration of the permits be tied into the secure NC DMF saltwater license website [www.ncalvin.org](http://www.ncalvin.org) and administered by NC Fish & Wildlife. This will significantly reduce NPS costs and allow ORV permit buyers a reasonably accessible alternative to NPS sites. Duplicating effort with a second website will only foster visitor frustration over governmental bureaucracy.

**Response:** Specific details on the administration of the ORV permit system have not yet been determined. However, because of the on-site educational requirements associated with the issuance of ORV permits, the permits will not be available online as is the North Carolina Saltwater Fishing license. NPS experience with ORV permit systems in other Seashores indicates that they can be administered in an efficient manner.

Please refer to the response to Concern ID 24094 for additional information on estimated costs for ORV permits based on the cost recovery system.

**Concern ID: 24098**

**Concern Statement:** Commenters stated that if a permit system is implemented, it should not just be for ORV users, but other Seashore users as well.

**Representative Quotes:**

**Corr. ID:** 11858

**Organization:** *Not Specified*

**Comment ID:** 134839

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I suggest rather than only requiring permits for ORVs, a general admission permit for all CHNSRA users to spread these costs among all users. Anyone using an NPS parking lot or other facility needs to contribute to the support of the recreational area, not just ORV users.

**Corr. ID:** 14678

**Organization:** *Not Specified*

**Comment ID:** 133916

**Organization Type:** Unaffiliated Individual

**Representative Quote:** While I understand that budget shortfalls are rampant in every area of government and for most business's. I can understand the need for a permit system in order to help offset this deficit and to help with the management of this park, but I am unable to accept this responsibility by myself, as an ORV user.

It is the job of the NPS to find ways to disperse this cost amongst all the users groups. It is unacceptable to put this cost just on the ORV users and the NPS should not institute an ORV permit fee, until the NPS can develop other means to collect money.

Whether this is with collection agents at popular day use areas and/or the use of parking meters at all public ramps. The temporary or year round permit holder should be allowed to use these lots at no additional costs, while all others are charged by the hour, day, etc. It is unfair for the ORV user to front the cost of the proposed new lots or any reconstruction of an existing lot, as it is equally unacceptable for the ORV user to face the brunt financially of the wildlife management.

**Response:** The following language has been added to Chapter 2 in the FEIS, under Alternative Elements Considered but Dismissed from Further Consideration:

The idea of an entrance or admission fee for the Seashore was discussed thoroughly during the negotiated rulemaking process and was dismissed primarily due to administrative and financial obstacles. The establishment of an entrance fee would require the NPS to install manned entrance gates in the Seashore to collect visitor fees. However, there are thousands of local residents that have to travel through the Seashore to gain access to their property. The logistics of collecting entrance fees from all visitors would result in delays at entrances and would restrict travel along NC-12. In addition, parking and access fees are managed under the Federal Lands Recreation Enhancement Act (FLREA), which does not provide for a cost recovery program. Therefore, the Seashore would be able to retain only a portion of the entrance or parking fees collected and could not use those funds to support key functions associated with an ORV management program, such as law enforcement, maintenance of routes or parking lots, or resource management. Therefore, the collection of access and parking fees was not carried forward for further analysis.

**Concern ID: 24099**

**Concern Statement:** One commenter requested clarification about how the permit system would be applied to current commercial uses in the park (guides, schools, etc).

**Representative Quotes:**

**Corr. ID:** 29

**Organization:** *Not Specified*

**Comment ID:** 126095

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I CANNOT FIND ANY MENTION OF PLANS ON HOW TO DEAL WITH CURRENT PERMITEES (GUIDES, SCHOOLS, ETC.) THAT OPERATE IN THE PARK AND HOW THEIR PERMITS WILL BE MESHED OR CONSIDERED WITH NEWLY REQUIRED VEHICLE PERMITS.

I WOULD SUGGEST THAT YOU ALLOW US TO OPERATE AND OUR STUDENTS TO FISH UNDER OUR EXISTING BUSINESS PERMIT. WE COULD BE ISSUED PERMANENT REARVIEW MIRROR PERMITS FOR DISTRIBUTION TO OUR STUDENTS. WE COULD BE RESPONSIBLE FOR MAKING SURE THEY KNOW AND ABIDE BY PARK RULES. WE COULD PROVIDE NECESSARY TRAINING IN OUR CLASSROOM SESSION.

AT THE VERY LEAST, YOU MUST ACKNOWLEDGE AND HAVE SOME PLAN FOR ACCOMODATING THOSE STUDENTS FISHING UNDER OUR "USE PERMIT."

FOR EXAMPLE, MY PARTNER AND I OPERATE 3 FISHING SCHOOLS EACH YEAR MOSTLY FISHING BEACHES IN THE PARK. WE WILL HAVE 12-25 PEOPLE IN EACH CLASS AND WE USHER 10-15 VEHICLES ON AND OFF THE BEACH FOR 1-2 DAYS DURING EACH PROGRAM. WILL EACH OF THESE VEHICLES BE REQUIRED TO PURCHASE A PERMIT? WE CURRENTLY PAY THE NPS \$200.00 PER YEAR TO OPERATE IN THE PARK- AND HAVE DONE SO FOR 4-5 YEARS- ONE OF THE FEW BUSINESSES TO DO SO I BELIEVE. TO REQUIRE OUR PARTICIPANTS TO PURCHASE VEHICLE PERMITS OVER AND ABOVE THE PERMIT WE NOW PURCHASE SEEMS EXCESSIVE.

**Response:** Persons holding a commercial use authorization (CUA) issued by the superintendent would not be required to obtain a separate ORV permit for the operation of a vehicle as prescribed by the conditions of the CUA. However, the CUA would not serve as blanket coverage for the CUA holder's customers, as the NPS would still be tasked with ensuring that permit applicants receive the proper educational information and that they acknowledge their responsibility for complying with the ORV rules and requirements, with the possibility of permit revocation for noncompliance. If some CUA customers do not plan extensive ORV use during their visit, several options exist,

including carpooling onto the beach in permitted vehicles or suggesting that customers obtain less expensive weekly ORV permits.

**Concern ID: 24101**

Concern Statement: One commenter requested a permit system that provided permits for different areas, which would allow the NPS to control use numbers in these areas.

**Representative Quotes:**

**Corr. ID:** 831

**Organization:** *Not Specified*

**Comment ID:** 132670

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would like to see a program where a permit could be applied for a certain area of beach, ex. Ocracoke island, or from ramp x to ramp y. The number of vehicles could be kept to a limit by doing this, but the public could still use and enjoy the area

**Response:** The following language has been added to the FEIS, under Alternative Elements Considered but Dismissed from Further Consideration:

The ORV permit system is an enforcement and education tool to reduce adverse impacts to park resources and visitor experience. It is not intended to limit the number of ORVs on Seashore beaches. Also, during internal and public scoping and during the negotiated rulemaking process, the NPS considered various methods for establishing an ORV permit system. A common theme among the alternatives for ORV permits was that fees should be kept reasonable so that all visitors, regardless of income level, would be able to afford to purchase an ORV permit. The most logical method of implementing an ORV permit system would be to use the special park uses authority under 16 USC 3a which would allow the Seashore to recover the cost of implementing the ORV management program. A permit system that required a different permit for different locations in the Seashore would be complex to implement, resulting in increases in NPS management costs, which ultimately would be passed along to ORV users because the permit fees would be based on cost recovery. Therefore, more complex permitting systems were considered but not carried forward for analysis in the DEIS. Therefore, the concept of establishing vehicle limits in certain areas through an ORV permit system was not carried forward for further analysis.

***AL1125 - Alternative Elements: Species Closures/Buffers***

**Concern ID: 24192**

Concern Statement: Commenters suggested that pass through corridors be allowed through all species closures/buffers. They stated this was necessary to allow access to various areas of the Seashore year-round.

**Representative Quotes:**

**Corr. ID:** 46

**Organization:** *Not Specified*

**Comment ID:** 128835

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Any plan should allow people to have a few feet above the high tide line to drive and park on most if not all of the island.

**Corr. ID:** 3490

**Organization:** *Not Specified*

**Comment ID:** 141204

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I agree with the opinion that:

- buffers use breeding / nesting buffer distances to establish ORV pass through only corridors to ensure beach access is always maintained

**Corr. ID:** 3863

**Organization:** *Not Specified*

**Comment ID:** 132740

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Corridors need only be small paths around a resource closure to provide access to an area that would otherwise be blocked. In some cases, these corridors can go through or around closures.

In many places, a corridor can easily be established below the high tide line. Since unfledged chicks are not found in this area, it is a perfect solution to providing access in a way that does not negatively affect wildlife.

As outlined in DEIS pages, roman numeral 12 and 17, and on page 468, corridors are only allowed in Management Level 2 portions of SMA's. Even these limited corridors are subject to resource or safety closures at any time.

Corridors are effective tools for access and should be established throughout the entire seashore including the highly restrictive Management Level 1 portions of SMA's.

**Response:** A buffer or resource closure is an area surrounding a sensitive resource, such as bird nests or chicks, which is closed to visitor access during critical life cycle stages in order to reduce human disturbance and the risk of mortality due to pedestrians and ORVs. Any passages, corridors, or pass-throughs that cut directly across/through a resource closures would essentially undermine the biological function of the closure and, for all intent and purpose, render it compromised, perhaps even useless to the species it is meant to protect.

The sensitivity of beach-nesting birds to human disturbance varies by species and can even vary among individual birds of the same species depending upon the circumstances. Therefore, closures need to be established and managed such that this inherent variability within and among species is anticipated. At the very core of the DEIS is the need to establish ORV routes and areas, while protecting species at the Seashore. Resource closures are established such that they can provide each protected species with the access they may need to key critical habitat elements during the point in their annual cycle that they require it. Unless resource closures are established and subsequently enforced, (including not allowing any pass-throughs/corridors), their ability to provide this critical access to resources and buffers to minimize disturbance would be significantly compromised. Where corridors are provided for under alternative F, the allowable corridor has been reduced in the FEIS as discussed under Concern ID 24207.

**Concern ID: 24193**

**Concern Statement:** Commenters stated that the buffers proposed for turtle nests were too large, and smaller buffer sizes. One commenter suggested that the exit to the ocean be no more than 18 inches wide. They suggested these closures be removed in the morning as is done at Pea Island National Wildlife Refuge. Other commenters suggested that nests be closed off from the nest to the surfline from one hour before sunset until dawn.

**Representative Quotes:**

**Corr. ID:** 893

**Organization:** *Not Specified*

**Comment ID:** 132451

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I currently reside in Englewood Florida and on the gulf beaches here there are similar concerns for nesting turtles and birds. In this area the nests are roped off with signs, approx 20 feet in every direction, and dogs must be kept on a leash. There are fines for anyone that disturbs a nest. This solution is working while still allowing vacationers to access the beach.

**Corr. ID:** 3376

**Organization:** *Not Specified*

**Comment ID:** 137030

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The proposed turtle nest buffer in areas with ORV traffic of 105 meters wide is excessive. All turtle nest areas should be a consistent area of 5 meters by 5 meters bounded by symbolic fencing and signage. I am concerned that a few irresponsible people will be tempted to encroach on a buffer zone that is obviously unreasonably oversized. Bigger is not always better. Smaller buffers will have a lower rate of human intrusion.

**Corr. ID:** 3490

**Organization:** *Not Specified*

**Comment ID:** 141211

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the NPS barriers 105 meters wide (p. 125) this cuts off all access and one nest at the beginning of two consecutive ramps would block the entire section of beach between the two ramps. This does not take into account all of the beach between two different nests that are cut off completely because the blockage is all the way to the surf line leaving zero passage.

I agree with the statement that "Closure should be 10 meters square during the day" This is a more effective way to allow for access.

**Corr. ID:** 13485

**Organization:** *Not Specified*

**Comment ID:** 138912

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I also believe that the turtle closures are extreme. I oppose the around the clock closure from nest to surfline and the size of the turtle closure buffers. I agree with the Coalition for Beach Access in their request to have the buffers run from nest to surfline from one hour before sunset until dawn. To have this area closed during the day when turtles will not be hatching is unnecessary. I also strongly disagree with the size of the buffers and feel that they should only surround the turtle nest during the daylight hours. The National Park Service has an established Turtle Night Nest Watch Program which has proved to be effective in the past.

**Corr. ID:** 14099

**Organization:** Avon Property Owners Assoc.

**Comment ID:** 141076

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Nest enclosures should be no more that 10x10 and the exit to the ocean no more than 18 inches wide. They should be set up in the evening and removed in the morning as done in the USFW Pea Island Refuge.

**Corr. ID:** 14774

**Organization:** *Not Specified*

**Comment ID:** 137825

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pro-active turtle night nest watch programs would insure no ORV impact. NPS wants 105 meter wide closures as described on page 125 and nowhere else in the country are there any closures this big for turtles. It seems odd to me that everywhere else closures 10 meters square during the day have worked just fine. Inco-operated with the Keyhole pattern fencing to the surf line at night during hatching would allow less chance of light disorientation and would allow the beaches to remain open at night for those who enjoy fishing in peace and quiet and out of the hot summer sun!

**Corr. ID:** 14964

**Organization:** *Not Specified*

**Comment ID:** 137332

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Nest Closures/Buffers Table 10. Species Management Strategies for Action Alternatives  
Approximately 50-55 days into incubation, closures will be expanded to the surf line. The width of the closure will be based on the type and level of use in the area of the beach where the nest was laid:

1. Vehicle-free areas with little or no pedestrian traffic-25 meters wide (total).
2. Village beaches or other areas with high levels of pedestrian and other non-ORV use-SO meters wide (total).
3. Areas with ORV traffic-105 meters wide (total).

On the landward side of the nest, the closed area will be expanded to 15 meters from the nest where possible, but no less than 10 meters landward from the nest. If appropriate, traffic detours behind the nest area will be established and clearly marked with signs and reflective arrows.

No science is listed anywhere in the entire DEIS document to justify any of the buffer distances included above (the 10 to 15 meters behind the nest or the widths of 25, 50 or 105 meters). Page 381 changes these distances as follows: 10 to 15 meters is changed to 9.1 to 15.2, 25 meters to 22.9 meters, 50 meters to 45.7 meters and 105 meters to 106.7 meters and still no science.

The "Sea Turtle Management - A Common Sense Approach for the Cape Hatteras Seashore Recreational Area" as submitted by OBPA, NCBBA and CHAC and available electronically at <http://www.obpanc.org/turtles/TurtleMgmtProgram.pdf> would not only add added protection for nests and hatchlings but save enforcement money and increase access for the visiting public. The nest watch program as outlined in the document would also greatly increase public awareness regarding the plight of sea turtles.

**Response:** Impacts on emerging turtle hatchlings from pedestrians and vehicles driving on the beach (light pollution, vehicle ruts etc) are known from the scientific literature and from experience at the Seashore. However, studies relating to buffer distances and their ability to sufficiently protect species are scant. Therefore, the size of expanded buffers for turtle resource areas once a nest reaches it hatching window is based on best professional judgment, taking into consideration the potential impacts and knowledge of the local physical, biological and human environment.

Management of the species also takes into consideration the ability to implement and enforce the policies relative to available staffing levels. Given the number of nests at the Seashore, expanding buffers/fencing from the nest to the shoreline on a nightly basis is not feasible. For a full explanation of why the NPS is not implementing management protocols similar to those implemented at Pea Island National Wildlife Refuge as well as a discussion regarding

relocation of nests to protect against weather related events, see the NPS response to Concern ID 24143.

Where possible and appropriate, the alternatives provide traffic detours behind turtle nests when they have reached their hatching window. However, creating these detours does not include destroying dune or other sensitive habitat which the NPS is charged with protecting.

**Concern ID: 24194**

**Concern Statement:** Commenters suggested a range of buffer distances for bird species, including disagreement with the 1,000 meter buffer for unfledged piping plover chicks. They felt that there was not ample scientific rationale for this buffer distance. Commenters also suggested that these buffers move with the brood, rather than being expanded.

Commenters suggested the following set of buffers for species at the Seashore (in order of breeding behavior, nest buffer, and unfledged chicks):

Piping plover: 50 meters, 30 meters, 100 meters, 200 meters, 300 meters

American oystercatcher: distance at which they flush plus 15 meters, distance at which they flush 15 meters, 15 meters

Least Terns and all other species of colonial waterbirds: 30 meters for all stages

**Representative Quotes:**

**Corr. ID:** 3490

**Organization:** *Not Specified*

**Comment ID:** 144278

**Organization Type:** Unaffiliated Individual

**Representative Quote:**

- Piping Plover unfledged chicks buffer should move with the brood as it relocates to reliable food source, not expanded

**Corr. ID:** 782

**Organization:** CHNSRA regular visitor

**Comment ID:** 141234

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would support these Shorebird / Water bird Buffers:

Species Breeding Behavior/ Nest Buffer ORV Pass-through Unfledged Chicks

Piping Plover 50 m 30 m 200 m

American Oystercatcher Flush + 15m Flush + 15m Flush + 15m

Least Terns 30 m 30 m 30 m

Other Species CWB 30 m 30 m 30 m

**Corr. ID:** 12971

**Organization:** *Not Specified*

**Comment ID:** 140274

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I strongly disagree with the proposed buffer of 1000 meters, or 2/3 of a mile. In many locations, the road itself is less than 200 meters from the beach - providing a huge linear buffer along the beach, but ignoring the road nearby appears to provide a false sense of protection. A corridor of 200 meters or less has been used at other sites. For example, in the Natural Resource Conservation Service, buffers for piping plover at Apple Creek Watersheds is a minimum of 200 feet or 60 meters. In the Mass. Audubon Society pamphlet, they indicate a 50 meter buffer, with a 200 meter buffer for kite flying only.

**Corr. ID:** 13068

**Organization:** *Not Specified*

**Comment ID:** 132418

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pg. 124: Nonbreeding shorebird SMAs. Protecting important habitat is good, but a language should be included for buffering known foraging and roosting sites, similar to the language about buffering foraging sites in the breeding season. For instance, erect 50 m buffers around any place piping plovers were observed foraging or roosting at least twice in the nonbreeding season, until monitoring confirms the site is no longer used.

**Corr. ID:** 13427

**Organization:** *Not Specified*

**Comment ID:** 140934

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Buffer size is also an important aspect of the regulations currently under consideration.

Our National Parks allow humans to experience the natural beauty of sensitive environments on a grand scale. Proper management practices help in preserving and encouraging sensitive species development within that environment. Protective buffers, as part of that management strategy, should be adequate to serve their intended purpose. The USGS Patuxent Wildlife Research Center developed an unbiased analysis specifically related to this issue. In that analysis adequate buffer sizes for protection of threatened and endangered species and species of special concern at Cape Hatteras National Seashore were established. The LARGEST recommended buffer size in that study was 200 meters. A smaller buffer size, supported by a Biological Opinion from the US Fish and Wildlife Service, details a 375 foot radius, or approximately 10 acres, as sufficient distance for protection from sight and noise disturbance for certain raptors. (USDI. 2004. Appendix 1 from: Biological opinion and letter of concurrence for effects to bald eagles, marbled murrelets, northern spotted owls, bull trout. Olympic National Forest. Lacey, Washington, August 2003, revised September 2004). Earlier scientific studies have been performed in a series of habitat suitability index (HIS) models published by the U.S. Fish and Wildlife Service for a variety of wildlife species, including birds, mammals, reptiles, and amphibians (e.g., Raleigh, 1982; McMahon, 1983; Sousa and Farmer, 1983; Raleigh et al., 1984; Schroeder, 1984). These studies demonstrated a need for buffer widths UP TO 106.7 meters, depending on the particular resource needs of individual species. I support the Coalition for Beach Access position of moving the buffer with the brood as it relocates toward reliable food sources.

In summary, buffers sizes up to 200 meters in width, with access corridors around these buffers, satisfies the objectives of National Park Service recreational access AND meets reasonable scientifically recommended MAXIMUM buffer size to protect species.

**Corr. ID:** 13553

**Organization:** *Not Specified*

**Comment ID:** 132639

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Please just rope off small areas (25 yards?) of beach if birds or turtles are nesting to protect the wildlife, but don't keep out the people all season who support and love this area.

**Corr. ID:** 14942

**Organization:** NC Wildlife Resources Commission

**Comment ID:** 136796

**Organization Type:** State Government

**Representative Quote:** Buffer distances for shorebird/waterbird protection: The shorebird/waterbird protection buffers associated with Management Level 1 (ML1) specified on page 127 of the DEIS are based upon results of research appropriate for determining buffer distances (Erwin 1989, Sabine 2005, Rodgers and Smith 1995); However, the additional buffer distances associated with Management Level 2 (ML2) exceed the empirically derived distances associated with ML1. Given the competing demands for the seashore and the importance of balancing human and wildlife uses of CHNS, we recommend using only the buffer distances listed under ML1.

**Corr. ID:** 14973

**Organization:** *Not Specified*

**Comment ID:** 137183

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I totally disagree with the 1000 meter buffer zones which does not allow for corridors to wide areas of open beach. No piping plovers have been harmed by ORV's. I believe these buffers should be reduced to 100 meters with corridors that allow access to open areas. As broods move instead of expanding the buffer zone, they should be moved.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140442

**Organization Type:** Conservation/Preservation

**Representative Quote:** Moreover, Appendix G of the Piping Plover Recovery Plan explicitly provides managing agencies with flexibility to address situations such as those at the Seashore where restrictions would impede vehicle access. The Recovery Plan specifically states that, while the USFWS recommends the protection measures described in Appendix G, "[s]ince restrictions to protect unfledged chicks often impede vehicle access along a barrier spit, a number of management options affecting the timing and size of vehicle closures are presented here." Piping Plover Recovery Plan at 66,193. Thus, Appendix G sets forth two methods of motor vehicle management. The first option reflects the 1,000 meter buffer incorporated into each of the DEIS's action alternatives. The second-again, designed

for situations just like that at the Seashore where restrictions would impede vehicle access-allows for management pursuant to a plan that obtains the concurrence of the USFWS, and that: (1) "[provides for monitoring of all broods during the chick-rearing phase of the breeding season and specifies the frequency of monitoring"; and (2) "[specifies the minimum size of vehicle-free areas to be established in the vicinity of unfledged broods based on the mobility of broods observed on the site in past years and on the frequency of monitoring."

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140441

**Organization Type:** Conservation/Preservation

**Representative Quote:** Rather than reflect any independent consideration of the multiple objectives that the NPS must weigh in developing its ORV management plan, and consider any alternative buffer distances in any of its action alternatives, the DEIS simply adopted the buffer distances specified in the USGS protocols and Piping Plover Recovery Plan. By their own admission, however, "[these protocols do not attempt to balance the need for protection of these species with other activities that occur at CAHA." Cohen, J.B., Erwin, R.M., French, J.B., Jr., Marion, J.L., and Meyers, J.M., 2010, A review and synthesis of the scientific information related to the biology and management of species of special concern at Cape Hatteras National Seashore, North Carolina: U.S. Geological Survey Open-File Report 2009-1262, at 99.

**Response:** Resource closures are established such that they can provide each protected species with the access it may need to key habitat elements during the point in its annual cycle that it requires it. Unless resource closures are established and subsequently enforced, the ability to provide this critical access to resources and buffers to minimize disturbance would be significantly compromised. Yet, in cases where a resource closure impacts human access, every effort has been made to provide alternate routes and points of entry. Similarly, resource closures are managed such that they are re-opened as soon as it has been confirmed that their primary role of providing buffers between protected species and human activity has been fulfilled. Given this, the NPS has modified buffer sizes alternative F to for some species by eliminating the ML1 and ML2 distinctions where ORV use is permitted, and using at all locations standard species management measures, equivalent to those described for ML2 in Table 10 of the DEIS. While the requested corridor would not be provided, buffer sizes will be modified and monitoring increased to allow for more access where ORV are permitted, while maintaining the contiguous closure to protect the species.

After review of public and agency comments, the NPS did make some adjustment to the buffer sizes under alternative F. While buffers for piping plover remained the same, buffers for other species were revised as follows, using ML2 buffers with increased management:

- American oystercatcher breeding and nesting buffers were reduced from 300 meters to 150 meters, buffers for unfledged chicks were reduced from 300 meters to 200 meters.
- Least tern breeding and nesting buffers were reduced from 300 meters to 100 meters, buffers for unfledged chicks were reduced from 300 meters to 200 meters.
- Other colonial waterbird buffers were reduced from 300 meters, for all breeding and nesting stages to 200 meters.

Along with a decrease in buffer sizes, increased monitoring would occur to ensure adequate protection for these species.

Regarding concerns that a 1,000 meter buffer around mobile chicks is unjustified and excessive, it is important to realize that piping plover chicks at the Seashore have been regularly observed/documented to have moved 500 meters or more and sometimes even further than the 1,000 meter buffer. For example, in 2005, a piping plover chick from a recently hatched nest moved nocturnally approximately one-half mile, from its nest on South Beach to a feeding location at Cape Point. In 2006, the brood from nest #4 on Ocracoke Spit moved 644 meters from their nest to a sound side foraging area by day 4 (NPS 2007c). In 2007, four chicks from brood #7 on Ocracoke, moved approximately 610 meters from the nest enclosure behind the dunes on the ocean side to the sound-side mudflats (NPS 2008c). In 2008, three chicks from brood #2 on Ocracoke moved 1000 meters from the nest enclosure southwest along the dunes to the tidal flats on the sound. On Cape Point, the brood from nest #4 foraged near the nesting site for three days then moved 800 meters east to establish a foraging territory at the mouth of the small Salt Pond. The brood from nest #5, on Cape Point, moved a total distance of 800 meters from the nesting area to the east side of the small Salt Pond. After brood #3 on Ocracoke hatched, the adults and chick traveled 1500 meters from the nest

enclosure to the sound side mudflats, and then over to the twin dunes (NPS 2009b). In 2009 a plover chick was observed to have moved as much as 1,200 meters from its nest on South Ocracoke (NPS 2009). Because piping plover chicks at the Seashore have a history of moving quickly and can range at distances in excess of 1,000 meters, the 1,000 meter buffer is supported at the Seashore.

**Concern ID: 24196**

**Concern Statement:** One commenter questioned the effectiveness of buffer areas because of issues related to population counts and timing of buffer implementation and suggested further research on piping plover patterns is needed.

**Representative Quotes:**

**Corr. ID:** 13090

**Organization:** *Not Specified*

**Comment ID:** 140953

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Additionally, buffer zones aren't very effective at providing protection for the species. One of the necessary parameters to create a quality management plan is an accurate population count. Unfortunately, breaking the plover's habitat into segmented buffers presents a huge challenge in doing so, consequently underestimating the amount of space the specie needs. Furthermore, these buffers require impeccable timing in order to be useful, which also reduces their value.

The park service is planning to use these buffers for the management of the wintering/nonbreeding piping plover populations as well. These birds face all the above issues, along with other challenges admitted but not addressed within the plan. The first difficulty is the assumption that despite posted signs, the plover habitat will be disturbed and destroyed. The proposed solution is to further research the piping plovers patterns to decide the best protective measure. Not only will the population dwindle as researchers decide how to best protect the species, valuable habitat will also be destroyed.

**Response:** The DEIS makes sufficient provisions to monitor bird species upon their arrival to the Seashore and in locations where there has been historic nesting and within suitable habitats such that all necessary buffers and closures can be established to provide protection during critical reproductive stages. The Seashore agrees that additional research on such matters is always beneficial and that the relationships between future research and resource management is iterative over time. Given this, the Seashore is still compelled to make judgments on resource management approaches now. Also, see response to Concern ID 24199.

**Concern ID: 24197**

**Concern Statement:** Commenters stated concerns with the proposed floating resource closures. One of the stated concerns is that the measurement on Ocracoke is not correct and is actually 1.3 miles, resulting in an almost total closure of the area when the 1 mile floating closure is applied, with some stating that the floating closures should have clearer criteria. Commenters also suggested wider application of floating closures throughout the Seashore to adapt to constantly changing conditions.

**Representative Quotes:**

**Corr. ID:** 10507

**Organization:** *Not Specified*

**Comment ID:** 131771

**Organization Type:** Unaffiliated Individual

**Representative Quote:** It is not clear how many 1.5 mile non-breeding floating zones (page 81 and others) will be imposed on the public at a given time. Additionally with all the miles of permanent closure and all the nesting site specific closures, there seems to be no case for additional beach closures especially if these areas also exclude pedestrians. There does not appear to be a technical basis for these floating zones. Without such a basis the NPS cannot justify additional closure and denial of ocean access.

**Corr. ID:** 13737

**Organization:** *Not Specified*

**Comment ID:** 135006

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the minimum ten year time frame for closure of designated beaches on Hatteras Island due to wildlife nesting sites. A floating closure is a more practical solution given that nesting areas can change from season to season.

**Corr. ID:** 14398

**Organization:** Ocracoke Civic and Business

**Comment ID:** 140613

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pg 101 states ".5 mile SW of ramp 72 to inlet" is "3 miles" it is not 3 miles and has been grossly overstated. This area what is called South Point of Ocracoke is the most important fishing area on our whole beach. For NPS to make such an error in measure is hard to believe. The actual distance to South Point is 1.3 miles. How could NPS miss this by 1.7 miles. Pg. 101 states "there would be 1.0 mile of "floating" ocean shoreline area for nonbreeding shorebirds. Area would be bypassed via the ORV corridor on the upper beach during nonbreeding season." With only 1.3 miles of beach there is no room for a "floating" area. What happens when part of the South Point washes away like it has in the past? Does it then close off South Point? There are too many unknowns to such an important area to close it off. 95% of this area is already closed in breeding season and over 75% is closed in non-breeding season this is to both ORV's and pedestrians, is this not enough? Pg. 124 states "if resource protection staff determines that any single activity or collection of activities is negatively impacting shorebird use of specific location they NPS may implement additional restrictions on compatible activities." This area is extremely impt. to fishermen, shellers, families, etc. so if the fish are really biting in this 1.0 mile closure and there are a lot of fishermen will it be closed off. We cannot take this chance and this 1.0 mile "floating" area should be removed from Alt. F. There is enough room for both people, ORV's and bird to share.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140452

**Organization Type:** Conservation/Preservation

**Representative Quote:** Year-round closures that are fixed rather than floating are not adaptable to the changing nature of the Seashore's barrier islands. Over time, areas designated for permanent closure today due to their current value as species habitat may no longer be attractive habitat. Map 4 of the Seashore's 2009 Annual Piping Plover Report, titled "Hatteras Inlet PIPL Nesting Activity 2000-09," is illustrative of this point. Piping Plover (*Charadrius Melodus*) Monitoring Cape Hatteras National Seashore 2009 Annual Report, Appendix A, Map 4. This map depicts piping plover nests from 2000 through 2009, as well as 2009 prenesting areas. As depicted on the map, as of the date the aerial photograph was taken (indicated to be August 2008), every piping plover nest site identified on the map was underwater. Although the NPS continues to maintain that primary constituent elements remain at the area and established prenesting closures there for this year, the area is nonetheless a poor nesting site, as there are ephemeral pools at the area only at low tide.

Floating closures provide appropriate flexibility to ensure that the areas subject to closure reflect those areas that actually have value as species habitat, and help ensure that areas no longer suitable for species habitat are not being unnecessarily closed to recreational use and enjoyment. CHAPA believes the use of floating closures for the protection of breeding birds represents sound adaptive management practices that can be beneficial to both natural resources and recreational activities. CHAPA recommends that NPS revisit the permanent closures contemplated under Preferred Alternative F and incorporate floating closures instead of fixed closures where practical. However, CHAPA also believes that the three floating closures currently including in Preferred Alternative F are unnecessary and should be omitted from the final plan, because their purpose is to isolate migratory birds during the non-breeding season.

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137736

**Organization Type:** Conservation/Preservation

**Representative Quote:** Another concern is the lack of criteria in this alternative for the proposed "floating" shorebird closures between ramps 23 to 34 and 55 to 59 totaling 3 miles. Instead, there is vague language that allows almost unlimited discretion on the part of the NPS where the floating closure is placed. DEIS at 121 and 124. This open-ended language allows the floating closures to be placed in low or moderate quality habitats, rather than high quality habitats.

We have experience with the implementation on non-breeding closures under the Interim Plan, and the experience is mixed at best, with some areas of high quality habitat being closed, and other areas being open. In some cases, a full component of high and low tide habitats were not protected, resulting in disturbance during certain parts of the tidal cycle. For example, at the east end of Ocracoke, high tide roosting habitat often was fully open to ORVs, as the nonbreeding closure occupied the north side of the spit, and this area frequently flooded - thus not being suitable for high tide roosting habitat. While this closure protected low energy, low elevation sound side feeding habitat, it did not protect the higher elevation areas where piping plovers likely roosted during high tide periods, which were inside the area open to ORVs.

In addition, there could be variation in the closures between years, but not in a manner that was based on habitat quality. For example, in the 2008-2009 winter, areas on the northeast of the "bait pond" were closed to ORVs. However, during the 2009-2010 winter, the NPS allowed an ORV corridor to be placed through this high quality feeding habitat. A corridor in this area was particularly inappropriate, given that the southeast side of the bait pond was going through vegetative succession, which reduced its value as feeding habitat, and increased the importance of the northeast corner even more. We are skeptical that the provisions in alternative F are sufficient to ensure that the NPS actually will select the high quality habitat to protect. Instead, as has occurred time and again, we will hear howls of protests to the Seashore from a vocal minority of beach drivers, the Seashore will cave to the political pressure, and the natural values of the Seashore will be impaired.

**Response:** Alternative F has been modified to remove the floating closures. As modified, alternative F would provide year-round ORV areas, year-round vehicle-free areas, and areas that restrict ORV use seasonally. Specific seasonal ORV routes under alternative F include ocean shoreline access to Bodie Island Spit, the village beaches from Rodanthe pier to Ramp 23, Avon, Frisco and Hatteras; a short seasonal route south of Pole Road on Hatteras Spit; 0.5 miles north of Ramp 68 to Ramp 68 (Ocracoke Campground); and two short seasonal routes north of South Point that provide soundside access. The reallocation of access areas would allow for species protection in historical breeding areas while accommodating a variety of visitor uses and access, and increased areas of reduced disturbance for nonbreeding shorebirds, in lieu of "floating closures." The seasonal ORV spur route to the northeast side of the Bait Pond on Bodie Island Spit has been eliminated; however, pedestrian access will be allowed to portions of the Bait Pond shoreline. If habitat changes, the NPS would be able to revise these areas under the Periodic Review element, which includes responding to changes after storm events, which would provide the needed flexibility and more accurately reflect nesting habitats. Areas designated for year-round ORV access would still be subject to safety and resource closures if breeding activities are seen or a nest is found. Maps found on pages 175 to 181 of the DEIS have been revised to reflect year-round and seasonal ORV areas and to more accurately represent the existing conditions within the Seashore, including changes in the land area that have occurred since the development of the DEIS. These map changes have also resulted in a change in the calculation of distances, including the south point of Ocracoke, reflected in the addition of table 7-1 in the FEIS.

**Concern ID: 24198**

**Concern Statement:** Commenters stated that certain areas of the Seashore should not be closed year round due to SMAs especially those spits that are very important to the recreational and commercial fishing public. These areas include:

- Cape Point and the inlet spits as they are desirable for watersports
- Ocean shoreline from 0.2 miles southwest of Bone Road to the inlet should remain open
- 0.2 miles west of the hook to ramp 45, and on to new ramp 47 should be open year round instead of seasonally
- Access between ramps 27 and 30 should be maintained
- Areas to the west of Ramp 55 (Hatteras Inlet)

**Representative Quotes:**

**Corr. ID:** 3620

**Organization:** Frank & Fran's The Fisherman's Friend, Inc.

**Comment ID:** 137689

**Organization Type:** Unaffiliated Individual

**Representative Quote:** This comment is in regard to the pre-nesting bird closures throughout the seashore and the early additional closures now installed when only 2 piping plovers have nests within the Cape Point closure and 7 oystercatcher nests in the entire seashore have been found.

**Corr. ID:** 3974

**Organization:** *Not Specified*

**Comment ID:** 138413

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I strongly disagree with the permanent exclusion of the areas to the West of Ramp 55 commonly known as the Inlet. (p. 99 - 107).I could not find and justification for this extreme measure as that area is under constant flux due to the wind and tidal conditions the survivability of any species in that area is subject to the environmental conditions NOT due to any human encounters. The NPS has not presented any evidence to support their position.

**Corr. ID:** 5736

**Organization:** N.C. Marine Fisheries Commission

**Comment ID:** 131068

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In addition to the above comments, the Marine Fisheries Commission is concerned about the recommendation that Hatteras Inlet Spit and North Ocracoke Spit areas be classified as non-ORV areas year round. These locations are very important to the recreational and commercial fishing public. We believe seasonal access could be allowed while protecting species of concern.

**Corr. ID:** 13403

**Organization:** *Not Specified*

**Comment ID:** 138569

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the restrictions (as proposed in Alternative "F" p. 97-101) of the ORV access between ramps 27 and 30 at the Hatteras Inlet, Ocracoke Inlet, and all other locations in the park. There must be a method to allow pedestrian and ORV access points to these areas without disturbing the natural resources.

**Corr. ID:** 13869

**Organization:** Tradewinds Tackle

**Comment ID:** 136534

**Organization Type:** Business

**Representative Quote:** We disagree with the ORV closure at the north end of Ocracoke. This area has not had any significant breeding pairs of shorebirds, and it is a critical area for recreational fishermen. Closing this area to ORV's and setting it aside as pedestrian-only will not enhance the pedestrian visitor's experience.

**Corr. ID:** 14958

**Organization:** *Not Specified*

**Comment ID:** 137327

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the Alternative F recommendation to close the Hatteras Island Spit at Hatteras Inlet to ORV access year round, and to pedestrian access from March 15 thru July 31. Hatteras Inlet is a traditional, high use visitor area. It is noted for the surf fishing experience in the spring, summer and fall, and as fertile commercial fishing grounds as well. The proposed designation of this area as ML1 suggests the closures are due to resource protection goals. The severe changes that regularly occur to the landscape due to ocean and weather events make this an unfavorable area for successful breeding events. Records show that many of the areas used occasionally by piping plovers in the past are now under water. As a result, no plover nesting has occurred on Hatteras Island Spit for several years.

**Corr. ID:** 15113

**Organization:** *Not Specified*

**Comment ID:** 138462

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Another thing that I found was these maps. The over-washed pre-nesting closure recommendations were South Beach and Hatteras Inlet co-closure recommendations and at North Point, Ocracoke closure recommendations, show no piping plover nests in the last two years. Under Alternative F, please explain why these areas are going to be closed permanently, not only to ORVs but to pedestrians.

**Corr. ID:** 15206

**Organization:** *Not Specified*

**Comment ID:** 139158

**Organization Type:** Unaffiliated Individual

**Representative Quote:** On page 16 of the executive summary, I respectfully disagree with ML1 closure restriction under Alternative F. The ocean shore line from .2 miles southwest of Bone Road to the inlet. I believe this area should remain open and an ORV route year-round.

**Corr. ID:** 15206

**Organization:** *Not Specified*

**Comment ID:** 139155

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I will offer a few comments on the DEIS with respect to Alternative F, the NPS preferred alternative, as described on xi and xii, the executive summary that directly relates to vehicle access to the beach. On page 15 of the executive summary, I respectfully disagree with ML1 closure restrictions. Under Alternative F for Cape Point, .2 mile west of the hook to ramp 45, and onto new ramp 47, from March 15 through July 31. I believe this area should remain an ORV route year- round.

**Response:** Alternative F was revised so that many of the points and spits would be open to pedestrian access, but closed to ORVs either seasonally (Bodie Island spit) or year-round (South Beach west of Cape Point, the southern portion of Hatteras Inlet spit, North Ocracoke spit, the sound shoreline at South Point Ocracoke). This was done primarily for protection of nesting birds and (where closed year-round) in recognition of the value of these areas for migrating and wintering shorebirds and vehicle free visitor experience opportunities. Under new alternative F, many of these areas will be accessible on foot, and at South Beach, alternative F has been modified to provide for parking off the interdunal road and access to the shoreline via periodic foot trails. Pedestrian access and parking will be enhanced at the north point of Ocracoke. The area between ramps 27 and 30 and from 0.3 mile west of Cape Point to milepost 47 would remain vehicle free year-round to protect habitat for breeding and nonbreeding birds and to provide visitors the opportunity to experience a vehicle free beach. In all cases, resource closures using standard buffers would apply. Watersport recreationists, recreational fishermen and other visitors would have vehicular access to seasonal ORV routes when open for ORV use and access to year-round vehicle free areas via parking areas adjacent to walkovers or boardwalks, or pedestrian access from interdunal roads in some locations. Commercial fishermen would be authorized to enter vehicle-free areas except for full resource closures, so access to these spits and points would be available outside of resource closure events, which would generally include the fall and winter fishing seasons. Revisions to the level of access provided under alternative F were made with resource protection as the primary concern, but also attempting to provide ORV access to mitigate adverse impacts to ORV visitor experience and the local economy.

**Concern ID: 24199**

**Concern Statement:** Commenters suggested alternative methods of species protection including the use of exclosures to keep out predators, better signage for enclosures, providing access though a permanent pedestrian path between Cape Point to the parking areas at Ramp 43 and 44, reviewing closures weekly for relevance, allowing pedestrian corridors in some areas closed to ORVs, and not posting closures until nests are discovered.

**Representative Quotes:**

**Corr. ID:** 911

**Organization:** *Not Specified*

**Comment ID:** 132431

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The beach should NOT BE POSTED because of suitable habitat, but only for identified actual nests

**Corr. ID:** 12609

**Organization:** Durant station condominium association

**Comment ID:** 140556

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pedestrian foot traffic such as anglers, surfers, beachcombers, runners, etc., which are commonly seen on beaches, should always be allowed to occur on beaches. Any proposed buffer zones for pedestrians should be substantially smaller than any corresponding buffer zones that apply to vehicles. No protection scheme should include a ban on foot traffic/pedestrian use! There is no evidence that shorebirds or other species are harmed in any way by pedestrians when given a small buffer zone to protect nesting activity. Common sense would indicate that a bird would typically not choose to nest in an area or amidst any level of activity, which it found to be uncomfortable and/or disruptive to its reproductive cycle.

**Corr. ID:** 14226

**Organization:** Outer Banks Anglers Club

**Comment ID:** 137860

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would also suggest that the Park Service consider cutting a permanent pedestrian path from Cape Point to the parking areas at Ramps 43 and 44, and the campground. This path could be cut through the brush between the west side of the sand dunes and the east side the pond at Cape Point. This path would have no negative impact on the Park's resources. The path would provide reliable year round access to Cape Point when all other access is lost during times of resource and safety closures. This access would be safer than wading around the enclosures at night and could prove useful for resource observation, predator management and park enforcement.

**Corr. ID:** 14341

**Organization:** *Not Specified*

**Comment ID:** 137386

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Reading different articles on the Piping Plovers it seems the use of "enclosures" is an effective way of notifying people where the birds are nesting and keeping the predators away. If one of the nests are found in a heavy traffic area and it is in emanate danger; move it as in the case of a Hurricane. No need to close the beach and grant the bird so much real estate. Post signs within a reasonable limit of the nests so everyone with binoculars can observe natures beauty if they like. If someone is caught doing intentional harm to any of the wildlife on our beaches they should be prosecuted. The majority of the visitors and residents would never do anything to harm the wild life.

**Corr. ID:** 14837

**Organization:** *Not Specified*

**Comment ID:** 138925

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Corridors are fine for pedestrians but ORV corridors have a greater negative impact on T/E species attempting to breed, feed, germinate, etc. in this particular barrier island habitat. Save them as a reward when T/E species numbers are routinely up to those needed to take them off the Endangered Species Listing.

**Corr. ID:** 14954

**Organization:** *Not Specified*

**Comment ID:** 138023

**Organization Type:** Unaffiliated Individual

**Representative Quote:** ENCLOSURES SHOULD HAVE SIGNAGE POSTED IN ALL DIRECTIONS AND A MAP OF THE ENCLOSURE WITH AN EXCERPT SHOWING A DIGITAL PIC OF THE ACTUAL NEST, THIS VISUAL PROOF WOULD PROVIDE THE FAIRNESS THAT THIS OPERATION NEEDS AND PREVENT UNJUST CLOSURES.

**Corr. ID:** 15167

**Organization:** Coastal Conservation Association

**Comment ID:** 139645

**Organization Type:** Conservation/Preservation

**Representative Quote:** And finally, there's no implementation of some of the things that are done up in the Northeast, particularly for plovers. There are some large cages that are put around -- around nests up there that keep predators out, and so forth. None of those actions are described, and they -- and yet we focus on ORV access, which is less than one percent, you know, a small fraction of one percent of the activity around -- around the birds. So, I think that you really need to reconsider that -- those buffers, et cetera.

**Response:** As described in DEIS Table 10 (FEIS Table 10 and Table 10-1) specific closures would be adjusted during the breeding season to respond to species activity. Standard buffer distances would be reviewed on a longer time frame. Several years of data are needed to determine population trends and whether management intensity could be decreased as desired conditions are met or whether it needs to be increased if population trends are away from desired conditions. The following text in the FEIS (Table 10-1 for Alternative F under Pre-Nesting Closures) has been added to provide pedestrian access along the shoreline outside pre-nesting closures until breeding activity is observed and standard buffers applied.

“Pedestrian shoreline access below the high tide line will be permitted in front of (i.e. seaward of) pre-nesting areas until breeding activity is observed, then standard buffers for breeding activity will apply. Pets and horses are prohibited in pedestrian shoreline access areas in front of pre-nesting areas. ORVs, pedestrians, pets and horses are prohibited within all resource closures, including pre-nesting closures.”

Table 11 has also been revised in the FEIS to allow for a reduced pedestrian buffer of 300 meters around unfledged piping plover chicks, while the ORV buffer distance would remain at 1000 meters. See response to Concern ID 24192 (but may move to 24194) for a discussion of the reasons for not allowing pedestrians inside resource closures and response to Concern ID 24069 for a discussion of the primary purpose of the national parks as mandated by the Organic Act.

Page 192 of the DEIS describes the use of exclosures at the Seashore. Piping plover exclosures are effective as a predator control method but are not large enough to provide the needed protection from human disturbance. Plover nests are not moved during hurricanes. See Alternative Elements Considered but Dismissed from Further Consideration, Relocate Bird and Turtle Nests, section, at the end of Chapter 2 in the FEIS for a discussion of why moving piping plover nests to maintain ORV access is not a reasonable alternative.

Under all alternatives, signs and symbolic fencing would be used to alert the public to the presence of a protected nesting area. The symbolic fencing would be placed at a distance sufficient to avoid disturbance of breeding birds. NPS does not consider posting a map of the enclosure with the nest location and picture of the nest to be prudent or efficient management nor necessary for “fairness” and declines to adopt this suggestion.

When indicators for desired conditions are reached then management modifications may be considered to enhance ORV access while maintaining desired conditions. Based on past experience and consultation with the FWS the NPS believes the limited corridors provided for in the FEIS alternative F can be provided without unreasonably interfering with the attainment of desired conditions for shorebirds and sea turtles. The following text change has been made to the last sentence of the DEIS definition for periodic review in the definitions section of FEIS Table 10-1 for alternative F to clarify that more increased restrictions on recreational use may result if monitoring shows that progress is not being made towards attainment of desired conditions:

In the sentence “Where progress is not being made toward the attainment of desired future conditions, periodic review and adaptive management may provide for additional management including appropriate restrictions on recreational use,” delete ‘may provide for additional management including appropriate restrictions on recreational use’ and replace with “may result in increased restrictions on recreational use.”

**Concern ID: 24201**

**Concern Statement:** Commenters stated concern over the amount of mileage that could be closed under alternative F due to the establishment of prenesting areas, Species Management Areas (SMAs), and the use of the ML1 strategies.

**Representative Quotes:**

**Corr. ID:** 14920

**Organization:** *Not Specified*

**Comment ID:** 137688

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with Alternative F in regards to the Special Managed Areas.

Page 468 states there will be 7 SMAs, managed under ML 1 procedure and would be closed to both ORVs and pedestrians during the breeding season. Of these, four SMAs would be designated as non-ORV year round ( Table 7 pages 97-101) to include Ramp 27-30, approximately 1.7 miles south of Ramp 38 to Buxton line with new Ramp 39 across from Haulover and new sound side parking at Kite Point, Ocean Shoreline 0.2 miles Southwest of Bone Road to Hatteras Inlet and Ocracoke North-south Inlet to 0.25 miles Northeast of Ramp 59. One SMA would be designated as non-ORV March 15" thru October 31, 0.5 mile Southwest Ramp 68 to 1.2 mile Northeast of Ramp 70. Two SMA would be designated as non-ORV March 15th through July 31st, but there are actually three SMA listed (table 7, pages 97-101, new Ramp 32.5 thru Ramp 34, Cape Point 0.2 miles West of the hook to Ramp 45 and Ramp 45 to Ramp 47. In addition to 8 (not 7) there will be 3 areas managed under ML2 which are subject to corridor closures according to breeding activity. The proposed areas of the buffer zones are much to large than what is necessary. This closes down 16 miles of beach SMA managed under ML1 and 23 miles designated for seasonal use.

The areas stated above are predetermined to be closed or limited to access when it is not for sure that the breeding will take place in these areas. Closures should only be determined on actual occurrences, not WHAT MAY HAPPEN. The weather is unpredictable in reference to storms and natural erosion, no one is to say how this will effect the breeding of any species and where they will go to breed.

**Corr. ID:** 14971

**Organization:** *Not Specified*

**Comment ID:** 138952

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Alternative F defines an unprecedented standard for species management outside of the Species Management Areas--namely, ML 1(Footnote 4). ML 1 protocols use "larger, longer-lasting buffers" to protect wildlife. While it is not possible to predict the number of miles that will be closed by these unprecedented protocols, it is possible to use the pattern of closures that have resulted from the past two years of management under the consent decree to make a fairly accurate estimate of potential closures. A review of the Beach Access reports for 2008 and 2009 shows a pattern of wide-spread full-beach resource closures spanning the period of 5/15 to 8/15 (Footnote 5). Based upon the fact the predicted ML1 closures will be added to the mandated Species Management Area closures, it is more than likely that the resource management proposal will relegate access for

ALL visitors to either the high density village front beaches or 15 miles of shoreline spread over 10 areas. The length of the shoreline available in these 10 areas will likely range from as little as 1/2 mile to a maximum of 2.7 miles (Footnote 6). In effect, the resource management proposal will likely turn the beaches available outside of the village fronts into virtual parking lots with the only opportunity for a remote experience being relegated to pedestrian day use at Pea Island. Furthermore, by reducing access areas to such small spaces, the potential for overcrowding and user conflicts will increase dramatically.

**Response:** Instead of using SMAs, alternative F in the FEIS has been revised to provide more intensive monitoring and response to changes in bird activity, equivalent to that described under ML2 in the DEIS, rather than the less intensive monitoring with larger and longer lasting closures described in ML1 in the DEIS. The purpose of this change is to simplify the plan and to lessen the amount of time that designated ORV routes would be affected by resource closures.

As described in the DEIS it is necessary to provide pre-nesting closures, based on an annual habitat assessment and past breeding data, before the birds arrive to provide undisturbed habitat where they can begin breeding activity. For those inlet spits and points designated as ORV routes, alternative F has been revised to provide pedestrian and ORV access along the shoreline when pre-nesting closures are established. Once shorebird breeding activity is observed, standard buffers would apply and adequate beach-width for continued ORV or pedestrian access may or may not be available depending on the location of the breeding activity. See response to Concern ID 24077 for more discussion of the potential effect of resource closures on designated ORV routes.

NPS estimates that under alternative F as revised in the FEIS, 27.3 miles of the total 68.9 miles of beach would be designated as year-round ORV routes, 26.4 miles would be vehicle-free year round, and 12.7 miles would allow seasonal ORV use equal to or less than six months a year. As stated before, it is not possible to know exactly how much or which specific areas will be closed to ORVs or to pedestrians during the breeding season for shorebirds and sea turtles. Experience managing under alternative B during the past three years indicates that the amount of miles that are temporarily closed for resource protection will vary from year to year, and from area to area. Table 37-2 has been added to the FEIS, under Affected Environment Visitor Use and Experience, to display closure dates during 2007 - 2010 for the inlets and Cape Point under alternative B.

NPS believes that providing more choice of areas for visitors to use without the presence of vehicles would result in fewer conflicts because visitors may self select which type area they wish to visit.

**Concern ID: 24202**

**Concern Statement:** Commenters questioned how commercial fishermen would be able to access the beach under the proposed species management procedures and questioned how law enforcement personnel would enforce regulations related to commercial fishing access.

**Representative Quotes:**

**Corr. ID:** 14831

**Organization:** *Not Specified*

**Comment ID:** 137139

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS proposes that the National Park Service allow commercial fishermen to drive Anywhere in the National Seashore as long as they can show a recent receipt from a local fish house. This rule is open for widespread abuse. - Describe specifically how the Park Service will monitor and enforce the rule protecting access for commercial fishermen.

**Corr. ID:** 15137

**Organization:** *Not Specified*

**Comment ID:** 138471

**Organization Type:** Unaffiliated Individual

**Representative Quote:** And we want to know why there is so little reference to the commercial fishing industry's access to the beach. Yes, ya'll say it's included, that the way you've got the closures at -- set up -- how're we going to get there?

**Response:** Page 114 of the DEIS (Chapter 2, Table 8) provides a detailed explanation of commercial fishing access under all alternatives, including alternative F. Under alternative F, commercial fishing will continued to be allowed in accordance with 36 CFR 7.58(b). Permitted commercial fisherman would be authorized to enter vehicle-free

areas, with the exception of full resource closures or lifeguarded beaches. Additionally, eligible commercial fisherman would have modified night driving hours, with restrictions from 9 pm to 5 am, instead of the proposed 9 pm to 7 am restriction. The NPS determined that fish house receipts are an adequate way to determine the eligibility of a commercial fisherman as they demonstrate an income based on fishing and recent fishing activity. To further assist law enforcement with compliance, To further assist law enforcement compliance, special use permits for commercial fishermen permit would be a different color than recreational ORV permits so they are easily identifiable.

**Concern ID: 24205**

**Concern Statement:** Commenters recommended additions to the Seashore's bird monitoring and data gathering procedures including recording the GPS location for banded birds, that scopes be used rather than binoculars, use of experimental design comparing bird populations in areas open or closed to vehicles, and discontinuing use of the SECN protocol for monitoring. A suggestion was also made that non-breeding surveys be designed to occur at multiple distinct tidal stages. Commenters suggested striking out specific language and additional language was suggested for how non-breeding seasons would be conducted.

**Representative Quotes:**

**Corr. ID:** 13068

**Organization:** *Not Specified*

**Comment ID:** 132417

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pg. 123: Nonbreeding surveys. I would just add that the design should ensure specific sites are surveyed at multiple distinct tidal stages (low and high but also rising and falling). At CAHA this means taking into account not just predicted lunar tides but, because of wind effects, actual tidal height.

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137780

**Organization Type:** Conservation/Preservation

**Representative Quote:** Fourth, we added recording of GPS location for banded birds, so that precise location data can be provided to the scientists who banded the birds; while Seashore biologists may be aware of where "South Point" is, a biologist who banded breeding or migrating birds hundreds of miles away may not be familiar with the area, and providing a GPS location will be very helpful to these scientists in accurately locating the resight location. We also have added the requirement that a spotting scope will be used to scan the legs of piping plovers for color bands. We support the proposal's inclusion of observers recording color bands. However, based on our extensive experience with non-breeding surveys for piping plovers and knowledge of the locations at the Seashore, we are very concerned that without a requirement that a scope be used, many, if not most, of color bands on piping plovers will be missed. Using binoculars clearly is not sufficient to detect difficult-to-observe color bands, especially at the distances that are involved in some locations. Band returns can provide very valuable data about non-breeding birds for the Seashore and scientists working on bird recovery efforts (e.g. Stucker et al 2010). The survey methodology should be designed in a way that actually allows a reasonable chance of band resight data being collected. Finally, we added the start and end time, so it is clear how long the surveys actually take.

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137778

**Organization Type:** Conservation/Preservation

**Representative Quote:** Second, if one of the objectives of the monitoring effort is to determine whether ORV use at the Seashore is impacting piping plovers or other non-breeding birds, the current monitoring approach will not provide a reliable answer to that question. The methodology only provides the number of birds that are detected outside of bird closures or inside of bird closures. Those two numbers do not tell us, however, whether piping plovers or other shorebirds are in a bird closure because the habitat is better habitat, or the disturbance is lower in the closure, or some other factor. If the Seashore wishes to address specifically the issue of how ORV use affects non-breeding shorebirds, the Seashore should be employing an experimental design that compares beach areas that are fully open or closed to vehicles, rather than a design that uses a beach that has a vehicle corridor along the ocean and inlet. Researchers at both Assateague (Forgues 2010) and Cape Lookout (Tarr 2009) have recently completed papers that use experimental designs as suggested here to address disturbance that may provide guidance.

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137777

**Organization Type:** Conservation/Preservation

**Representative Quote:** DEIS at 123. Our reasoning for the suggested changes is as follows. We removed the language "using the SECN protocol." First, we are concerned about the reliability of the data generated by the current methodology for monitoring non-breeding piping plovers. The 2009 Annual Report (Map 17) shows parallel survey transects that are approximately perpendicular to the sound and ocean shoreline, and, from the scale, appear to be spaced almost 0.2 miles apart. Non-breeding piping plovers can be very difficult to detect due to their small size, plumage color, and how well they blend in to the surrounding habitat. If piping plovers are resting in a depression or behind a piece of wrack, they are very difficult to detect, even at 50 yards. Having transects 0.2 miles apart likely will result in numerous piping plovers not being detected. The SECN protocol is significantly different from previous shorebird methodologies for beaches and those used on the Seashore.

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137776

**Organization Type:** Conservation/Preservation

**Representative Quote:** The DEIS, at Table 10, includes non-breeding surveys; these surveys would be included in the preferred alternative as well as other action alternatives. We have the following suggestions for the language regarding these surveys (additions underlined, deletions struck out):

The NPS will monitor presence, abundance, and behavior of migrating and wintering shorebirds from July 1 through May 31 (Strike OUT using the SECN protocol) Survey sites will include all Nonbreeding Shorebird SMAs and the 100 foot corridor area at Cape Point and South Point. The NPS will obtain data similar to International Shorebird Survey data. The following information will be recorded: Date, start and end time, and location of observations; identity of observer; species and number of birds observed; band combination and GPS location of any banded birds; weather variables (start underline) such as wind direction, speed, visibility, and other relevant information, such as whether the flats are flooded from strong winds (end underline), and tidal stage; habitat; behavior of the majority of birds in the flock (foraging, resting, disturbed [source will be recorded], other); site management in effect where birds are seen, (start underline) including whether the birds are in full closure, pedestrian only area, or ORV area (end underline); and number of pedestrians, pets, ORVs and other potential disturbances. Species to be surveyed include piping plover, American oystercatcher, Wilson's plover, red knot, and representative species of colonial waterbirds. (start underline)A spotting scope will be used to scan the legs of piping plovers for color bands. (end underline)

**Response:** For the following reasons, NPS would continue to do what it has been doing for the nonbreeding shorebird surveys. First, SECN is the NPS Southeast Regional Office Inventory and Monitoring Program data collection arm, and it is appropriate for the Seashore to follow its technical guidance on monitoring methodology. Second, the concern expressed that the transects are too far apart to accurately count plovers is not an issue because the counts are not meant to count every single bird, but are designed to show trends over time. Trends over time can be monitored without counting every bird. Third, the current transects are timed transects, which means they cannot be interrupted to obtain band data. Finally, the recently signed Memorandum of Understanding (MOU) between the U.S. Fish and Wildlife Service (FWS) and the NPS (<http://www.fws.gov/migratorybirds/Partnerships/NPSEO13186Signed%204.12.10.pdf>) commits NPS to working with its Inventory and Monitoring Program, of which SECN is a part, for migratory bird data collection. However NPS recognizes that it is desirable to retain flexibility in case improved survey methodology is developed during the life of this plan. Therefore the following text changes have been made in the FEIS to alternative F:

Alternative F has been deleted from Table 10.

In the new Table 10-1 for Alternative F, the phrase "using the SECN protocol" has been deleted.

On DEIS page 470 in the first sentence in the Wintering/Nonbreeding Management section, the phrase "according to the NPS SECN survey protocol" have been deleted.

NPS has no objection to and would consider an application for a research study comparing areas open to ORVs to areas closed to ORVs, with respect to disturbance of non-breeding shorebirds.

**Concern ID: 24206**

Concern Statement: Commenters stated that there was ambiguity related to how buffers would be implemented inside pre-nesting closures at a distance from the edge of the closure that is less than the standard buffer distance. Suggested language was provided to reduce the perceived ambiguity.

**Representative Quotes:**

**Corr. ID:** 15074 **Organization:** Southern Environmental Law Center

**Comment ID:** 137772 **Organization Type:** Conservation/Preservation

**Representative Quote:** The DEIS is unclear on two critical issues: 1) what will happen if a shorebird or colonial waterbird is scraping at a location that is inside a pre-nesting closure, but at a distance from the edge of a closure that is under the standard distances provided in Table 11; and 2) what will happen if a bird is nesting near an area with a "designated ORV access corridor" and the distance between the nest and the corridor are less than the standard buffer distance in Table 11.

**Corr. ID:** 15074 **Organization:** Southern Environmental Law Center

**Comment ID:** 137775 **Organization Type:** Conservation/Preservation

**Representative Quote:** Nest Buffers - ML1 and ML2: "A 75-meter buffer/closure will be established around nest(s). Buffers will be increased in 50-meter increments if human disturbance occurs." DEIS at 122.

If a buffer falls within the intertidal zone, a full-beach closure will result." DEIS at 122. The DEIS is unclear if standard Table 11 buffers will apply, if a bird is found scraping or nesting inside a pre-nesting closure at a distance from the edge of a closure that is less than the standard buffer distance. (Footnote 13) These suggested changes will resolve this ambiguity. Failure to implement standard buffers in these critical circumstances would result in a significant reduction in protection at critical nesting sites, potentially leading to abandonment of sites or nests.

Footnote 13 - This concern is exacerbated especially for piping plovers, for unlike the other species, there is no statement in the nest buffer section that "For nests that occur inside a pre-nesting closure and require a buffer expansion of the prenesting area, the buffer expansion maybe removed to the original pre nesting closure after 2 weeks with no breeding activity if the nest is lost to overwash or predation, DEIS at 122 (emphasis in original), as is listed in the columns

**Corr. ID:** 15074 **Organization:** Southern Environmental Law Center

**Comment ID:** 137774 **Organization Type:** Conservation/Preservation

**Representative Quote:** Relevant provisions are quoted below, and our suggested changes - which address the piping plover provisions - are indicated with underlines for additions and deletions for language that should be removed to address our concerns; similar changes, with buffers appropriate to the species, also should be made for the columns for American oystercatcher/Wilson's plover and Colonial Waterbirds:

Pre-nesting Closures: "Upon the first observation of breeding activity, the standard buffers (please refer to table 11, Shorebird/Waterbird Buffer Summary) will apply, (BEING STRIKE OUT-which depending upon the circumstances may close the access corridor END STRIKE OUT)." DEIS at 121.

Courtship/Mating Buffers: "In unprotected areas, a buffer will be established immediately when courtship or mating is observed." DEIS at 122.

Courtship/Mating Buffers - ML1/ML2: "If breeding activity is observed outside of an existing closure, a buffer will be established or expanded to ensure a 75-meter buffer for the observed birds; (start underline)if breeding activity is observed inside of an existing closure at a distance under 75 meters from the closure boundary; the closure will be expanded to ensure a 75-meter buffer. (end underline)" DEIS at 122.

**Response:** The language in Table 10 has been revised in Table 10-1 of the FEIS as follows: " If breeding activity is observed outside of an existing closure or within a closure less than the prescribed buffer distance from the closure boundary, a buffer will be established or expanded to ensure a 75-meter buffer for the observed birds.

**Concern ID: 24207**

Concern Statement: One commenter requested that the description of ORV corridors for ML2 areas remove the word "generally" as this leaves the exact size of the closure unclear to staff (generally 50 meters could be more or less than 50 meters). The commenter also indicated that ORV corridors should be no more than 100 feet wide.

**Representative Quotes:**

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137771

**Organization Type:** Conservation/Preservation

**Representative Quote:** We note that Table 10 indicates that the "ORV access corridor at ML2 sites will generally be no more than 50 meters wide above the high tide line ...." DEIS at 121. We are concerned about the word "generally" as it leaves it unclear to the reader - and NPS staff who will have to implement this provision - (start italics)where(end italics) the corridor can be greater than 50 meters, or by (start italics)how much(end italics) it can be greater than 50 meters wide. We are concerned that this vague language could result in a corridor that may be 100, or 200 meters wide in certain areas, which would significantly increase the adverse impacts of ORV use. To address this concern, the word "generally" should be removed. In addition, we see no reason why a 50 meter corridor is necessary. The corridor should be reduced to the minimum that is necessary for a vehicle to park perpendicular to the shoreline and two other vehicles traveling landward of a parked vehicle and parallel to the shoreline to pass safely going in opposite directions. To address this purpose, a corridor 100 feet wide would be sufficient, so we urge the Seashore to implement this corridor width limitation.

**Response:** Under modified alternative F, two levels of species management measures (ML1 and ML2) no longer exist. Species management measures, equivalent to the ML2 described in the DEIS, will be applied at all locations under modified alternative F. In table 10-1, "Pre-nesting Closures", has been revised to state "ORV corridors at Cape Point and South Point: When pre-nesting closures are implemented by Mar 15, the ORV access corridor at Cape Point and South Point will be established at 35 meters (115 ft) wide above the mean high tide line. The pre-nesting closure will not be modified if the beach erodes into the ORV corridor or into the protected habitat. Once breeding activity is observed, standard buffers will apply."

Based on experience enforcing the interim strategy and consent decree and comments received on the DEIS, the NPS has determined that an initial breeding season corridor closer to 100 feet wide than 150 feet wide is adequate for resource protection, is more in keeping with recent nesting patterns, and is less likely than to need as many modifications after the pre-nesting area is established. The NPS revised alternative F to provide for a 35 meter (instead of 100 feet) wide corridor to use a metric-based whole number (multiple of 5 or 10) that was close to 100 feet.

The intent is that, at these sites when the pre-nesting area is installed, the initial ORV corridor width will be no more than 35 meters (115 ft) above the mean high tide line, recognizing that field conditions make precise marking difficult. As the season progresses, the beach width will typically change; however, the pre-nesting closure will not be reduced to accommodate ORV use if the corridor becomes more narrow due to erosion and, absent observed breeding activity that would prompt the implementation of standard buffers, the pre-nesting area will not be expanded if the beach widens.

**Concern ID: 24208**

Concern Statement: Commenters stated that provisions for pre-nesting closures should be modified so that these closures would be removed August 15 instead of July 15 to account for species that nest later. Concern was expressed that pre-nesting management using ML2 procedures would require intensive management and higher costs and NPS would need to choose between this approach and one that closes the area for a longer period of time but requires less monitoring.

**Representative Quotes:**

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137767

**Organization Type:** Conservation/Preservation

**Representative Quote:** The other approach is that chosen in the DEIS under the ML2 approach, which utilizes pre-nesting closures, combined with intensive monitoring to close areas for the period where there is breeding activity observed. This approach is less predictable than the first approach: those who are skilled at shorebird and waterbird nesting behavior can predict the approximate areas where nesting will occur, but the precise timing and location of closures is unknown, requiring intensive monitoring, and it is possible that a bird may nest in an unexpected location, requiring monitoring of lower value areas. In addition, this approach places increased risk on the nesting species: if monitors do not detect nesting behavior in a timely manner and install closures in the appropriate location, the breeding birds could fail to set up a territory, abandon a nest, or there could be direct take of nests or chicks by pedestrians or vehicles. Finally, this approach increases administrative costs: there have to be larger numbers of skilled people, who observe breeding birds on a regular basis, and quickly implement closures based on observed breeding activity.

Fundamentally, NPS, or any other management entity, has to choose one or the other alternatives (or a combination of the two) in determining how to conserve nesting shorebirds and colonial waterbirds.

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137769

**Organization Type:** Conservation/Preservation

**Representative Quote:** Table 10 notes that "Pre-nesting closures would be adjusted to the configuration of the Nonbreeding Shorebird SMAs for the respective sites (as described later in this table) if no breeding activity is seen in the area by July 31, or 2 weeks after all chicks have fledged, whichever comes later." DEIS at 121 (bold in original), Alternative F summary uses similar language. DEIS at 81 ("through July 31, or until two weeks after all chicks have fledged and breeding activity has ceased, whichever comes later"). We are concerned that July 31 is not late enough for black skimmers, which nest even into September, and least terns, which can continue nesting into August, from ORV based disturbance. As an entire colony of waterbirds can relocate after the colony is lost to predation, disturbance, or weather events, the July 31 reopening date could conflict with late season colonial waterbird nesting attempts. We request the Seashore replace July 31 with August 15.

**Response:** NPS has revised the language for alternative F in Table 10-1 in the FEIS, "Pre-nesting Closures", to state that, "Pre-nesting closures would be removed if no breeding activity is seen in the area by Jul 31 (or Aug 15 if black skimmers are present), or 2 weeks after all chicks have fledged, whichever comes later. Nonbreeding shorebird habitat protection would be implemented, as described later in this table, before pre-nesting areas are removed." If black skimmers are present at a site and breeding activity is observed, then the monitoring and buffers described in Table 10-1 following the "Pre-nesting Closures" section would be implemented for late nesting birds. NPS believes that this will adequately provide for the protection of late nesting birds and recognizes that the success of this management action depends on monitoring to detect breeding behavior and increases administrative costs.

**Concern ID: 24210**

**Concern Statement:** Commenters stated that the DEIS does not establish enough vehicle free area for use by non-breeding and migratory shorebirds. Commenters requested that specific non-breeding SMAs be designated, rather than leaving this decision to a later date. It was suggested that six non-breeding SMAs be provided at the Seashore, based on use by migratory and wintering species. Commenters further stated that the review of these areas should be every three years instead of every five years. Commenters suggested areas where non-breeding and migratory shorebird closures should occur such as: Bodie Island Spit 0.1 miles south of Ramp 4 to the inlet; 0.2 miles northwest of Cape Point to Ramp 49; Hatteras Inlet Spit ocean shoreline and backshore beach, and dunes 0.68 miles west of Ramp 55 to the soundside of the inlet; North Ocracoke Spit inlet 1 mile west of Ramp 59 and; South Point Ocracoke 0.2 miles west of Ramp 72 to the inlet.

**Representative Quotes:**

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137719

**Organization Type:** Conservation/Preservation

**Representative Quote:** The following changes (stikeouts and additions) were proposed by the commenter: ~~Points and Spits: An annual habitat assessment will be conducted after all birds have fledged from the area. Nonbreeding~~

resource closures will be established at the points and spits based on habitat used by wintering piping plovers in more than one (i.e., two or more) of the past 5 years, the presence of birds at the beginning of the migratory season, and suitable habitat types based on the results of the annual survey. This may include non-ORV areas as well as areas closed to all recreational use. Actual locations of suitable foraging and roosting habitat may change periodically due to natural processes. Access to the inlet shorelines, where permitted, will be maintained by a corridor to be determined by NPS staff based on the annual habitat assessment.

**Ocean Shoreline Areas:** In addition to the nonbreeding resource closures at the points and spits described above, the NPS will establish non-ORV areas along the ocean shoreline that will provide relatively less disturbed foraging, resting, and roosting areas for migrating and wintering shorebirds. These may include wider sections of beach with an upper beach ORV corridor that has a buffer of at least 50 meters above the high tide line, and/or sections of beach that have been designated as non-ORV for other reasons, such as to provide pedestrians with opportunities for a natural beach experience. The following activities are generally compatible with migrating/wintering shorebird use of these areas: pedestrian access for fishing, beach walking, bird watching, kayaking, kiteboarding, paddleboarding, photography, picnicking, sailing, shelling, stargazing, sunbathing, surfing, swimming, wildlife viewing, windsurfing, and commercial fishing due to the relatively low number and frequency of occurrences. If resource protection staff determines that any single activity or collection of activities is negatively impacting shorebird use of a specific location, the NPS may implement additional restrictions on compatible activities. The location(s) of all ocean shoreline Nonbreeding Shorebird SMAs will be subject to periodic review."

"Non-breeding SMAs will be re-evaluated and re-designated every 3 years, or after a hurricane, tropical storm, or extra-tropical storm that significantly modifies habitat quality or quantity. The reasoning for these changes is as follows. Some non-breeding SMAs could be installed in areas where there are not breeding closures; in this event non-breeding SMA management would go into effect by July 15. Since we recommend specific areas where nonbreeding SMAs are to be designated, we have removed the additional language regarding "Points and Spits" and "Ocean Shoreline Areas." Instead, we have indicated that, similar to breeding SMAs, there will be a periodic re-evaluation process that occurs after a certain time period or after storms. We have shortened that period to 3 years, due to how quickly habitat changes can occur at the Seashore. For example, at the east end of Ocracoke, due to accretion, the quality of the habitat for non-breeding piping plovers has increased significantly in the last three winters, and the level of use by piping plovers has increased. If a 5 year period were used instead, we would be concerned that emergent, high quality habitats from natural accretion may not be protected from disturbance until after several years pass, due to the long review window."

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137717

**Organization Type:** Conservation/Preservation

**Representative Quote:** "Nonbreeding Shorebird SMA: Area of suitable nonbreeding habitat that has had (cross out concentrated) foraging or (start underline)roosting/resting (end underline) by migrating/wintering shorebirds in more than 1 (i.e., 2 or more) of the past 5 years and is managed to reduce human disturbance during the nonbreeding season. This may include portions of breeding SMAs that provide suitable nonbreeding habitat during periods of overlap between the breeding and migrating season and designated non-ORV areas that are set aside to provide pedestrians with the opportunity for a natural beach experience. (start underline)The following areas have been initially designated as Non-breeding SMAs:

- Bodie Island Spit: 0.1 miles south of ramp 4 to inlet.
- 1 mile south of ramp 23 to one mile north of ramp 34.
- 0.2 mile northwest along the shoreline from Cape Point to ramp 49, including Cape Point Interior.
- Hatteras Inlet Spit: Ocean Shoreline and backshore beach, and dunes .68 of a mile west of Ramp 55 to soundside of inlet.
- North Ocracoke Spit: Inlet to 1 mile west of ramp 59.
- South Point (Ocracoke): 0.2 miles west of ramp 72 to inlet." (end underline)

Our first suggested change is to remove the word "concentrated" from the description. With rare species such as piping plover, relative low numbers will be found at most sites. For example, in the 2001 International Piping Plover Winter Census, of the 118 sites where piping plover were found, 56.8% contained 1-10 birds (Ferland and Haig 2002). The word "concentrated" could be used as a reason not to protect certain important non-breeding sites at the Seashore.

Second, the SMA language should be amended to add "or roosting/resting" to the habitat types that are protected in SMAs. Protecting only feeding habitats is inadequate. The two habitats are not necessarily the same; indeed, some of the highest quality feeding locations at the Seashore are under water at high tide and unavailable for use. Piping plovers during the winter can spend a significant percentage of their time roosting, so this important behavioral activity also must be protected.

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137718      **Organization Type:** Conservation/Preservation

**Representative Quote:** Third, the FEIS must designate specific non-breeding SMAs, rather than leaving this important process to some later date. The Seashore is one of the most significant sites for migrating and wintering shorebirds on the Atlantic coast of North America. In addition, as noted by the USFWS, survival during the nonbreeding season plays a critical role in determining whether the population is increasing, stable, or decreasing. The NPS should identify and designate these areas in the FEIS, rather than leaving their designation to some future process that is not subject to public review and comment and not part of the rulemaking. Accordingly, we propose an initial designation of six nonbreeding SMAs at the Seashore, based on use by migrating or wintering shorebird species, migrating colonial waterbirds, and habitat quality. The DEIS (p. 124) provides the following additional information regarding the process for designating non-breeding SMAs. We will suggest specific modifications to the provisions, using underlines to show language additions and strike outs to show deleted language, and then provide a discussion of why these provisions should be changed as requested.

All Species: Nonbreeding Shorebird SMAs are (delete will be) established and managed to reduce disturbance of migrating/wintering shorebirds at various locations throughout the Seashore. Such closures will be installed no later than when breeding season closures are removed at the same location(s), or by July 15 if the location does not have a breeding season closure. Pets will be prohibited within Nonbreeding Shorebird SMAs as well as the corridor to Cape Point and South Beach.

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137715      **Organization Type:** Conservation/Preservation

**Representative Quote:** In addition, the DEIS does not adequately address non-breeding shorebird SMAs. The DEIS, at Table 10, has four paragraphs that are devoted to non-breeding shorebird SMAs. DEIS at 121 and 124. Because of the critical importance of these areas to meeting the stated goals of the DEIS as well as meeting the Seashore's statutory, regulatory, and policy provisions, we are reproducing these provisions in full in the text below. We will suggest specific modifications to the provisions, using underlines to show language additions and strike outs to show deleted language, and then provide a discussion of why these provisions should be changed as requested.

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137723      **Organization Type:** Conservation/Preservation

**Representative Quote:** Based on these criteria, non-breeding SMAs should be established at the following areas:

- Bodie Island Spit: 0.1 miles south of ramp 4 to inlet, including all moist soil habitats, soundside intertidal areas, and adjacent dry sand resting/roosting habitats. This area merits designation due to its use by migrating and wintering piping plovers (Critical Habitat NC-1), red knots, and many other shorebird species.

- 1 mile south of ramp 23 to 1 mile north of ramp 34. This area merits designation due to its use by migrating and wintering Willet, sanderling, black-bellied plover and many others.

- 0.2 mile northwest of Cape Point to ramp 49, including Cape Point interior. This area merits designation due to its use by migrating and wintering piping plover (Critical Habitat NC-3), red knots, and many other species of shorebirds, and the area can be used by several species of migrating terns during spring migration.

- Hatteras Inlet Spit: Ocean Shoreline and backshore beach, and dunes .68 of a mile west of Ramp 55 to soundside of inlet. This area merits designation due to its use by migrating and wintering piping plover (Critical Habitat NC-4), including birds from the endangered Great Lakes breeding population and many other shorebird species.

- North Ocracoke Spit: Inlet to 1 mile west of ramp 59. This area merits designation due to its use by migrating and wintering piping plover (Critical Habitat NC-4), including birds from the endangered Great Lakes breeding population, red knot and many other shorebird species.
- South Point (Ocracoke): 0.2 miles west of ramp 72 to inlet, excluding a 100 foot corridor as discussed in Section IV.D. 4 below. This area merits designation due to its use by migrating and wintering piping plover (Critical Habitat NC-4), including birds from the endangered Great Lakes breeding population. This area is also the most important area in the Seashore for red knots. This area is also used extensively by other shorebird species and colonial waterbirds, common tern, black skinner, and American oystercatcher, and piping plover. Alternative A provides insufficient protections for migrating and wintering shorebirds, including the threatened piping plover and candidate red knot as well as other species.

**Response:** The NPS has taken into account many comments requesting additional year-round non-ORV areas for better protection of migratory and wintering shorebirds, as well as to better balance the various desired uses in the Seashore. To this end, alternative F has been modified to designate more vehicle-free areas year-round, as described in the response to Concern ID 24055. The following responds to the specific suggestions made in these comments, with regard to the proposed designations under new alternative F :

Bodie Island Spit: 02 miles south of ramp 4 to inlet - This is proposed to remain seasonally open to ORVs from 0.2 miles south of ramp 4 to the inlet from September 15 to March 14. The NPS recognizes that this area is used by wintering birds and has decided to eliminate the proposed seasonal ORV access to the Bait Pond and along the inlet shoreline for shorebird protection, but to designate the ocean shoreline to Oregon Inlet for seasonal ORV use from September 15 to March 14.

1 mile south of ramp 23 to 1 mile north of ramp 34 - The NPS examined this area and retained one portion as closed to ORVs year-round, based on relative bird use. However, part of this area will remain open to ORV use year round because of the desire to provide areas for ORV access where the use could be best accommodated, since an objective of this plan is to manage ORV use to provide for a variety of visitor use experiences.

0.2 mile south/west of Cape Point to ramp 49, including Cape Point interior - This area had been designated for seasonal ORV access, but in revised alternative F, the NPS decided to change this to vehicle-free year-round to milepost 47, and to reduce the proposed number of connector routes from the interdunal road to the ocean beach from two to one, based on the value of this area as a consistent nesting area, important nonbreeding habitat, and opportunities for a vehicle free beach experience.

Hatteras Inlet Spit - Ocean Shoreline and backshore beach, and dunes 0.68 of a mile west of Ramp 55 to soundside of inlet. Dates for a new seasonal ORV route with parking near the end of the spit have been changed to allow ORV use from September 15 to March 14 to facilitate spit access for fall fishing and forms of recreation at this popular location during the less resource sensitive months.

North Ocracoke Spit- Alternative F has been revised to eliminate the proposed interdunal road and to move the ORV route boundary and ramp to the south side of the MP 59 parking lot. A longer ORV route has been designated south of the MP 59 parking lot, since that area receives limited nesting activity.

South Point (Ocracoke) - 0.2 miles west of ramp 72 to inlet, excluding a 100 foot corridor. In an effort to accommodate both resource protection and the demand for several uses at this popular area, the modified alternative F designates an ORV route with a corridor (subject to standard buffers) that will be established at 35 meters (115 ft) wide above the mean high tide line when the pre-nesting closure is installed. The pre-nesting closure will not be modified if the beach erodes into the ORV corridor or into the protected habitat. Once breeding activity is observed, standard buffers will apply (subject to resource closures). The ORV corridor at South Point will change from a shoreline corridor Mar 15 – Sept 14, as described above, to an upper beach ORV corridor Sept 15 – Mar 14 that is 35 meters (115 ft) wide and located approximately 35 meters (115 ft) above the mean high tide line. The upper beach corridor will begin approximately 0.7 mi SW of Ramp 72 and extend approximately 1 mile south for the benefit of migratory and wintering shorebirds that forage on the shoreline. To add more wintering and migratory bird habitat, another segment of beach between ramps 68 and 70 was changed to vehicle-free year-round.

Regarding the review period, language has been added to Chapter 2 of the FEIS to indicate that periodic reviews would be done after storms or other events that significantly change or create new habitat. Please refer to the response to Comment ID 24126 for an explanation of why the length of time between reviews would not be reduced to three years.

**Concern ID: 24213**

**Concern Statement:** Commenters stated that how SMAs are designated should be adjusted to include areas of high quality habitat, even if there has not been recent breeding activity as that may have been due to high disturbance levels. Language and additional areas where SMAs should be established or expanded was provided. They further asked that the past 10 years of nesting history (rather than 5) be considered when establishing these areas.

**Representative Quotes:**

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137714

**Organization Type:** Conservation/Preservation

**Representative Quote:** - "South Beach: ramp 45 to new ramp 47." We agree that the listed area merits designation as an SMA, due to use by breeding piping plover, American oystercatcher, and least tern.

However, for the reasons listed above, we object to the construction of a new interdune ramp 47 (and 48) to the beach. "South Beach: ramp 45 to (cross out new ramp) mile marker 47."

- "Hatteras Inlet Spit: Ocean Shoreline south of the Pole Road to soundside of inlet." We agree this area should be an SMA, based on breeding by colonial waterbirds, American oystercatcher, and historical breeding by piping plover. However, the designated area does not include habitat to the east (towards Hatteras village) that has been used by American oystercatcher and least terns. In addition, the utilized nesting habitat is not only the "shoreline" but also the backshore and dune areas. Therefore, the language should be modified as follows (additions underlined, deletions struck out): "Hatteras Inlet Spit: Ocean Shoreline (start underline)and backshore beach, and dunes .68 of a mile west (end underline) (delete south) of Ramp 55 (cross out the Pole Road) to soundside of inlet."

- "North Ocracoke Spit: Inlet to .25 miles northeast of ramp 59." Based on existing habitat quality, the SMA should start at ramp 59, rather than extending east of the ramp.

Therefore, the language should be modified as follows (additions underlined, deletions struck out): "North Ocracoke Spit: Inlet to (crossed out .25 miles northeast of )ramp 59."

- "South Point (Ocracoke): 0.5 miles southwest of ramp 72 to inlet." Based on existing habitat quality as well as use by American Oystercatcher this year, the SMA boundary should be extended east. Therefore, the language should be modified as follows (additions underlined, deletions struck out): "South Point (Ocracoke): 0.2 (cross out 0.5) miles west (delete south)of ramp 72 to inlet."

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137709

**Organization Type:** Conservation/Preservation

**Representative Quote:** 2. Species Management Areas: The implementation of a 5-year window for the establishment of SMAs will begin at a time when the Seashore experienced the lowest number of nesting shorebirds and waterbirds in the history of the Seashore. This is not adequate to identify SMAs and implement adequate closures for the protection of shorebirds and waterbirds. This will serve only to limit habitats and nesting sites available to nesting shorebird and waterbirds. Pre-nesting closures and mandatory SMA status should be applied to all areas used by shorebirds and waterbirds in two or more of the previous 10-year period. The SMAs should include the sites listed below and all other areas used by shorebirds and waterbirds in two or more of the previous 10-year period. The DEIS lists 10 SMA areas. DEIS at 64. We support the concept of an SMA, as it highlights areas where shorebird and colonial waterbird breeding is most likely. However, in certain instances, the DEIS does not supply boundaries that are consistent with the provided definition of breeding locations. In addition, the NPS should be able to designate SMAs in areas where habitat quality is high, even if there has not been recent breeding activity, perhaps because of high disturbance levels. Based on breeding history and habitat quality, we have the following modifications to the specific SMA areas:

- "Bodie Island Spit: 0.2 miles south of ramp 4 to inlet" DEIS at 64. With the increase in the quality of nesting habitat just south of Ramp 4 due to the erosion of the dunes, and the nesting of American Oystercatcher in the area in 2009 and 2008, the SMA boundary should be modified as follows (additions underlined, deletions struck out): "Bodie Island Spit: (start underline)0.1 (end underline) (cross out 0.2) miles south of ramp 4 to inlet."

- "New Ramp 32.5 to ramp 34" DEIS at 64. While we support the establishment of an

SMA in this area, we disagree, for the reasons stated above, that a new ramp should be constructed in this area. Therefore, the language should be modified as follows (additions underlined, deletions struck out): "(start underline) From mile marker (end underline) (deleted New Ramp) Ramp 32.5 to ramp 34."  
 - "Approximately 1.7 miles south of ramp 38 to north boundary of Buxton"

**Response:** In Table 10-1 for revised alternative F, SMA terminology has been eliminated and replaced by changes in the amount of vehicle free areas. The "Pre-nesting Closure" section of the table has been revised to state" By Mar 1, Seashore staff will evaluate all potential breeding habitat for piping plover, Wilson's plover and American oystercatcher and recommend pre-nesting closures for those species based on that evaluation. CWB breeding habitat will be evaluated by Apr 1. Areas of newly created habitat will also be evaluated during the annual habitat assessment Areas of suitable habitat that have had individual PIPL, Wilson's Plover or American Oystercatcher nests, or concentrations of more than 10 CWB nests in more than one of the past five years and new habitat that is particularly suitable for shorebird nesting, such as the habitat at new inlets or overwash areas, will be posted as pre-nesting closures using symbolic fencing (string between posts) or with other closure signs by Mar 15 at sites involving piping plover, Wilson's plover, and/or American oystercatcher; and by Apr 15 at sites involving only colonial waterbirds. Because CWB colonies may shift locations from year to year, ramps that have had colonies in more than one of the past five years will remain open until scraping or nesting is observed. Pre-nesting closures will still be established in these areas, however, the closure will allow vehicle access through the areas until scraping or nesting is documented at which point the appropriate buffer will be established."

Due to the fact that so much potential nesting substrate is impacted and rearranged on an annual basis, especially during fall and winter storms, it is believed that it is sufficient to use breeding and nesting location data for up to 5 previous years in conjunction with an annual pre-season habitat assessment. Given how much annual change there is in suitable nesting substrates on barrier islands, 10 years of nesting/breeding data would very likely capture many sites that do not presently have sufficient potential to support breeding populations.

The increased number of vehicle-free areas, combined with pre-nesting areas based on an annual habitat assessment buffers consistent with the best available science on the expected movement of adults and young birds, provide complementary and appropriate protections for breeding birds. This is inherently an inexact science because movement varies among individual birds and is influenced by distribution and abundance of food, cover and predators, all of which vary in space and time. Furthermore, there is competing pressure from recreation for the limited space available on the Seashore. Nevertheless, the application of these measures is believed to be sufficient to provide for the spatial needs of the species they are meant to protect.

### ***AL1130 - Alternative Elements: Vehicle/Operator Requirements***

#### **Concern ID: 24102**

**Concern Statement:** Commenters requested that ATVs and motorcycles not be banned from the Seashore and claimed that the DEIS did not provide an adequate rationale for prohibiting the use of these types of vehicles on Seashore beaches.

#### ***Representative Quotes:***

**Corr. ID:** 3544

**Organization:** Horizon Engineering & Consulting, Inc.

**Comment ID:** 135509

**Organization Type:** Unaffiliated Individual

**Representative Quote:** My second concern is that all alternatives appear to exclude use by ATVs. I believe this is a mistake from a legal and a practical standpoint. Proper and reasonably operated ATVs do much less damage, consume less fuel, emit less contaminants and provide less obstruction than full size ORVs. Their use should be encouraged and not prohibited. I have not seen in the documents that there is an adequate justification for excluding ATVs or for requiring that all vehicles meet "street legal" requirements (license, inspections, registration, etc.) It should not be difficult to conclude that the vehicles accessing the beaches at the time of the Act (1937) would not meet these requirements since most, if not all, were not in effect at that time. Again, we should not be taking actions that serve to further limit or restrict any such access, vehicular or otherwise beyond what was directed in the enabling Act. Excluding a class of vehicles or requiring that all vehicles meet certain prescribed standards without first demonstrating the necessity of such requirements, should be considered arbitrary and capricious.

**Corr. ID:** 14255

**Organization:** *Not Specified*

**Comment ID:** 139957

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Whether riding on the beach or the road, I abide by the regulations. My motorcycles make less noise than many heavier vehicles. My motorcycles return better than 50 miles per gallon and I am frequently carrying a passenger. I do not ride on the dunes or the wrack line and am quite capable of traveling safely through any sand conditions that I have encountered on the Outer Banks. I create a tire track on the beach that is less than 7 inches wide. In other words, the motorcycles allow me to travel efficiently and produce less impact than driving my truck while abiding by the same regulations as 4-wheeled vehicles.

My understanding of the DORVMP/EIS is that unless either of the "no action" options (A or B) is chosen, motorcycles will be prohibited on the beach. I urge you to continue to apply the same rules to motorcycles that you currently apply to all other street legal vehicles, allowing the same beach access. Please do not discriminate against people who choose to use motorcycles for regular conveyance. Please amend options C,D,E, and F so that all street legal vehicles are treated in an equitable manner. In addition, I ask that you not burden the motorcyclist with needless equipment requirements. A jack is not necessary on a motorcycle.

**Corr. ID:** 15045

**Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137937

**Organization Type:** Unaffiliated Individual

**Representative Quote:** b. Motorcycle Prohibition on Ocean Beachfront.

An element common to all action alternatives is the prohibition by motorcycles on the ocean beachfront. DEIS at 62. Nowhere within the DEIS does it state the rationale, justification, or evaluation of whether motorcycles should be allowed or prohibited on the ocean beachfront. As such, the DEIS fails to provide a clear basis for choice among the options by the decisionmaker and the public. Not only does the DEIS lack any evaluation of the issue of motorcycle access, it lacks any choice. As stated above, every action alternative proposes a prohibition of motorcycle use on the ocean beachfront. Conversely, none of the action alternatives consider the use of street-legal motorcycle access on the ocean beachfront. Throughout the Negotiated Rulemaking process UFWDA provided information to the NPS regarding the suitability, accessibility, and manageability of street-legal dual-sport motorcycle use on the ocean beachfront as a means of vehicular access in pursuit of recreation. Fatally, the issue of motorcycle access was neither evaluated nor dismissed from consideration in the DEIS.

**Response:** The NPS has noted several issues involved with motorcycles on Seashore beaches. The deep sand conditions have resulted in motorcycles getting stuck and the operators having to walk them through the deep sand to access areas of compacted sand. The proposed reduction of beach speed limits would exacerbate this. The NPS also has concerns about resource impacts of allowing noisier, more mobile vehicles (dirt bikes, etc.) in beach nesting habitat. For these reasons, alternative F prohibits the off-road use of motorcycles. Available case law clearly supports the conclusion that motorcycles may be regulated differently, or even prohibited, as long as the regulation has a rational basis. As stated above, the NPS based the decision to prohibit motorcycles off-road on the potential for impacts to visitor experience (soundscapes), visitor safety, and natural resources. Many units of the National Park Service prohibit off-road use of motorcycles.

The rationale for continuing the long standing ATV prohibition and revising alternative F to also prohibit utility vehicles (UTVs) is similar to the rationale for motorcycles as explained above. Also, scientific studies have shown that ATVs generate more noise than street-legal vehicles and cause more disturbance to beach nesting birds. McGowan and Simons (2006) conducted American Oystercatcher monitoring surveys using stationary video cameras on Cape Hatteras National Seashore and Cape Lookout National Seashore in 2002 and 2003. They recorded 539 instances in which incubating birds departed their nests. Of those instances, ATVs were filmed within 3 minutes of nest departure on 136 occasions (25%) and ORVs were filmed 92 times (17%) within 3 minutes of nest departure. They recorded a total of 284 ATVs, 62% of which passed by a nest within less than 3 minutes of a bird departing its nest. They observed 1,466 ORVs pass by filmed nests, but only 11% passed by within 3 minutes of a bird leaving its nest. Groups or individual pedestrians (traveling by foot) were filmed 19 times (4%) within 10 minutes of nest departures (McGowan and Simons 2006).

Regression models show that there was little or no association between ORV traffic and the rate at which incubating oystercatchers made trips to and from their nests, or the amount of time they spent incubating. Likewise, pedestrian foot traffic was not associated with a significant reduction in the percent time incubating, or birds making more trips

to and from their nests per hour. Increased ATV traffic, however, was associated with a reduction in the percent time spent incubating, and an increase in the rate of trips to and from the nest.

McGowan and Simons suggest that birds appear to have habituated to the presence of ORVs (Whittaker and Knight 1998), but they view ATVs (and to a lesser extent, pedestrians) as threats. They propose that ATVs are louder and move faster than ORVs and pedestrians, which might explain why the birds are affected more by ATV traffic (Burger 1981, Burger and Gochfeld 1998). ORVs and pedestrians also tend to stay closer to the firm sand along the water's edge, which means they generally travel farther from nesting birds.

The following language (DEIS p. 84) specifically explains the reason for the prohibition of ATV use at the Seashore:

“The NPS only allows street-legal vehicles on the beach under the North Carolina Motor Vehicle Code, which does not include ATVs. Alternatives in this plan/EIS do not include changing the requirement for street-legal vehicles. The Seashore considers ATV use at the Seashore to be incompatible with visitor use and resource protection goals and objectives due to the damage they could cause. Further, street-legal vehicles are used for transportation, but the majority of ATVs are used primarily for recreational purposes, although they may secondarily serve a transportation function.”

This language has been revised in Chapter 2 of the FEIS to explain and include the prohibition of UTVs at the Seashore.

**Concern ID: 24103**

**Concern Statement:** Commenters suggested vehicle requirements such as no leaking oil and proper display of permits and licenses.

***Representative Quotes:***

**Corr. ID:** 81

**Organization:** humans

**Comment ID:** 129746

**Organization Type:** Unaffiliated Individual

**Representative Quote:** One thing not mentioned is that any vehicle driving on the beach MUST be ABSOLUTELY OIL-LEAK FREE. It is imperative that cars be routinely inspected for oil leaks. Or, perhaps the only vehicles allowed should be electric.

**Corr. ID:** 3398

**Organization:** *Not Specified*

**Comment ID:** 135331

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Many vehicles do not display vehicle license plates as prescribed by state law because of coolers, rod racks, or other possessions blocking view of the license plate. There are plenty of other plates displayed, those advertising fishing, automotive, or political organizations are often seen, but the vehicle license plate is hidden from view contrary to motor vehicle laws. If a beach driving permit is initiated, this law should be addressed for public safety and officer safety concerns.

**Corr. ID:** 14149

**Organization:** *Not Specified*

**Comment ID:** 137604

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would suggest that the vehicles being allowed on MUST be in good repair and not leaking fluids. If a vehicle is found to be leaking or contaminating the beach, there should be heavy fines by Law Enforcement.

**Response:** The Seashore does not have the capability to efficiently inspect each vehicle that enters the beach to determine if it is leaking oil. Individual vehicle inspections for leaking fluids could cause substantial traffic backups which would adversely affect visitor experience and safety. However, all vehicles operated in the Seashore must comply with state inspection requirements, which include regulations on leaking fluids. If the NPS were to observe a vehicle leaking oil, it would be removed from the beach and could potentially be cited under existing NPS regulations. The NPS is not proposing to allow only electric vehicles in the Seashore due to the limited availability of these vehicles to the general public.

Obstruction of the rear license plate is a violation of North Carolina law, which is enforced by NPS law enforcement staff under 36 CFR 4.2(b). It would be considered a violation of Seashore regulations and in developing the details of the ORV permit program the Seashore would consider whether this violation would be a basis for permit revocation.

**Concern ID: 24625**

Concern Statement: One commenter questioned the vehicle requirements with respect to allowable vehicle length and number of axles.

**Representative Quotes:**

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 142350

**Organization Type:** Unaffiliated Individual

**Representative Quote:** It is unlikely that a 30' long 3-axle vehicle pulling a trailer of unspecified length will get very far on a beach that is 20 meter wide. The beach would have to be at a minimum of 30 meters and very flat with hard packed sand for a vehicle of these characteristics.

**Response:** Alternative F has been revised to indicate that vehicles must have no more than two axles; towed boat trailers must have no more than two axles; and travel trailers (i.e., camping trailers) are prohibited on designated ORV routes.

**AL1135 - Alternative Elements: Accessibility for visitors with disabilities**

**Concern ID: 24106**

Concern Statement: Commenters expressed concern regarding accessibility at the Seashore. Issues noted were the use of beach wheel chairs including where they are available and how practical they are to use as well as a lack of handicap accessible ramps to the Seashore. Some commenters stated that these deficiencies create non compliance with the Americans with Disabilities Act. Commenters also stated that special use permits to transport visitors with disabilities were impractical because they did not allow for a quick response in case of emergency or changing weather, as well as created unnecessary risks and hardships on these visitors. They also noted this does not address visitors with disabilities who come to the Seashore by themselves .

**Representative Quotes:**

**Corr. ID:** 3288

**Organization:** MS Society

**Comment ID:** 132175

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The accommodations for the handicapped as described on page 58 are woefully inadequate, and certainly not in compliance with the existing Americans with Disabilities Act. That act provides that ALL public facilities should be accessible to those disabled. Three ramps out of ? doesn't comply. If the "special use permitting" is implemented, how are the handicapped going to "call" their transportation back. How about bathroom facilities since it seems it will take an hour or more to get transportation back

**Corr. ID:** 7057

**Organization:** *Not Specified*

**Comment ID:** 133321

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In reference to the NPS DEIS, I strongly disagree with both page 7 part 1 and chapter 2-alternative: accessibility for the disabled. It suggest with a special permit for areas in front of the villages that an ORV be allowed to transport disabled persons to the beach but must return the vehicle to the street. I do not understand this concept which would make for more beach driving rather than leave the vehicle with the party at the beach. Also about the boardwalks, this is of no use to someone who cannot walk distances nor ride in wheel chairs. My husband has disabilities that restrict him of either of these options.

**Corr. ID:** 8742                      **Organization:** *Not Specified*  
**Comment ID:** 133225              **Organization Type:** Unaffiliated Individual  
**Representative Quote:** P. 1 ORVs providing primary and practical access for visitors -pedestrian only access are in opposition to ADA, small children, elderly, folks who need recreational equipment.

**Corr. ID:** 13018                      **Organization:** *Not Specified*  
**Comment ID:** 140296              **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The national seashore was created with a series of ramps to allow 4wd access to the beach while preserving the dune line. As a result there are very few parking spaces. Dare County reports there are 749 spaces; 25 of these are handicapped. Of those, 10 are at Coquina Beach which is not even on Hatteras Island. Of the 15 on Hatteras Island I challenge you to show me one that allows wheelchair access.

**Corr. ID:** 13193                      **Organization:** *Not Specified*  
**Comment ID:** 140175              **Organization Type:** Unaffiliated Individual  
**Representative Quote:** I also find the concept of loaning out beach wheelchairs on a first-come, first-serve basis is totally silly. Who is going to push them? Once again, the independence of the disabled in the Cape Hatteras National Seashore Recreational Area is just not addressed.

**Corr. ID:** 13854                      **Organization:** Disability Rights North Carolina  
**Comment ID:** 140735              **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Page viii: Beach access would be provided through the issuance of special use permits for areas in front of the villages to allow ORVs to transport visitors with disabilities to the beach and then return the vehicle back to the street.

While DRNC appreciates NPS's effort to accommodate visitors with disabilities via these special use permits, the scheme as proposed does not accommodate visitors with disabilities who are visiting the Seashore alone. The Plan proposes that the special use permit be used "to transport [individuals with mobility impairments] to join their family or friends on an open beach that is otherwise closed to ORV." (Page 540) This necessarily excludes individuals with mobility impairments who are able to operate their own vehicle and choose to visit the Seashore without friends or family.

**Corr. ID:** 13863                      **Organization:** National Multiple Sclerosis Society  
**Comment ID:** 138250              **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Several aspects of the plan/EIS are troubling and would present significant obstacles for people living with MS. For instance, special use permits would be required to transport people with disabilities to the beach and then the vehicle must be returned to the street. If a person living with MS is fortunate to be traveling with a companion or caretaker, this requirement could still prove problematic if the individual must remain alone for any period of time and the individual's symptoms are severe and for instance, include loss of balance, paralysis, blurred vision, or blindness. People living with MS traveling to Cape Hatteras alone may also encounter extreme difficulty if they are forced to park far away from ADA accessible access points and his or her symptoms are severe in nature. Having to travel even a short distance when experiencing intense fatigue, tremors, loss of balance, vision problems, or memory issues can be an enormous burden which runs counter to Cape Hatteras's purpose of a place of enjoyment for all.

**Corr. ID:** 13863                      **Organization:** National Multiple Sclerosis Society  
**Comment ID:** 138251              **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The plan/EIS indicates that four ADA compliant beach access points will be provided for persons living with disabilities. Cape Hatteras consists of more than 30,000 acres distributed along approximately 68 miles of shoreline, making a mere four ADA-compliant access points a fairly significant barrier for people living with MS attempting to fully participate in recreation and/or enjoyment of Cape Hatteras's offerings.

**Corr. ID:** 15063                      **Organization:** Rodanthe-Waves-Salvo Civic Association  
**Comment ID:** 138979              **Organization Type:** Civic Groups  
**Representative Quote:** The draft statement calls for beach wheelchairs to be available in each seashore district. On Hatteras Island that means Buxton, a 50-mile round trip for those seeking the equipment. The board requests that the

seashore make beach wheelchairs available in Rodanthe, Waves and Salvo by establishing a partnership with Chicamacomico Banks Fire and Water Rescue Department.

**Corr. ID:** 15063

**Organization:** Rodanthe-Waves-Salvo Civic Association

**Comment ID:** 138978

**Organization Type:** Civic Groups

**Representative Quote:** The association's board supports the addition of Ramps at mile 24 and 26 as indicated in the draft statement. Adding ramps at 24 and 26 has the possibility of providing close-by vehicle access for residents as well as visitors in Hatteras Island's northern villages when Ramp 23 is inevitably closed.

The board notes, however, that the draft statement calls for beach access points and boardwalks compliant with the Americans with Disabilities Act in only one location on Hatteras Island, in Frisco, many miles south of the northern villages.

The civic association has previously submitted a request to the Cape Hatteras National Seashore for a boardwalk and expanded parking at Ramp 23. The board renews that request. The board requests that, as new Ramps at 24 and 26 are constructed, the National Park Service install boardwalks and access points compliant with the Americans with Disabilities Act.

**Corr. ID:** 10

**Organization:** *Not Specified*

**Comment ID:** 126150

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The lack of access to the beach for handicap or disabled people is illegal. A small number of park and walk areas, plus oceanfront houses makes most of the park impossible for people to get to without ORV access. If there was more ramps and a road connecting them, it would allow more access and still protect nesting areas.

**Corr. ID:** 32

**Organization:** NCBBA

**Comment ID:** 126085

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Some of these people are disabled and can't maneuver themselves over walkways or around dunes. Many are Veteran's young and old who are disabled. And what about the folks whose spouses or care providers who cannot maneuver those in their care due to their own disabilities? I don't believe the report considered or inquired with these folks!

**Response:** The NPS recognizes that visitors to the Seashore have different needs, and therefore provides a variety of uses, including both ORV and vehicle-free areas. For those visitors that feel that they may require a vehicle to be readily available due to a medical condition or disability or need to have a family member with them at all times, opportunities are provided in the Seashore where ORVs are allowed, and these needs can be met. The NPS recognizes that this would mean that these visitors would not be able to take advantage of the special use permit under the preferred alternative, but would be able to have an experience in the Seashore. For those mobility impaired visitors who wish to join their party on the beach in a vehicle free area, the special use permit (SUP) option is provided. The SUP language has been clarified as follows: The superintendent may issue special use permits to allow beach access through the issuance of special use permits for areas in front of the villages to allow ORVs to transport visitors with disabilities to the beach and then return the vehicle back to the street.

This is in line with the applicable requirements and NPS policies. Under the Rehabilitation Act, 29 U.S.C. § 791 et seq., which applies to federal agencies in lieu of the ADA, the NPS is required to provide reasonable access to programs and services at the Seashore. "Reasonable" does not necessarily mean "total" and must be viewed in the light of the entire program or activity, including its purpose (i.e., providing the visitor with a variety of experiences).

Likewise, for visitors with disabilities who come to the Seashore by themselves, opportunities are provided throughout alternative F for transportation to areas of the Seashore in an ORV.

**Amount of Accessible Boardwalk:** As called for on page 63 of the DEIS, the NPS will retrofit existing boardwalks with accessible ramps to allow for more opportunities for visitors with disabilities to view and access the beach. In addition to retrofitting of existing boardwalks, additional boardwalks would be considered in future planning efforts,

subject to available funding.

Number of Handicap Accessible Parking Spots on Hatteras Island. Access on Hatteras Island is as follows:

- Salvo Day Use Area – 1 space with boardwalk access to soundside beach.
- Ramp 27 Parking Lot - 2 spaces, with boardwalk to beach.
- Old Lighthouse Site Parking, Buxton - 3 spaces, beach wheel chair available at the Lighthouse V.C., easy wheel chair access to beach.
- Buxton Lifeguarded Beach Parking, Buxton - 4 spaces, same as Old Lighthouse Parking above.
- Cape Hatteras Lighthouse Parking - 5 spaces (no beach access) Buxton Woods Trail/Picnic Area - 2 spaces (no beach access) Frisco Bathhouse Parking - 3 spaces, with access to bathhouse and deck overlooking beach.
- Graveyard of the Atlantic Museum - 5 spaces (no easy access to beach)

-Total: 25 NPS Handicap Parking spaces on Hatteras Island, 10 of which access the beach. When new parking areas are developed, additional handicap parking spaces would be included, as appropriate.

The Seashore currently works closely with Chicamacomico Banks Fire and Rescue for wildland fire and water rescue response and would explore the possibility of expanding that partnership to include providing additional access to beach wheel chairs, as suggested. It is anticipated that with Dare County's proposed beach access area in Rodanthe, that Dare County would also be providing additional beach wheel chairs. Beach wheel chairs are also available for rent from a variety of providers throughout the Outer Banks, including Kitty Hawk Kites and Ocean Atlantic Rentals, both with locations in the Tri-Villages. These rental companies also deliver the wheel chairs to the renter.

**Concern ID: 24107**

**Concern Statement:** Commenters stated that the creation of pedestrian only areas discriminates against visitors with disabilities or visitors with limited mobility.

**Representative Quotes:**

**Corr. ID:** 814

**Organization:** regular park vacationer

**Comment ID:** 132696

**Organization Type:** Unaffiliated Individual

**Representative Quote:** To limit ORV access would discriminate against individuals with limited mobility due to age or physical impairments, families with children, senior citizens and those wishing to engage in activities requiring recreational equipment such as Fishing, surfing, birding, swimming and family gatherings.

**Corr. ID:** 14719

**Organization:** *Not Specified*

**Comment ID:** 133642

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 1: I agree with your statement "ORVs have traditionally served as a primary form of access for many portions of the beach in the seashore, and continue to be the most practical means of access and parking for many visitors." However, pedestrian-only areas discriminate against individuals (such as myself) with limited mobility due to age or physical impairments, families with small children, and those wishing to engage in activities requiring recreational equipment (boogie boards, beach umbrellas, beach chairs, coolers, fishing rods and tackle, etc.) Pea Island National Wildlife Refuge, 12 miles of pristine beach lying within CAHA, more than fulfills the needs of those who desire a walking beach free of ORVs.

**Response:** Alternative F provides for ORV access in numerous areas along the length of the Seashore. Alternative F also provides for vehicle-free areas as a means of providing a more natural visitor experience for park users. In addition, the NPS would allow temporary use of ORVs to transport mobility-impaired individuals to join their family or friends on village beaches that would otherwise be closed to ORVs.

Please refer to the response to Concern ID 24106 for information on how the NPS has addressed providing additional access for mobility-impaired visitors.

**Concern ID: 24108**

Concern Statement: Commenters suggested additional steps the NPS could take to increase accessibility including catwalks to the beach, allowing seniors (over 65) to have special vehicles to access the beach, ensuring beach shuttles if utilized can accommodate visitors with disabilities, and the required use of noise suppressors for vehicles that are transporting visitors to the beach.

**Representative Quotes:**

**Corr. ID:** 3079

**Organization:** *Not Specified*

**Comment ID:** 134857

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would like to suggest that there be some provision for permitting of special vehicles for seniors over age 65. With the popularity of electric carts, utvs, and atvs, those with limited mobility can access areas without the use of heavy ORV's. Older individuals can and will handle lighter equipment, but not heavier vehicles. While you have made provisions for persons covered by ADA, please do not forget those seniors that are healthy, but do not own or no longer have the stamina to handle large trucks and other ORV's. I think this age group will give you very little enforcement problems, especially if there is a specific permit process.

**Corr. ID:** 5431

**Organization:** Defenders of Wildlife

**Comment ID:** 131072

**Organization Type:** Unaffiliated Individual

**Representative Quote:** . Va Beach has taken another step to make the beach accessible for people with disabilities and yet not harmed the wildlife. They have put wooden catwalks from the boardwalk almost to the ocean where handicapped people can ride wheelchairs down to the waters edge and enjoy it from sideareas off the catwalks. These catwalks have harmed no wildlife and do not interfere with non-handicapped persons from enjoying and accessing beach areas.

**Corr. ID:** 14242

**Organization:** ENVISCI3330 Land Use Management

**Comment ID:** 140395

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Might I suggest that with ORV utilization as transportation to grant access to those who otherwise could not access these areas that special noise reducing devices be required.

**Corr. ID:** 15059

**Organization:** Disability Rights North Carolina

**Comment ID:** 138938

**Organization Type:** Non-Governmental

**Representative Quote:** Several of the Plan's alternatives note the potential for a beach shuttle service. (See, e.g., page 540)NPS should ensure any such shuttle service can accommodate riders with disabilities.

**Response:** As noted on page 84 of the DEIS, the Seashore operates using the North Carolina Vehicle Code, which allows only street-legal vehicles on the beach, and therefore allowing other types of vehicles as suggested (ATV, UTV, electric carts, etc.) would not be within keeping of this law and outside the legal framework of this plan. The street-legal requirement for all ORVs would also address concerns regarding noise.

As indicated on page 63 of the DEIS, the NPS will retrofit some existing boardwalks with accessible ramps, to the extent that funding allows, to allow for more opportunities for visitors with disabilities to view and access the beach. In addition to retrofitting of existing boardwalks, additional boardwalks would be considered in future planning efforts, subject to available funding. As future improvements are made, such as boardwalks and other access described under the preferred alternative or potential beach shuttles, accessibility issues and all applicable regulations would be considered. Please refer to the response to Concern ID 24106 for information on how the NPS has addressed providing additional access for mobility-impaired visitors.

**Concern ID: 24110**

Concern Statement: Commenters noted that “pets” are needed in some instances to assist visitors with disabilities and should be allowed.

**Representative Quotes:**

**Corr. ID:** 13863      **Organization:** National Multiple Sclerosis Society

**Comment ID:** 138252      **Organization Type:** Unaffiliated Individual

**Representative Quote:** The National MS Society also finds distinctly troubling the considerable restrictions placed on "pets" by each of the alternatives, whether prohibited in certain areas or during certain seasons. The current policy for Cape Hatteras is that "[g]uide dogs for the visually impaired are permitted to remain with their owners at all times." People living with MS or other disabilities may very well rely on assistance animals not only for specific guide purposes, but also for providing balance support, pulling wheelchairs, alerting to sounds, or responding to changes in the physiological, mental, or emotional state of their human partners. People living with MS and other disabilities needing help from assistance animals simply must not be denied their presence, guidance, and comfort at any location in Cape Hatteras or during any time of year.

**Corr. ID:** 15059      **Organization:** Disability Rights North Carolina

**Comment ID:** 138937      **Organization Type:** Non-Governmental

**Representative Quote:** 4. In various places, the Plan mentions restricting "pets" at certain times of the year, and in fact Alternatives D, E and F prohibit "pets" in species management areas year-round. (See, e.g., page 546) DRNC would like to highlight for NPS that Seashore visitors with disabilities may be accompanied by a trained service animal necessary for the visitor's use and enjoyment of the Seashore. A working service animal should not be considered a pet and therefore should be exempt from any such restrictions. NPS should train Seashore personnel on the use of and inquiry into the use of service animals, including training about the various uses of service animals. Service animals include not just guide dogs for people with visual impairments, but also include animals trained to assist individuals with mobility and balance impairments, seizure disorders, and hearing impairments, among others. NPS may also wish to devise a policy for granting requested reasonable accommodations to this "no pets" prohibition for individuals with disabilities who use service animals. A trained service animal of course poses little risk to the wildlife the Plan seeks to protect.

**Response:** The NPS relies on the Department of Justice's definition of service animals, which are defined in 28 CFR 36.104 as, "any guide dog, signal dog, or other animal individually trained to do work or perform tasks for the benefit of an individual with a disability, including, but not limited to, guiding individuals with impaired vision, alerting individuals with impaired hearing to intruders or sounds, providing minimal protection or rescue work, pulling a wheelchair, or fetching dropped items."

The NPS does not consider service animals to be pets and, in general, when accompanying a person with a disability (as defined by Federal law and regulation), service animals must be allowed wherever visitors or employees are allowed. Superintendents have discretion under 36 CFR 1.5/1.7 to close an area to the use of service animals if it is determined that the service animal poses a direct threat to the health or safety of people or wildlife. In summary, the pet regulations contained in the plan/EIS would not apply to service animals.

**Concern ID: 24111**

**Concern Statement:** One commenter requested that the document use "person first" language in the document. For example, use "visitors with disabilities" rather than "disabled visitors" or "the disabled."

**Representative Quotes:**

**Corr. ID:** 15059      **Organization:** Disability Rights North Carolina

**Comment ID:** 138933      **Organization Type:** Non-Governmental

**Representative Quote:** Throughout the Plan, the terms "disabled visitors" and "the disabled" are used. DRNC urges NPS to us "person first" language (e.g., "visitors with disabilities") in its publications.

**Response:** The NPS agrees with the suggestion provided by this commenter. The recommended changes in language on page 63 of the DEIS regarding visitors with disabilities have been made in and FEIS and will now read:

"Access for Visitors with Disabilities: Some existing boardwalks would be retrofitted with accessible ramps to the extent that funding allows to provide for more opportunities for visitors with disabilities to access or view the beach. When new parking areas are developed, additional handicap parking spaces would be included, as appropriate."

This correction was made in the FEIS in all instances in the DEIS where the term “disabled” occurred.

### ***AL1140 - Alternative Elements: Education and outreach***

#### **Concern ID: 24112**

Concern Statement: Commenters suggested various way of increasing education at the Seashore such as videos for visitors, classes, and provide educational materials on the ferry to Ocracoke.

#### ***Representative Quotes:***

**Corr. ID:** 15

**Organization:** *Not Specified*

**Comment ID:** 126134

**Organization Type:** Unaffiliated Individual

**Representative Quote:** THE FERRY SERVICES SHOULD HAVE EDUCATIONAL VIDEOS PLAYING ON THE TELEVISIONS EXPLAINING PRESERVATION MEASURES AND FINES FOR NOT FOLLOWING GUIDELINES.

FLYERS SHOULD BE DISTRIBUTED TO EACH VEHICLE ENTERING THE FERRY WITH EXPLANATION OF PUNITIVE FINES AS WELL AS EDUCATION ON PROTECTING THE BEACHES AND WILDLIFE.

FERRY WORKERS AND PARK RANGERS SHOULD TALK WITH GUESTS, PROVIDE PROGRAMMING, AND CREATE AN OVERALL CAMPAIGN TOWARDS RESPONSIBILITY

**Corr. ID:** 87

**Organization:** ESA

**Comment ID:** 129789

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Education is first and most important. If someone would like to drive on the beach there should be a short (15-30 min) instructional course to explain the hazards.

**Corr. ID:** 3398

**Organization:** *Not Specified*

**Comment ID:** 135333

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The NPS should do more to educate visitors. Increase funding for interpretive programs that provide interesting, relevant programs which promote awareness of the Seashore's attributes and the NPS mission.

**Corr. ID:** 14642

**Organization:** *Not Specified*

**Comment ID:** 139160

**Organization Type:** Unaffiliated Individual

**Representative Quote:** It may be helpful to discuss the topic of "Take" and note that once an area has met its Endangered Species numbers there is the possibility of relaxing preservation actions and "permitting Take" as has been the case in Massachusetts.

**Corr. ID:** 14837

**Organization:** *Not Specified*

**Comment ID:** 138931

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Find a way to highlight that only the most experienced in beach habitat wildlife have even a chance to spot a plover or nest before driving or stepping on one. Describe the plovers methods of evading detection such as walking, halting and slightly changing profile so the human eyes continue moving after the plover has stopped and when the eyes move back to find the bird it has frozen in a different profile making it hard to see even if only 20 feet or less away.

**Response:** The NPS is actively working to expand resource management and interpretive staff throughout the Seashore. Within Chapter 4: Park Operations and Management, page 629 of the DEIS, under Interpretation, language has been revised to read “Included in the additional Interpretive division staff would be a Resource Education Ranger to develop education material, program, and signs throughout the Seashore to educate all visitors on the state and federally-listed threatened and endangered species within the Seashore. These programs would provide visitors more information on the species within the Seashore, what protection measures the Seashore has in place, and why these species are important to the coastal ecosystem.” The nature of specific educational programs would be developed after an alternative has been selected and implemented and these suggestions would be taken

into consideration at that time. Additional educational opportunities include watching a short educational video during the permitting process, as suggested by commenters during the DEIS comment period. Please see response to Concern ID 24113 for an expanded response on future educational opportunities within the Seashore.

**Concern ID: 24113**

**Concern Statement:** Commenters stated that education and outreach should be focused toward pedestrian users, as many of the recorded violations involve this user group including signage at pedestrian walkovers. One commenter suggested charging a fee at a gate, where this type of education could also be administered.

**Representative Quotes:**

**Corr. ID:** 4747      **Organization:** NC Beach Buggy Assn

**Comment ID:** 138452      **Organization Type:** Unaffiliated Individual

**Representative Quote:** I would also suggest some type of education program for pedestrians in respect to walking over vegetation and the dunes. I see walkers on the beach abusing the dunes a lot. There should be more effort put forth by the park service to educate pedestrians in respect to vegetation and dunes.

**Corr. ID:** 10869      **Organization:** High Country Audubon Society

**Comment ID:** 136133      **Organization Type:** Unaffiliated Individual

**Representative Quote:** We recognize that not all resource impacts are caused by ORV users. Alternative F requires "There would be a new voluntary resource education program targeted toward non-ORV beach users." We recommend that this be extended to other alternatives.

**Corr. ID:** 13400      **Organization:** *Not Specified*

**Comment ID:** 141300      **Organization Type:** Unaffiliated Individual

**Representative Quote:** -Put a gate on CAHA and charge an admittance fee for all visitors and exempt residents who reside within the boundaries of CAHA. At time of admittance this is where the educational component can be administered. As pedestrians are the biggest resource violators, this component could be very valuable in the compliance of closures and the cost recovery could be shouldered by the entirety of the user groups instead of just ORV permit holders.

**Corr. ID:** 14980      **Organization:** *Not Specified*

**Comment ID:** 137549      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Pedestrians are the largest "access group" and there is very little outreach and training to enable this group to follow the rules made for species management. Pedestrians violate more rules and laws as seen in NPS reports again in 2010. There are no signs at pedestrian access points and walkovers. How do you expect to get the outreach message to this group?

**Corr. ID:** 15166      **Organization:** *Not Specified*

**Comment ID:** 138794      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Under page 58 of the DEIS, "Education and Outreach. Post signs regarding applicable ORV regulations and ORV access ramp, beach routes and sound side areas. Information on beach closures and sound seashore resources is readily available and presented in a clear manner to the public." That's not quite true. Nowhere does it say, "pedestrians." There are no rules for pedestrians. Pedestrians in the first three weeks of Cyndy Holda's reports, say, "17 pedestrians violated resource closures. One ORV did."

**Response:** The Seashore agrees that resource stewardship and resource education is important for all visitors, including pedestrians. The proposed education and outreach program included in all alternatives is intended to reach all park visitors and user groups. It is also recognized that many users span both groups, since ORV passengers become pedestrian users once they reach a destination and venture further into the park. For an explanation on why the NPS is not proposing to place gates at entrances and charge all visitors fees, please see the response to Concern ID 24098. However, additional educational materials can be distributed at the visitor centers and at key locations in the Seashore, with emphasis on compliance and species protection directed at all users. The park proposes to develop a sustainable, highly visible, and effective education program for all beach users that will encourage visitors to "share the beach" with wildlife.

**Concern ID: 24114**

Concern Statement: Commenters suggested improving education and outreach through improved signage. They stated that current signs are hard to read and that compliance would improve with better signage.

**Representative Quotes:**

**Corr. ID:** 27

**Organization:** *Not Specified*

**Comment ID:** 126104

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I was there last year and could not believe the chaos of just trying to get on the beach to fish in a LEGAL area. The postings are very unclear and moved around daily!!! Seems to me that if a whole species (PIPING PLOVER) is to be protected then why not have an educated person manufacture CLEAR, CONCISE, signage that leaves nothing to ponder!

**Corr. ID:** 2673

**Organization:** *Not Specified*

**Comment ID:** 132161

**Organization Type:** Unaffiliated Individual

**Representative Quote:** We do support information from the Park Service regarding use of the beaches - (currently the information is located on the access road to the beach - it is very hard to read this information when you are driving on the sand and cannot stop to read this important information). The regulations should be posted in a location that is accessible to the driver before driving on the sand.

**Corr. ID:** 14734

**Organization:** *Not Specified*

**Comment ID:** 140725

**Organization Type:** Unaffiliated Individual

**Representative Quote:** There is not enough information for visitors at the ramps , parking areas, or walkovers. Visitors do not understand the penalty process or how it takes away more beach area. There should be bigger signs, better rope and more information distributed to visitors. The current signs and lettering are too small and look unimportant.

**Corr. ID:** 14954

**Organization:** *Not Specified*

**Comment ID:** 138025

**Organization Type:** Unaffiliated Individual

**Representative Quote:** YOU COULD ALSO PUT A LITTLE EDUCATION ABOUT THE SPECIES ON THE SIGNS. THIS WOULD LET THE CREATURES SPEAK FOR THEMSELVES. RIGHT NOW WE HAVE A GROUP REPRESENTING THE WILDLIFES BEST INTERESTS.

**Response:** The NPS agrees that improved and more legible signage is needed, and has a goal to improve signage as well as to reduce the amount of signage needed as the plan becomes more known and accepted. ORV operators will be provided with a copy of the rules as part of the permitting process. The NPS will add more educational signage where appropriate, along with increased education and outreach, as the plan is implemented. However, the wording on signs indicating closures or restrictions must remain regulatory in nature to provide the basis for enforcement.

**Concern ID: 24115**

Concern Statement: Commenters suggested incorporating a volunteer program into the education and outreach for the Seashore. Some commenters noted that this program would need to be carefully carried out so that it does not impact the resources.

**Representative Quotes:**

**Corr. ID:** 2006

**Organization:** *Not Specified*

**Comment ID:** 132344

**Organization Type:** Unaffiliated Individual

**Representative Quote:** How about working with the OBPA and NCBBA to adopt nesting areas? Empowering members to actively monitor sites while reducing buffer zones.

**Corr. ID:** 14686

**Organization:** *Not Specified*

**Comment ID:** 133987

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Nesting areas can be protected through organized volunteer groups patrolling the beach responsibly. The best protection against any terrorism is for responsible citizens to be involved in identifying and deterring possible problems.

**Corr. ID:** 14795

**Organization:** *Not Specified*

**Comment ID:** 138849

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would suggest a pro-active turtle nest watch program that could get young people involved and keep the beaches open for the rest to enjoy as well. I would also like to suggest setting up a volunteer community beach watch program for anyone fishing at night to report any violations they see on the beach to law enforcement.

**Corr. ID:** 15045

**Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137900

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The agency's cries of management poverty partly, if not significantly, reflect the agency's questionable decisions or management strategy. The DEIS states, " ... the escort system would be extremely labor intensive to initiate, and providing the staffing levels necessary to adequately implement an escort program would likely not be feasible". DEIS at 85. However, the availability of funding is directly correlated to management effort and outreach to funding sources and the affected user community. Where they have been able to, UFWDA and other recreational groups have contributed volunteer assistance including monetary contributions. Typical volunteer activities have included user education brochures, motorist assistance to beach ORV users, turtle sitting, escort services at ramps and other areas where needed from time to time, and other contributions of volunteer time and money.

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137783

**Organization Type:** Conservation/Preservation

**Representative Quote:** Regarding volunteers, we are supportive of the use of volunteers for certain tasks - such as the nighttime turtle nest watch, or collection of winter cold-stunned turtles. However, given the current very emotional feelings over the issue of beach driving management, and the pressure that is placed on those who support resource protection, we strongly oppose the use of volunteers to conduct turtle patrols. The turtle patrol is a critical component of evaluating ORV impacts to turtle nests. By finding and protecting the nests before ORVs are allowed on the beach, the turtle patrol can mitigate harm caused by ORVs. If this process were not properly carried out, it would devastate the protection measures, and significantly increase the adverse impacts of beach driving, including a risk of direct take of nests and hatchlings. There is far too much risk that if a nest were located at a popular ORV ramp or between a ramp and a popular fishing area such as Cape Point, a volunteer who supports ORV use, or one who is pressured by those who do, might not report the turtle nest to the Seashore. Volunteers should not be put in a position to face that kind of decision. We would be extremely concerned if the FEIS allowed the use of volunteers for turtle patrol, due to the high risk that the integrity of the patrol process could be compromised.

**Response:** The NPS recognizes the importance of encouraging stewardship through volunteer opportunities. At this time, NPS believes that the best use of volunteers would be in a trained volunteer program for watching sea turtle nests that have reached their hatch windows in order to monitor hatching emergence success and success reaching the water, and to provide for the minimization of negative impacts from artificial lighting, predation and human disturbance. This program should enhance protection and encourage ownership/stewardship of resources among the public. However, at this time, the NPS believes that it would be more appropriate to use staff to conduct morning turtle patrols, although volunteers may be allowed to ride along with NPS turtle patrol staff. Given the strong opinions of the various groups that use the Seashore, the NPS would also not want to place its volunteers in situations that might put them in conflict with the public.

## ***AL1145 - Alternative Elements: Parking Areas***

### **Concern ID: 24116**

Concern Statement: Commenters stated that parking areas should be expanded, with some adding that boardwalks should be installed. They further stated this would provide for visitors to access areas, and reduce some of the need for long walks to the beach, while better protecting the resources. One commenter requested that the old road north of Rodanthe not be used for parking, as it is currently used for surfing parking. One commenter stated that parking should not be expanded because the impacts to wetlands and the cost would be too great. Another commenter further stated that the funding for access improvements is uncertain, and its inclusion in the plan could raise issues with the Antideficiency Act.

#### ***Representative Quotes:***

**Corr. ID:** 106

**Organization:** *Not Specified*

**Comment ID:** 129408

**Organization Type:** Unaffiliated Individual

**Representative Quote:** However, I would like to see more public street parking and beach access where former ORV use is restricted.

**Corr. ID:** 3852

**Organization:** *Not Specified*

**Comment ID:** 131379

**Organization Type:** Unaffiliated Individual

**Representative Quote:** (Possible additional parking lots for beach access)

1) I disagree, would be costly, (construction & main.) would require harsh impact to wetlands & or beach. Much worse than ORV contact.

**Corr. ID:** 3874

**Organization:** Outer Banks Chamber of Commerce

**Comment ID:** 139375

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 56. "This alternative would involve the construction of a pedestrian access trail and improvements and additions to the interdunal road system."

Page 80. "...by improving interdunal road and ORV ramp access. Pedestrian access would be enhanced by providing increased parking capacity at various points of access to vehicle-free areas..."

Page 81. "would include the construction of a short ORV route to access a new pedestrian trail to the sound on Ocracoke Island..."

Page 593. "...additional pedestrian and ORV access would be facilitated by construction and relocation of access ramps, and the designation of ORV access corridors at Cape Point and South Point."

Page 598. "The extra efforts to increase ORV access and pedestrian access should increase the probability that the impacts are on the low rather than high end of the range."

The inclusion of these forward-looking statements is troublesome. There is no appropriation in the NPS budget through 2011 for these plans so they should not be used to imply that they will minimize economic impact.

Furthermore, given the inherent unpredictability of each future budgetary cycle after FY 2011, it would be difficult or impossible to quantify any economic impact of these improvements given the likelihood they will be implemented over an unknown term and are likely subject to additional modification dependent on future budgetary constraints.

Leaving these statements in the DEIS or using them as a basis to determine/predict/minimize economic impact could raise questions about compliance with the Antideficiency Act described on Page 40.

**Corr. ID:** 13368

**Organization:** *Not Specified*

**Comment ID:** 137990

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Also not take away the old road north of Rodanthe at the S turns for parking as it is needed for surfing parking. It will be increasingly dangerous situation especially in summertime.

**Corr. ID:** 13773

**Organization:** *Not Specified*

**Comment ID:** 140116

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The best protection for wetland resources would be to replace routes with parking lots and maintaining foot trails to the water's edge. Additional interdunal roads would be built through fresh water wetlands

under Plan F. Based on past experience, it would be difficult to keep users from going off trail to avoid passing through standing water or to allow oncoming traffic to pass (even if periodic turnouts are provided). Building the road high to keep dry and wide enough to accommodate traffic would mean the building of a large culvert trail through the wetlands.

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137707

**Organization Type:** Conservation/Preservation

**Representative Quote:** NPS should increase pedestrian parking on Bodie, Hatteras, and Ocracoke islands, either by expanding existing parking at lots that are often full (such as the Ocracoke Day Use Area), or constructing new parking facilities in appropriate locations.

- The NPS should construct new dune walkovers for pedestrians, Such an approach would allow lower impact pedestrian access to more easily occur at the Seashore, and remove pedestrians from ORV travel areas, reducing the chance of conflicts or safety problems.

- The NPS should provide one or more pedestrian trails from the new interdune road between ramp 45 and 49 to allow pedestrians to walk from the ORV trail to beach locations.

**Response:** Within modified alternative F, there would be additional parking lots built with pedestrian access throughout the Seashore, including 0.5 mile south of Coquina Beach; near Ramp 4; 1.0 mile south of Ramp 23; 1.5 miles south of Ramp 23; adjacent to soundside ramps 48, 52, 59 and 60; site of former Buxton Coast Guard Station; Loran Road; along the interdunal road between ramps 45 and 49; and on Ocracoke Island near Barrow Pit Road. All new construction of parking or walkovers would use environmentally appropriate design standards to minimize stormwater runoff and other resource impacts, including avoiding impacts to wetlands. Therefore, the Seashore's preferred alternative provides a wider range of vehicle-free and pedestrian parking areas with access to both the oceanside and soundside to accommodate a variety of desired visitor uses. For an in-depth response to total number of vehicle-free miles included under a revised alternative F, please see the NPS response to Concern ID 24037. Page 40 of the DEIS indicates that, pursuant to the Antideficiency Act, the plan must be able to be implemented through expected funding sources. NPS has included the access improvements as an integral part of each of the action alternatives and not as an optional mitigation that may or may not occur. Therefore, the economic impact analysis in Chapter 4 of the DEIS is correct.

The DEIS did not include a quantitative analysis on how planned construction projects would be accommodated in the annual budget because they would be completed from a separate funding source, as discussed under Concern ID 24253. NPS expects that it would be able to implement the preferred alternative including funds for construction.

**Concern ID: 24117**

**Concern Statement:** One commenter requested that night parking be provided at the end of access ramps on the beach side of the dunes, as well as in certain areas along the sand road that is behind the dunes at Cape Point and the spits.

**Representative Quotes:**

**Corr. ID:** 14226

**Organization:** Outer Banks Anglers Club

**Comment ID:** 137859

**Organization Type:** Unaffiliated Individual

**Representative Quote:** During the periods when night time driving on the beach is prohibited, the DEIS should include provisions for night time parking near the beach at the end of the access ramps on the beach side of the dunes. Night time parking should also be allowed in certain areas along the sand roads that run behind the dunes at Cape Point and at the spits. Parking near the beach at the end of the access ramps has no negative impact on resource protection, but would greatly enhance user experience and reduce a burdensome walking requirement.

**Response:** Night parking and pedestrian beach access will be allowed at the roadside parking areas identified on the maps for modified alternative F. Allowing vehicles to park overnight on interdunal roads or ORV ramps immediately adjacent to resource sensitive locations would be difficult to patrol and enforce, and could place an unrealistic expectation on visitors in such locations to strictly comply with the applicable resource protection restrictions. The NPS does not have the resources to patrol the entire park at night to enforce compliance, and placing more park vehicles on ORV routes adjacent to the beach at night would potentially result in additional compliance problems that would cause the same adverse impacts as other non-essential ORVs.

## ***AL1155 - Alternative Elements: Ramps and Interdunal Roads***

### **Concern ID: 24120**

Concern Statement: Commenters requested an increase in interdunal roads, ramps, and access points at the Seashore. They specifically requested that any new ramps be at least two lanes wide to allow sufficient room to prevent vehicles from getting stuck and that new ramp construction occur before beach closures to allow access around them. Specific suggestions were offered for soundside access ramps at Bodie Island, as well as new ramps between Ramps 23-34 and Ramps 45-49. Commenters also expressed concerns with information in the DEIS related to adding new ramps at the Seashore. Among these were the cost of the projects, the impact to shorebird habitat with the construction of new ramps, opening up or including ramps that have previously been noted as unsafe or currently not user friendly, the closure of Ramp 1 (which commenters felt should be open to Coquina Beach), and how Ramp 4 should be relocated, if necessary.

Commenters questioned the location of proposed interdunal roads. One commenter noted opposition to the proposed interdunal road at North Ocracoke as it would not leave one inlet spit in a wilderness setting, while another stated that the interdunal road on Hatteras Inlet was too long for pedestrians to walk.

Commenters expressed concern about plans to close Ramp 23 to ORVs year round. Commenters felt that the distance to walk from this ramp to the ocean was too great, and that this closure, in combination of the proposed "floating" zone during non-breeding season could effectively close this area off.

#### ***Representative Quotes:***

**Corr. ID:** 3868

**Organization:** *Not Specified*

**Comment ID:** 131361

**Organization Type:** Unaffiliated Individual

**Representative Quote:** 9) Ramp 1 is closed. It should be opened to Coquina Beach 10) New inter-dunal road to the Bait Pond on Bodie Island. Should be open to ORV's.

**Corr. ID:** 11621

**Organization:** *Not Specified*

**Comment ID:** 135622

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In Part I of the Executive summary, ramps are discussed. Adding ramps to increase access around closures is an excellent idea but there must be a time frame that guarantees these be built BEFORE so many of these closures go into effect. Otherwise we will have no way to access the parts of the beach that are open. This has happened in the past. It is unfair to count beaches as open if access to these areas is blocked to Orv's and pedestrians on both sides.

**Corr. ID:** 12002

**Organization:** *Not Specified*

**Comment ID:** 134205

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Map 5 of 7, page 179 of the DEIS shows that for Alternative F you have proposed an intra-dune road to Hatteras Inlet. It is not clear how accurate the mapping is, but the distance to the Inlet from the Parking area scales as 1 mile. This is an unacceptably long distance for Pedestrians, especially children, to walk in hot weather when carrying fishing gear. Any alternatives that show a parking area and pedestrian access to the beaches should minimize walking distance. For ORV's the pedestrian access can be very close, unlike those for paved areas.

**Corr. ID:** 12672

**Organization:** *Not Specified*

**Comment ID:** 140392

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 61. - Disagree with the relocation of Ramp 2 to 0.5 miles south of Coquina Beach as financially irresponsible. The money can be better spent to enlarge the parking lot and provide pedestrian and handicapped accessible ramps to the beach at Ramp 1 since it will be closed to ORV use to increase the "Pedestrian Only" area.

**Corr. ID:** 13030

**Organization:** *Not Specified*

**Comment ID:** 140459

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Another point involving the ramps- the existing ramps should also be upgraded and/or improved for the sake of visitor safety. Each ramp should be two lanes and have should also have a separate corridor

for pedestrian access. At some of the ramp pedestrians walking on the ORV are difficult to spot. Ramp 38 comes to mind, it is steep and you must carry forward momentum in order to avoid getting stuck. It is difficult to spot pedestrians or other trucks until you crest the top of the ramp. Improving safety at the access points should be an essential mandate for the NPS going forward.

**Corr. ID:** 13030

**Organization:** *Not Specified*

**Comment ID:** 140457

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Which ever plan the NPS chooses to implement, I would recommend that the addition of new ramps be made a priority. I would recommend several new ramps between Ramps 23-34 and Ramps 45-49. Adding ramps would help keep more of the beach open especially as many ramps have been closed due to nesting activity in close proximity to the ramp. There may be miles of open beach beyond the ramp that would be accessible if more ramps were installed.

**Corr. ID:** 13400

**Organization:** *Not Specified*

**Comment ID:** 141301

**Organization Type:** Unaffiliated Individual

**Representative Quote:** -Increase the amount of interdunal access points and roads.

-Increase the amount of access ramps so the areas that are closed for resource protection can be bypassed.

-Increase/create bypass routes behind the dunes for safety closures and resource closures especially in proposed SMA.

**Corr. ID:** 13546

**Organization:** *Not Specified*

**Comment ID:** 139092

**Organization Type:** Unaffiliated Individual

**Representative Quote:** One of the changes I found in the plan that didn't seem to make sense was the development of the Ramp 23 parking facilities and walk-over access to the shoreline. The distance from the highway to the water's edge is far too great for most people to walk on hot summer days yet alone tote their family and all their belongings. We feel that a development like this could make more sense and as well be more economical to make a better impact if it were located at a new or existing ramp that was closer to the water. A good example of a distance that works would be the allover day use area to the water's edge. If you are to develop a facility such as the one outlined in the plan, we feel the cost would be justified if you position it further south of Ramp 23, where the parking lot would be more close to the water and more people would use the facility.

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 139225

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I strongly oppose creating new interdunal roads to access North Ocracoke Spit. There is more to pedestrian access than just vehicle free areas. During the reg/neg the committee discussed extensively on a way to keep one inlet spit of the three NPS inlet spits in a wilderness setting. North Ocracoke was the spit that would be easiest to keep in a primitive wilderness manner. The idea was to make North Ocracoke Spit a primitive Wilderness area that would only be accessible by foot. Adding a new interdunal road would defeat that purpose. Ramp 59 would be the logical place to stop ORV traffic. Visitors could walk from there to the inlet or a pedestrian trail could be established from a parking lot at the ferry terminal on North Ocracoke and gain access to the inlet by that route. There are not many places in the Seashore to accomplish this and North Ocracoke was agreed during meetings by park managers as the best place to have a primitive wilderness inlet spit if that experience were desirable in the Park. It would be better to let visitors use vehicles to get to either Hatteras Spit or North Ocracoke spit and makes the other Spit a wilderness area than to create interdunal roads where none existed so visitors can drive to some of the last areas in the Park that could be a wilderness area. Creating interdunal roads where none existed so visitors can drive to some of the last areas in the Park that could be a wilderness area violates the No-impairment standard of the Organic Act. With new access roads to both Hatteras and North Ocracoke spits very little walking will be involved to fish these spits, vehicles will be in close proximity to the fishing areas this would result in negligible to minor impacts to ORV users.

**Corr. ID:** 14888

**Organization:** NCBBA

**Comment ID:** 136464

**Organization Type:** Recreational Groups

**Representative Quote:** Ramp #4 if relocated (table 7) due to the construction of the new Oregon Inlet Bridge should be moved minimally in a northerly direction. Those familiar with the past dynamics of this oceanfront can assist NPS in there choice of locations. This location is critical since a move that is too far to the North will in affect

close all beaches south of the campground. Dune configuration coupled with typical winter erosion in this area often closes the accessibility of the beach between Ramp #2 and Ramp #4.

Ramp #23 thru # 34 including new Ramp #32.5 should be ORV accessible year round with the possible exception of a 1.5 mile floating non-ORV area for breeding shorebirds that may be closed if the birds chose to use this area.

Ramp #43 thru Frisco east village line should be ORV accessible year round. There shall be a 1.5 mile floating, non-ORV area for breeding shorebirds that may be closed if the birds chose to use this area. Should any of this area be closed for nesting birds or turtle nests, every effort shall be made to provide pass thrus and corridors for the safe passage of visitors, both ORV and pedestrian.

Frisco & Hatteras Village Beaches shall be ORV routes Sept 16 to May 14 and non-ORV areas May 15 to Sept 15. These dates are the same as those recommended by NPS for the villages of Avon, Rodanthe, Waves and Salvo. These dates that we recommend are consistent with historical closure dates and all villages need to be the same as Avon and the tri-villages. Visitors deserve consistency and closure dates should not be controlled by a minority of property owners in the Frisco/Hatteras area.

Ramp #55 to the soundside of Hatteras Inlet should be an ORV area open year round except for safety closures and/or necessary closures as dictated by ESA. Interdunal roads and crossovers should remain in place and be maintained.

**Corr. ID:** 15063      **Organization:** Rodanthe-Waves-Salvo Civic Association

**Comment ID:** 138971      **Organization Type:** Civic Groups

**Representative Quote:** Ramp 23 under Alternative F

Under Alternative F, the National Park Service's preferred alternative, seashore beaches accessed at Ramp 23 could be closed year-round to drivers and limited for walkers. For the villages of Rodanthe, Waves and Salvo, such closures would be an economic hardship and deprive villagers of traditional access. During the years the beach management plan is in effect, Ramp 23 will at one time or another be closed for nesting colonial waterbirds.

Under Alternative F, a "floating" 1.5 miles of ocean shoreline between Ramps 23 and 34 (Avon) is to be set aside during non-breeding season, July through May. If established at Ramp 23, that floating zone could effectively close access to the beach in this area of the seashore year-round. Such a scenario is unacceptable.

**Corr. ID:** 15064      **Organization:** *Not Specified*

**Comment ID:** 140520      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Why does Alternative F continue to ignore the longstanding need for a soundside access ramp on Bodie Island? (p. 263)

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137706      **Organization Type:** Conservation/Preservation

**Representative Quote:** While we support the relocation of Ramp 2 south of Coquina Beach, we object to the construction of new ORV ramps at 32.5, 62, and 64. The establishment of new ramps will create extremely high disturbance areas, increased off-road vehicle impacts and increased human disturbance impacts resulting from off-road vehicle use at sites where habitats are suitable and where shorebirds and waterbirds can and have nested in previous years. The new ramps will only further reduce the habitat available for shorebirds and waterbirds, and further jeopardize these species. We strongly oppose the establishment of new off-road vehicle ramps as they will have localized major adverse impacts to protected species and habitats. In addition, given the vandalism problems that have occurred between Avon and Salvo, we are concerned that additional ramps could increase the chance of illegal activity.

Rather than building new ramps for ORV use, we support measures that would increase pedestrian access. First, the NPS should clarify the issue of whether there will be increased parking spaces under alternative D, and support increased parking spaces to facilitate pedestrian access to the Seashore. The summary notes that "[n]o new or expanding parking areas would be provided under alternative D." DEIS at 77. However, in Table 8, the DEIS states that under alternative D, parking areas for non-ORV access would be the "same" as alternative C, and then

references Table 7. DEIS at III. In turn, Table 7 provides for new parking, but it is mainly in alternative E or F, not C. DEIS at 97-101. Thus, it is still unclear, even after looking at Tables 7 and 8, what increased parking will be provided.

**Corr. ID:** 15169

**Organization:** *Not Specified*

**Comment ID:** 139756

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Also, new ramps – from installing the new ramps, page 100. Ramps 62 to 64, are open to ORVs. This area has been a safety closure my entire life. Now, we're closing down areas that are safe to open up areas that have been considered unsafe for the past 30 years or more. Yes, we do need these other areas open, if they're going to close them down, but why should we close down safe areas and open up unsafe areas?

**Response:** As presented in Table 8, page 107 of the DEIS, all new ramps would be two lanes wide with separate pedestrian walkovers provided so that pedestrians do not need to utilize the same access points as ORVs. After review of public comment, alternative F has been modified to change the location of some ramps to change where designated routes and vehicle free areas are located. From north to south the following changes were made: ramps 1 and 2 on Bodie Island would no longer be considered “ORV ramps” as this area would be vehicle-free year round, with a new ramp added at mile 2.5 to allow access to the ORV route that would be south of the ramp. Concerns about the walking distance at ramp 23 have been addressed as the area north of the ramp, in front of Salvo and Waves, would be changed to a seasonal (November 1 to March 31) ORV route. The area 1.5 miles south of Ramp 23 would be vehicle free year round with a new pedestrian parking area and a new ORV ramp at the south end of that area. News ramp would still be added at ramp 32.5 and 47.5, while the ramp at 45 would be vehicle free and used as a foot trail to the beach and parking would be allowed in pullouts along the interdunal road between ramps 45 and 49. This would allow for access to the portions of Cape Point and South Beach that are vehicle-free year round by providing parking areas that are a walkable distance to the beach. Ramp 59 would be relocated to mile 59.5. A new ramp would be added at mile 63, rather than at 64, as this area would be vehicle-free year-round. The addition to new ramps was made in areas that are year-round or seasonally open to ORV use to allow more access points and also to allow ORV users to navigate around resources closures, when present. Although no timeframe would have been set for construction, when the projects are funded construction would likely occur before the next breeding season as requested because such activities could not be conducted during breeding season to minimize impacts to the species. Additional soundside access points were not added as the NPS feels these are adequate representations of the existing soundside access throughout the Seashore.

The construction of new ramps would not result in major adverse impacts to protected species and habitats, as construction activities would be short-term and would not occur during critical periods of reproduction nor would it result in direct mortality or loss of habitat. Safety closures would continue to be implemented when an event exhibits a threat of significant bodily injury to death or ORV users.

How funding would be obtained for construction projects is further described under the response to Concern ID 24253. Ramp 4 would be relocated, if needed, as part of the NCDOT Bonner Bridge project. The interdunal road in North Ocracoke and floating closures throughout the Seashore have been eliminated from the revised alternative F, which is further discussed under the response to Concern ID 24197. For a discussion on compliance with the Organic Act, please see the responses to Concern ID 24281 and 24167.

### ***AL1165 - Alternative Elements: Camping (SCV, Park and Stay included)***

**Concern ID:** 24124

**Concern Statement:** Commenters stated that limitations on beach fires were overly restrictive, and would have the effect of limiting beach fires to the areas in front of certain homes. They were also concerned that details regarding the availability of for beach fire permits were not provided. Commenters suggested alterations to beach fire regulations under the preferred alternative including adopting the beach fire restriction under alternative A, while others requested the beach fire restrictions under alternative C.

**Representative Quotes:**

**Corr. ID:** 13118

**Organization:** *Not Specified*

**Comment ID:** 140362

**Organization Type:** Unaffiliated Individual

**Representative Quote:** However, under Alternative F, campfires would be allowed during the turtle nesting season from May 1 - Nov. 15 ONLY in front of the Hatteras Island villages, Coquina Beach, and the Ocracoke Day Use Area. A non-fee education permit would be required year-round for a beach fire.

This restriction has the practical effect of limiting beach fires to only those who rent the first row of expensive oceanfront homes on Hatteras Island.

At Coquina Beach and at the Ocracoke Day Use Area, I guess you could carry all your firewood over the dunes and down to the beach. But on Hatteras Island, if you could build fires only in the villages, the Park Service would be putting them off limits to all but oceanfront owners or renters. There are few, if any, areas for people to park and even carry their wood to the beach in the villages.

**Corr. ID:** 15051

**Organization:** *Not Specified*

**Comment ID:** 138200

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Beach fires are a concern. While I believe it might be best to simply ban them, if they are allowed, the permit is good. Again there is an important education element that is introduced with the permit. However, I would suggest that alternative D be changed to be the "same as C" rather than "same as A. "

**Corr. ID:** 15063

**Organization:** Rodanthe-Waves-Salvo Civic Association

**Comment ID:** 138996

**Organization Type:** Civic Groups

**Representative Quote:** Under Alternative F, only those with strong backs to haul wood and with oceanfront access will be able to enjoy a nighttime beach fire. Nighttime beach fires are further limited by the statement's call for a free permit for every event. Permit availability is not spelled out.

**Response:** After considering public comments received regarding beach fires, the NPS has modified alternative F to allow for beach fires throughout the Seashore from November 16 through April 30, until 10 pm. This would allow users to have beach fires anywhere in the Seashore, outside of the turtle nesting season. As noted under alternative F, a free permit, essentially an informational brochure, would be required for this use. From May 1 to November 15 (turtle nesting season), beach fires would not be allowed from 10:00 pm to 6:00 am, and would be limited to within the village beaches and developed day use areas (Coquina Beach, Rodanthe, Waves, Salvo, Avon, Buxton, Lighthouse Beach, Frisco, Frisco Day Use Area, Hatteras Village, and Ocracoke Day Use Area) so as not to disturb turtle nesting activities at other locations. From May 1 to November 15, the limitation of fires to certain developed areas of the Seashore would limit and reduce the potential disturbance of nesting turtles and emerging hatchlings.

**Concern ID: 24125**

**Concern Statement:** Commenters requested that some type of accommodations for overnight camping on the beach be included in the preferred alternative, including a park-and-stay option. One commenter expressed concerns that existing camping areas did not have enough non-ORV areas adjacent to them.

**Representative Quotes:**

**Corr. ID:** 10

**Organization:** *Not Specified*

**Comment ID:** 126152

**Organization Type:** Unaffiliated Individual

**Representative Quote:** If there is no way to allow night traffic, then camping overnight at the popular fishing spots should be permitted.

**Corr. ID:** 13279

**Organization:** *Not Specified*

**Comment ID:** 140635

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 112: IN option F why is camping in the campgrounds limited to SCV?

**Corr. ID:** 13400

**Organization:** *Not Specified*

**Comment ID:** 139932

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The park and stay option is another idea that could be implemented at CAHA. This would allow night time use, while mitigating potential impacts.

**Corr. ID:** 13400

**Organization:** *Not Specified*

**Comment ID:** 139940

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Referring to the points and spits, the high value of recreational usage should remain open to nighttime ORV use as a pass thru or a park and stay option with no lantern use, mandating red tape over the headlights, and a suggestion to use as little light as possible.

**Response:** Under 36 CFR 2.10, camping is permitted only in campgrounds designated by the Superintendent. The Superintendent's Compendium prohibits camping on park beaches. During the time of the year when night driving on seashore beaches is not prohibited, parking along designated ORV routes is permitted at night when all occupants of the vehicle are actively engaged in fishing or passive recreation such as stargazing. For an in-depth response to suggestions or concerns surrounding night driving restrictions, please see the response to Concern ID 24089. In order to provide the appropriate level of resource protection during the turtle nesting season, ORVs would not be permitted on the Seashore beaches during nighttime hours, even if ORVs were to remain in place with lights off in a park and stay capacity, as human disturbance may impact nesting sea turtles. Although this concept was proposed in the DEIS under alternative E, the potential impacts and operational and compliance concerns were determined to be too great to include in the preferred alternative. Allowing vehicles to remain parked on the beach during the breeding season in resource sensitive locations for the duration of the night would be difficult to patrol and enforce, and could place an unrealistic expectation on visitors parked in such locations to strictly comply with the night driving restrictions. The NPS does not have the resources to patrol the entire park at night to enforce compliance, and placing more park vehicles on the beach at night would potentially result in additional compliance problems that would cause the same adverse impacts as other non-essential ORVs.

### ***AL1170 - Alternative Elements: Adaptive Management/Periodic Review***

#### **Concern ID: 24126**

**Concern Statement:** Commenters stated that five years was too long to wait between periodic reviews because of the dynamic nature of the Seashore. Commenters suggested that periodic reviews occur every one, two, or three years.

#### ***Representative Quotes:***

**Corr. ID:** 10625

**Organization:** *Not Specified*

**Comment ID:** 136524

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Any final plan must allow a review period with provisions for flexibly adjusting access and closure sizes every two years. This review period is due to the dynamically changing nature of CAHA. As the beach structure changes, areas that were once closed should be promptly re-opened.

**Corr. ID:** 13352

**Organization:** NCBBA, OBPA, CHAC

**Comment ID:** 135553

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The 5 year periodic review is inadequate. The shore of Cape Hatteras changes far too quickly for breeding areas and ORV routes to be reviewed only once every five years. An annual review would be the minimum time for review of the plan.

**Corr. ID:** 13777

**Organization:** American Sportfishing Association

**Comment ID:** 139846

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Opportunities to implement less restrictive closures as a result of the above initiatives should be considered more frequently than the 5-year periodic review process identified in the DEIS.

**Corr. ID:** 14223

**Organization:** *Not Specified*

**Comment ID:** 137911

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I further argue that the NPS should aggressively pursue the Adaptive Management Initiative identified on p. 124 of DEIS to improve both resource management and visitor access. The success of these adaptive management initiatives should be evaluated more frequently than the 5 year periodic review process identified in the DEIS to allow for less restricted access if resource protection improves, i.e. evaluated yearly (alt F). The proposed NPS closure policies will have little impact on chick survival.

**Corr. ID:** 14408

**Organization:** *Not Specified*

**Comment ID:** 140837

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Due to the dynamic nature of the seashore this is too long to go between reviews. For example in the last 2 years Hatteras Inlet has suffered extensive erosion to the benefit of Ocracoke. The NPS should evaluate the conditions of the final plan every 3 years at a minimum.

**Response:** Determination of species population trends at the Seashore requires collecting and analyzing data over several seasons under a consistent management strategy. NPS believes that five years is an appropriate time for data collection and analysis before considering changes to protected species and access management.

### Concern ID: 24127

Concern Statement: Commenters asked specific questions on how the period review process would work. Suggestions for new language in the section were offered. Questions included:

- What constitutes a "major hurricane"?
- Language should be clarified that protection measures could both be increased and decreased.
- Would the periodic review process include public review?
- How will carrying capacity be addressed in periodic review?
- At what point during review are efforts determined to be a success?
- When "more flexible management of recreational use" would be implemented and a specific definition?

Commenters also stated that buffer distances should not be decreased until defined desired future conditions have been met.

#### *Representative Quotes:*

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137787

**Organization Type:** Conservation/Preservation

**Representative Quote:** Second, the DEIS fails to disclose what "more flexible management" means in terms of specific management changes that will be implemented, nor does the DEIS provide an analysis of the direct and indirect impacts and cumulative effects of such management changes. For example, one proposal that is popular with some local ORV interests is ORV corridors, even if unfledged chicks are present. Such a management measure, however, is inconsistent with the piping plover revised recovery plan and would pose a high risk of take of a threatened species (Hecht, 2009). Under NEPA, there should be a full disclosure of the NPS proposed action, and what the effects of this provision would be.

Third, we are very concerned that the NPS has selected short or long-term targets that are too low for shorebirds and colonial waterbirds. As a result, these low targets could allow a premature weakening of management measures before there has been species recovery at the Seashore.

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137786

**Organization Type:** Conservation/Preservation

**Representative Quote:** We agree with the general concept of having a desired future conditions analysis, as it provides a standard against which management efforts can be reviewed. However, we have serious concerns about the adequacy of specific provisions of the desired future conditions analysis in the DEIS.

First, it is unclear how the short-term and long-term goals interact and how these goals relate to modification of management measures. The DEIS notes that when desired future conditions for resources "are met or exceeded, it may allow for more flexible management of recreational use, provided adverse impacts of such use are effectively

managed and wildlife populations remain stable." DEIS at 7. Will "more flexible management" be implemented after the short-term goal is met, or only after the long-term goal is met? If flexible management is implemented after the short-term goal is met, it would conflict with meeting the long-term goal, because as noted in the DEIS, such flexibility is allowed provided the wildlife populations "remain stable."

**Corr. ID:** 867

**Organization:** Fishing Fleet

**Comment ID:** 132552

**Organization Type:** Unaffiliated Individual

**Representative Quote:** At what point (number of birds) do or would you say that your efforts could be called a success? Then what amendments would you add to open or loosen the restrictions of regulation to a successful co-habitation.

**Corr. ID:** 13068

**Organization:** *Not Specified*

**Comment ID:** 132414

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pg. 108: Regarding carrying capacity requirements and periodic review. Will the density of cars (number per mile) only be reviewed, or will the method of figuring carrying capacity by density (as opposed to imposing an actual limit on total vehicles) be reviewed? And what will be the endpoints of the review (i.e., disturbance, population trends, habitat characteristics)?

**Corr. ID:** 14968

**Organization:** *Not Specified*

**Comment ID:** 137329

**Organization Type:** Unaffiliated Individual

**Representative Quote:** "Periodic Review Alternative F

Every 5 years NPS would conduct a systematic review of the ORV management measures that are identified in this plan as being subject to Periodic Review. This could result in changes to those management actions in order to improve effectiveness.-

The above does not describe the process by which changes would be made . Would changes be made by the superintendent alone or thru a public process where the public could participate?

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137789

**Organization Type:** Conservation/Preservation

**Representative Quote:** The DEIS provides for a process to periodically review and revise management measures. We support this concept, as the NPS would be able to more accurately tailor management measures to dynamic habitat conditions. However, to more effectively implement the review process, the NPS should modify the language as follows (additions underlined, deletions struck out):

"A systematic review of data, annual reports, and other information would be conducted by NPS every 5 years, after a ~~major~~ hurricane, tropical storms, or extra-tropical storms that significantly modify habitat quality or quantity, or if necessitated by a significant change in protected species status (e.g., listing or de-listing), in order to evaluate the effectiveness of management actions in making progress toward the accomplishment of stated objectives and desired future conditions (see chapter 1 of this document). Periodic review could result in changes to the management actions in order to improve effectiveness. When the long term desired future conditions for resources are met or exceeded, periodic review and adaptive management may allow for more flexible management of recreational use, provided adverse impacts of such use are effectively managed and wildlife populations remain stable. Where progress is not being made toward the attainment of desired future conditions, periodic review and adaptive management may provide for additional management including increased appropriate restrictions on recreational use. Components subject to periodic review vary among the action alternatives."

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137765

**Organization Type:** Conservation/Preservation

**Representative Quote:** Once adequately defined desired future condition targets have been met, so that breeding shorebird and colonial waterbird populations have recovered, at that time, we would be open to considering more flexibility regarding pedestrian buffer distances. However, until populations have recovered at the Seashore, we strongly oppose decreasing protective buffer distances, due to the known adverse impacts discussed in this letter and in the DEIS.

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137790

**Organization Type:** Conservation/Preservation

**Representative Quote:** DEIS at 74. The reasons for these changes are as follows. First, "major hurricane" is not defined in the glossary, so it is unclear what this term means. Moreover, storm events other than a major hurricane - such as a slow moving category 1 hurricane, a stalled tropical storm that stayed a short distance off the coast for a period of time - or an extra-tropical storm ("nor'easter") could result in extensive habitat modifications that should trigger a re-examination of SMAs.

Second, we are not opposed to "more flexible" management of recreational activity if the properly defined desired future conditions are met. However, the desired future condition numbers are set at an inaccurate, low number, resulting in a premature weakening of protection before recovery has been achieved. In addition, reduction of protective management measures should be allowed only after the long term goal has been met; allowing reduced protection prior to the long term goal being met could result in only the short term goal being achieved, or delayed efforts to achieve the long term goal. Finally, as the DEIS makes clear that management can be reduced, the language also should be clear that management protections can be increased if existing measures are not successful.

**Response:** The "Desired Future Conditions" for protected species (p. 7 DEIS) represent the condition of these species once management goals have been achieved. When desired future conditions for resources are met or exceeded, it may allow for more flexible management of recreational use, provided adverse impacts of such use are effectively managed and wildlife populations remain stable. Details of any proposed changes to recreational access would depend on analysis of the data and a study of the particular management elements that resulted in the achievement of the desired condition.

More flexible management of recreational use would be considered after the long term goals are met. If they are met more quickly than the time projected, then more flexibility would be considered then (i.e. if 20 years are projected for the long term goal, but the goal is met in 10 years, then more flexibility would be considered after 10 years).

Management actions that could be considered as more flexible management would be defined for each species depending on information available at that time.

Specific details of the periodic review process have not yet been formulated. The NPS will outline a process to conduct periodic review once this planning process has been completed and an alternative has been selected for implementation. For clarification purposes, the language on p. 74, and p. 126 of the DEIS has been revised in the FEIS as follows:

A systematic review of data, annual reports, and other information would be conducted by NPS every 5 years, after storms or events that Seashore management determines to be a major modification of habitat quantity or quality, or if necessitated by a significant change in protected species status (e.g., listing or de-listing), in order to evaluate the effectiveness of management actions in making progress toward the accomplishment of stated objectives. Periodic review could result in changes to the management actions in order to improve effectiveness. When desired future conditions for resources are met or exceeded, periodic review and adaptive management may allow for more flexible management of recreational use, provided adverse impacts of such use are effectively managed and wildlife populations remain stable. Where progress is not being made towards goals, periodic review and adaptive management may provide for increased restrictions on recreational use.

All references to "major hurricane" or what storm events would trigger periodic review have been updated to reflect this revision.

Where progress is not being made toward the attainment of desired future conditions, periodic review and adaptive management may provide for additional management including increased restrictions on recreational use.

**Concern ID:** 24128

**Concern Statement:** Commenters suggested that adaptive management be a prime component of the plan, specifically calling for use of a species-habitat model and buffer-size studies.

***Representative Quotes:***

**Corr. ID:** 12142      **Organization:** Audubon

**Comment ID:** 131968      **Organization Type:** Unaffiliated Individual

**Representative Quote:** I want decreased OVR use and OVR FREE zones with a plan for recovery of wildlife and birds as well as zones for breeding, wintering and migrating wildlife with increased buffer zones for protection. Also include follow-up studies to increase the buffer areas as necessary to protect the wildlife recovery and establishment.

**Corr. ID:** 14002      **Organization:** U.S. Fish and Wildlife Service

**Comment ID:** 139449      **Organization Type:** Federal Government

**Representative Quote:** Our March 27, 2009, recommendations also emphasized the importance of modeling to the effective application of adaptive management. While the DEIS describes a number of research questions that the NPS would like to pursue as the ORV Management Plan is implemented, it does not articulate a desire on the part of NPS to develop and use species-habitat models as tools to inform management. As we have previously stated, models are important tools and essential components of an adaptive management framework. They would enable you to make better predictions about the effects of management actions relative to your desired future conditions, and would help focus research and monitoring efforts for maximum effectiveness. We continue to encourage the NPS to commit resources to the development of models for priority species, and we continue to offer our assistance toward that end.

**Corr. ID:** 14674      **Organization:** *Not Specified*

**Comment ID:** 134012      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Whatever plan you put into place, there also has to be room for adaptive management, meaning if, in time, the plan is determined to insufficiently protect the natural resources, it must be amended accordingly. If you fail to protect these resources appropriately, you will only be opening yourself up to lawsuits by environmental groups, who would likely have the law on their side.

**Response:** The NPS has identified specific components of an adaptive management strategy in the Species Management Strategies tables in the EIS. These include scientific studies on improving protected species habitat; analyzing resource protection buffers; and evaluating predator management actions. As part of implementation of the plan, NPS would seek staff to develop, coordinate, implement, and manage an ongoing research, species habitat modeling, and adaptive management program related to protected species that use beach and beach-related habitat.

***AL1175 - Alternative Elements: Routes and Areas***

**Concern ID: 24222**

**Concern Statement:** Commenters disagreed with differing seasonal closure dates in front of southern villages. They questioned why, with similar visitation levels, Frisco, Hatteras, and Ocracoke villages would be closed longer than the traditional May 15 to September 15 under the preferred alternative.

***Representative Quotes:***

**Corr. ID:** 3490      **Organization:** *Not Specified*

**Comment ID:** 141196      **Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the statement made by NPS: Shorter Off-Season ORV access on South-facing Villages (p. xix) I agree that the question needs to be asked: Why are Frisco, Hatteras and Ocracoke Villages closures to ORV access longer than the traditional May 15 to September 15 period, even though seasonal visitor statistics are similar for all villages? (p. 23)

**Corr. ID:** 14976      **Organization:** Outer Banks Group

**Comment ID:** 137181      **Organization Type:** Civic Groups

**Representative Quote:** These comments are specifically directed at pages xiii thru xvii of the DEIS on the topic of different dates for village closures to ORV use on the east facing beaches as opposed to the villages located on the south facing beaches. It also addresses the ORV closure north of Ramp 43.

It is our position that the beaches in front of all villages except Buxton should be the same and the dates closed to ORV use should be May 15 to September 15 as has been the case for many years. Our slide show on the attached CD shows the lack of public use on the village beaches in front of Frisco and east of Ramp 55 in front of Hatteras Village. Some have said these beaches are extensively used in early May and from September 16 to November 30 but the pictures, taken at random times and days, show otherwise.

**Corr. ID:** 15056

**Organization:** *Not Specified*

**Comment ID:** 138878

**Organization Type:** Unaffiliated Individual

**Representative Quote:** NPS has misrepresented the data supporting shorter ORV season on the south facing beaches on Hatteras Island, at Frisco and Hatteras villages on page 23. The closure to ORV's driving in the front all the villages have traditionally been from May 15 to Sept 15. The statistics are similar at all villages' locations. Ultimately using different dates confuses the public and significantly raises the possibility of a court challenge. Consider all locations in front of the villages from May 15 to September 15 to be ORV free, as have been established for the last 40 years.

**Response:** The NPS revised alternative F to have more consistency in the management of beaches in front of villages, while recognizing that some village beaches may be too narrow to safely accommodate an ORV corridor. Therefore, under modified alternative F, Rodanthe north of the pier and Buxton would be vehicle free year-round, as these are chronically narrow beaches where there is little or no NPS land ownership above the high tide line and therefore no room for an ORV corridor. Seasonal ORV routes would be designated for Rodanthe south of the pier, Waves, Salvo, Avon, Frisco, and Hatteras beaches. These would all be treated similarly and would be open to ORVs from November 1 to March 31, with a minimum beach width criteria that would prompt a safety closure of portions of village beaches not meeting the criteria. This approach would keep ORVs off village beaches during the busiest tourist seasons as well as the prime nesting season for turtles, while allowing off season ORV access for fishing and other beach recreation. If these village beach locations become too narrow in the future, the beach width criteria would be used to guide decisions on beach closures.

**Concern ID: 24223**

**Concern Statement:** Commenters requested that not all high values areas be designated for ORV use and provided criteria and suggestions where they felt pedestrian use areas should be located when designating routes and areas. Some commenters suggested an alternative that designates at least half of the Seashore as "ORV-Free." Other commenters requested that prohibitions on pedestrian access to eight areas of the Seashore (page 121) from March 15 to July 31 be revised to be open to pedestrian use. One commenter suggested that these areas be called "Vehicle-Free" areas.

Commenters stated that certain areas of the Seashore should be open to ORV use as a route or area. These areas include:

Between Ramp 27 and 30 at Hatteras Inlet

Ocracoke Inlet

1.2 miles northeast of Ramp 70 to 0.5 mile northeast of Ramp 70

0.5 mile southwest of Ramp 68 to 1.2 mile northeast of Ramp 70

**Representative Quotes:**

**Corr. ID:** 803

**Organization:** *Not Specified*

**Comment ID:** 141028

**Organization Type:** Unaffiliated Individual

**Representative Quote:** C. OCRACOKE ISLAND

Hatteras Inlet (North End of Ocracoke) to Ramp 59

- Pedestrians access only

- Relocate Ramp 59 to MP 64

- Establish 2 hiking trails from enhanced parking area at NC Ferry docks and relocated Ramp 59

Relocated Ramp 59 to North End Turnout

- ORV access

## Appendix C

### North End Turnout Ramp to Ramp 70

- Pedestrians access only
- Move Ramp 70 to Ocracoke Day use area
- Establish Parking areas and handicapped accessible, pedestrian boardwalk and bath room facilities at North End Turnout and at Ramp 70
- Improve parking lot and handicapped accessible, pedestrian boardwalk and trail at old Ramp 67 site

### Ocracoke Day use Area (relocated ramp 70) to southern most point of South Point (Ocracoke Inlet)

- ORV access

### Ocracoke Island, Soundside

- Status quo
- Establish minimum widths on sound side ORV routes and cul-de-sac with sufficient turning width that vegetation is unimpaired

**Corr. ID:** 803

**Organization:** *Not Specified*

**Comment ID:** 141024

**Organization Type:** Unaffiliated Individual

**Representative Quote:** It should not be taken as a given that all of the high value areas in CHNS will be ORV routes. Management Policies 2006 outlines rational and attributes for NPS Values. The Organic Act places a high value on the no-impairment standard and includes identified NPS values subject to the no impairment standard as well as resource issues. The Cape Hatteras Enabling Legislation intended this park to be managed for a diverse set of recreational activities as long as those activities do not impair resources or NPS values. ("no development of the project or plan for the convenience of visitors shall be undertaken which would be incompatible with the preservation of the unique flora and fauna or the physiographic conditions now prevailing in this area")(2) Physiographic conditions are an identified NPS value. ("physical processes that created the park and continue to act upon it" 1.4.6 Management Policies 2006)(3)

**Corr. ID:** 803

**Organization:** *Not Specified*

**Comment ID:** 141026

**Organization Type:** Unaffiliated Individual

**Representative Quote:** B. Hatteras Island (suggested pedestrian areas)

Rodanthe, Waves, and Salvo to Ramp 23

- Seasonal pedestrians access only
- Seasonal ORV access
- Dates to be determined by Villages Subcommittee or NPS
- Construct handicapped accessible, pedestrian boardwalk just north of Ramp #23
- Add a new ramp 2 miles south of Ramp 23

### Ramp 23 to new Ramp (2 miles south of Ramp 23)

- Pedestrians access only
  - Construct handicapped accessible, pedestrian boardwalk just south of Ramp 23
- ### New Ramp (2 miles south of Ramp 23) to Relocated Ramp 34
- (Ramp 34 to be relocated 2 miles north of Avon village line.
  - Construct handicapped accessible, pedestrian boardwalk just south of Ramp 34
  - ORV access

### Relocated Ramp 34 to Avon Village Line

- Pedestrians access only
- Construct handicapped accessible, pedestrian boardwalk at Relocated Ramp 34

### Avon Village north boundary to Avon Village south boundary

- Seasonal pedestrians access only
- Seasonal ORV access
- Dates to be determined by Villages Subcommittee or NPS

Soundside, South end of Salvo to North end of Avon

- Status quo
- Establish minimum widths on sound side ORV routes and cul-de-sac with sufficient turning width that vegetation is unimpaired

Relocated Ramp 38 to New Ramp (located 2 miles south of relocated Ramp 38)

- Relocate ramp 38 to 1 mile north of the Haulover
- Establish new Ramp 2 miles south of Ramp 38
- Pedestrian access only
- Construct handicapped accessible, pedestrian boardwalk at both ramps

New Ramp (2 miles south of relocated Ramp 38) to Buxton north boundary

- ORV access

**Corr. ID:** 803

**Organization:** *Not Specified*

**Comment ID:** 141027

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Suggested pedestrian areas con't

Buxton Village north boundary to Buxton Village south boundary

- Seasonal pedestrians access only
- Buxton Village south boundary starts at north groin at Old Coast Guard Base
- Seasonal ORV access
- Dates to be determined by Villages Subcommittee or NPS
- Establish emergency Ramp at Buxton Village north boundary

South Buxton boundary To Ramp 43

- Pedestrians access only

Ramp 43 to New Ramp 49

- Open to ORVs
- Move Ramp 49 to 500 m east of eastern boundary of NPS Frisco Campground
- Construct a new interdunal road to connect relocated ramp 49 with campground entrance road

Ramp 49 to Ramp 55

- Pedestrians access only
- Construct a parking lot and handicapped accessible pedestrian boardwalk board walks at old ramp 49 site.
- Expand existing parking lot at Ramp #55

Ramp 55 to Hatteras Inlet

- ORV access

Frisco Soundside

- Status quo
- Establish minimum widths on sound side ORV routes and cul-de-sac with sufficient turning width that vegetation is unimpaired

Hatteras Inlet soundside

- Status quo
- Establish minimum widths on sound side ORV routes and cul-de-sac with sufficient turning width that vegetation is unimpaired

**Corr. ID:** 803                      **Organization:** *Not Specified*  
**Comment ID:** 141025           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** A. Bodie Island

CAHA northern boundary to 2 miles south first NPS ORV ramp designated as Ramp 2

- Pedestrians access only
- Ramp 1 for emergency ramp only

Ramp 2 south to approximately 200 m north of Oregon inlet campground

- ORV access

200 m north of Oregon Inlet campground to 200 m south of Oregon Inlet campground

- Seasonally ORV access (Date to coincide with opening and closing of Oregon Inlet campground)
- Seasonal pedestrian access only
- Construct new Ramp 200 m south of Oregon Inlet campground

New Ramp south of OI campground to southern most point of Bodie Island

- ORV access

Soundside Bodie Island

- Status Quo
- Establish minimum widths on sound side ORV routes and cul-de-sac with sufficient turning width that vegetation is unimpaired

**Corr. ID:** 3880                      **Organization:** *Not Specified*  
**Comment ID:** 133205           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Cape Hatteras Business Allies recommends that the Park Service reconsider its permanent closure of Hatteras Inlet. We recommend changing the designation to one that will allow access to this area on at least a seasonal basis. The interior used for foraging can be permanently closed for shorebird use. But the soundside & "Rip" areas along the shoreline need to be opened to the public. This should include ORV use, as many visitors & residents cannot walk long distances with a load of fishing/recreating equipment. This usage of Hatteras Inlet has been ongoing for many decades & has not resulted in any major disturbance of wildlife use in the area. In fact, PPL usage of the this area has been non-existent since 2006 (Table 20, pg.199 DEIS)

**Corr. ID:** 6972                      **Organization:** *Not Specified*  
**Comment ID:** 131351           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** - New ramps 32.5 to ramp 38 do NOT AGREE NO CLOSURES NEEDED.  
- Cape Point DO NOT AGREE to March 15th to September 15th closure. ANY BIRDS NESTING WOULD MOVE TO BETTER PROTECTED AREAS.  
- 0.2 mile South Ramp 4 to Oregon Inlet Pond. DO NOT AGREE ON CLOSING March 15th to July 31st. Nesting birds will find and nest in inland waters where better protected.

**Corr. ID:** 10625                      **Organization:** *Not Specified*  
**Comment ID:** 136503           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Section 3.1: Lack of ORV Access to Hatteras Inlet spit from Ramp 55 Pole Road. ORV access must be maintained to Hatteras Inlet spit from Ramp 55. ORVs do not damage this area due to it's dynamic tidal nature. Tracks left in the morning are gone during the next tidal cycle. this area and ORV access is essential to maintain the visitor experience on this stretch of beach. Also, prohibiting access to the spit stops recreational fishing access to one of the best fishing spots on the island.

**Corr. ID:** 13197                      **Organization:** OBPA  
**Comment ID:** 140509           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** 6) Year Round Closures: Hatteras Inlet, North End Ocracoke Island, Ramp 27-Ramp 30 (Salvo) are set to be closed year round to ORV, I am most familiar with the Hatteras inlet area and this area does not have the characteristics of prime habitat for the plover and the other supposed reason for the closure was the need

for a pedestrian only area. It would not be economically or environmentally feasible to pave "pole road" and create parking lots in a beautiful and natural setting at the Hatteras Inlet. The need for pedestrian only areas is addressed in adjacent 15 miles of beach on Pea Island, which never gets included in the amount of beach for pedestrian only and is also a wildlife refuge.

**Corr. ID:** 14246

**Organization:** *Not Specified*

**Comment ID:** 140347

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pages 97- 101. I strongly disagree with proposals in this section saying that ORVs will be prohibited year round between ramps 27 and 30, at Hatteras Inlet (Hatteras Spit), Ocracoke Inlet (North Ocracoke Spit) and various other locations. Not allowing ORV access is paramount to denying the public access to these beaches. They are located miles from the nearest parking or paved road area and too far to access on foot. As a matter of course, there has been no breeding of piping plover or other endangered species at the Hatteras Island Inlet (spit) area in the past 6 years.

**Corr. ID:** 14433

**Organization:** *Not Specified*

**Comment ID:** 136734

**Organization Type:** Unaffiliated Individual

**Representative Quote:** ORV access areas should be clearly demarcated, and any areas not clearly set aside for this use should be considered off limits to ORV access. The superintendent should not have discretionary power to increase access beyond this point, nor should these areas change seasonally. Current routes that bisect wetlands should be closed and replaced with footpaths to reduce the damaging effects that unnatural culverts have on the complex hydrodynamics inherent to these environments. Furthermore, the reduction in areas open to ORV traffic should be accompanied with the construction of new gravel parking lots to allow for continued public access (albeit via pedestrian routes). The total length of beach containing ORV access areas also needs to be reduced.

**Corr. ID:** 14483

**Organization:** *Not Specified*

**Comment ID:** 135731

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In my analysis of the NPS preferred plan (Alternative F), the use and experience of non-ORV visitors to the year-round non-ORV areas will not be regarded as beneficial because they include some of the least attractive and cramped areas of beach in the entire seashore. These areas compare most unfavorably to the grand vistas of the expansive stretches that are open to ORV use.

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 139221

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Many of the proposed pedestrian access beaches are situated very close to highway 12. Vehicle noise from highway 12 can clearly be heard on these beaches. On ORV access beach music from vehicle sound system can impact the soundscape and was not considered in the study. Loud music constitutes a recreational conflict for many visitors. The park's analysis on soundscapes is incomplete.

ORV beaches are inadequate for pedestrian access. A 20-meter wide beach is of insufficient width in front and adjacent to village beaches. These beaches should be a minimum of 35 meters from the toe of the dune to the high tide line. The top half of the beach starting 5 meters from the toe of the dune out to 20 meters should be designated as the ORV route and from 20 meters to the mean high tide (15 meters) should be the pedestrian/recreation corridor of the beach. Most recreation occurs in the section of beach close to the tideline and it would be the most logical place to insure the safety and reduce recreational conflicts between pedestrian and ORVs (On beaches wider than 35 meters it would be better to start the ORV route 10 meters from the toe of the dune and then divide the rest of the beaches with an ORV corridor next to the dune and the recreation corridor next to the tideline. Having a beach closed to ORV access because park managers see congestion as a pedestrian safety issue is problematic as pedestrians and ORV users visit the beach at unscheduled times and it would be difficult to predict when to close the beach because of congestion. Plan F does not sufficiently identify natural physiographic conditions in the Park and or set standards to protect them.

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 139200

**Organization Type:** Unaffiliated Individual

**Representative Quote:** There should be pedestrian only access areas in locations of low pedestrian use. Assigning ORV routes into areas of low pedestrian use with vehicle capacity set at 1 vehicle for every 20 feet of shoreline will

severely impact "primitive wilderness". Managing the Park for "primitive wilderness" is an important component of the enabling legislation. If areas of lower visitor use are identified as an attribute of ORV assessable beaches and not pedestrian only access beaches then visitors seeking lower visitor use areas without the presence of vehicle will be denied that experience. The opportunity for maintaining primitive wilderness will be lost. The set carrying capacity of ORV beaches negates primitive wilderness.

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 139214

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Visitor use conflict issues do exist. The NPS has received complaints of conflicts involving both safety issues and recreational conflicts dealing specifically with soundscapes, and viewscapes being negatively impacted by ORV routes.

Alternative F has not provided for a diversity of visitors experience. The majority of pedestrian access areas are placed in areas where national park values are lacking. Specifically these areas are in sections of the beach where highway noise is noticeable, the beaches are eroded to the dunes, and village infrastructure is adjacent. There is less area of pedestrian access now than there was in 2002

One would not expect to find incidents of pedestrian being struck by vehicles because there is little pedestrian traffic on ORV beaches. Most pedestrian find high use ORV beaches lacking the aesthetics they should expect in a National Park, feel unsafe or in conflict with vehicle traffic. It is extremely uninviting for visitors to access the beach on foot because:

1. There is no designated ORV or pedestrian corridor on these beaches
2. The beaches could be as narrow as 20 meters, or less in some plans (See photo #5)
3. Vehicles leave some beaches highly rutted making walking difficult (See photo # 5)

**Corr. ID:** 14642

**Organization:** *Not Specified*

**Comment ID:** 139136

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Call all areas that exclude ORVs" Vehicle-Free Areas" (VFAs). This in part, takes away much of the emotional terror of "closing our beaches", etc.

**Corr. ID:** 14648

**Organization:** *Not Specified*

**Comment ID:** 141099

**Organization Type:** Unaffiliated Individual

**Representative Quote:** - I disagree with the prohibition of pedestrian access (as proposed in Alternative "F" p. 121) at the 8 different park locations from March 15 to July 31 each year. These locations have traditionally been available for all to enjoy. The removal of such large tracks of the park limits the overall positive experience that the park has to offer and significantly reduces ones desire to return to the seashore.

**Corr. ID:** 15025

**Organization:** *Not Specified*

**Comment ID:** 137264

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I respectfully suggest that more than half of the park be reserved for families to enjoy the flora, fauna and marine life safely and without the noise associated with motorized vehicles.

**Corr. ID:** 15058

**Organization:** *Not Specified*

**Comment ID:** 138164

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would like to see a positive, full time access route to Cape Point. I appreciate being allowed to spend the night on the point especially during the spring and fall drum runs. The number of vehicles should be 75 vehicles. The benefits to fishing and night sky viewing are immeasurable

**Corr. ID:** 15063

**Organization:** Rodanthe-Waves-Salvo Civic Association

**Comment ID:** 138984

**Organization Type:** Civic Groups

**Representative Quote:** In charts ES 2, page xiii, and Table 7, page 97, and a map on page 176, Alternative F describes and shows seasonal closure to beach driving from May 15 to September 15 of the beach between the southern boundary of Salvo to the northern boundary of Rodanthe. The board supports this seasonal closure. The board does not support the seasonal closure of the approximately three tenths of a mile between the southern boundary of Salvo and Ramp 23, as also shown on the above-referenced pages.

**Corr. ID:** 15169

**Organization:** *Not Specified*

**Comment ID:** 139760

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Also, on page 100, a half a mile southwest of ramp 68 to 1.2 miles northeast of ramp 70, has dates of closures from November 1 to -- ORV route from November 1 to March 14. These dates need to be changed. Having these dates totally blocks out our spring and fall fishing seasons. No access in March, or half of March, all of April, May, and September, and October, we're losing when people like to come to the beach to go fishing.

**Response:** The NPS received many specific comments regarding designation of routes and areas along the Seashore, with suggestions from those desiring more vehicle-free areas to support a more natural visitor experience and to provide protection for wildlife and wilderness values, and from those desiring to maintain or expand ORV routes and areas to preserve vehicular access for fishing and beach recreational opportunities. A few commenters stressed achieving a balance or 'fair' distribution, combined with a suggestion for more walkways and better access facilities, to provide balanced access for all visitors. The NPS considered all these views as well as the management plan objectives, the impact analysis, and the purpose and significance of the park, and reexamined alternative F, which had been developed using many of the ideas that came from the same diverse public during the regulatory negotiation process. For the FEIS NPS revised proposed route designations under alternative F to provide a more equitable balance of areas/routes that are year-round vehicle-free areas and year-round ORV routes, with some seasonally accessible areas that are vehicle free 6-7 months of the year and open to ORVs during the remainder of the year. The revised alternative F also simplifies the management approach (fewer seasonal areas, more consistency among the villages, and eliminating changing/floating closures and SMAs), reduces the overall amount of new construction while maintaining adequate beach access, protects sensitive species during non breeding seasons as well as breeding seasons, and accommodates access to the beach for all user groups. The changes made to alternative F are depicted in the FEIS on alternative F maps 1 – 7 and summarized in table 7-1. In general, the main decisions made and the reasoning behind the proposed actions in the revised alternative F are as follows:

Points and spits – North Ocracoke spit, and the southern shoreline portion of Hatteras Inlet spit and North Ocracoke spit were maintained as year-round vehicle free areas to minimize impacts to both breeding and non-breeding shorebirds and to provide vehicle free visitor experience opportunities. Year round ORV access was designated at the east side of Cape Point and South Ocracoke Inlet, but these are subject to resource closures and would not likely be open to ORVs during various times throughout the shorebird breeding season. Bodie Island Spit is designated as a seasonal ORV route that is open to ORV use along the ocean shoreline from September 15 through March 14. See response to Concern ID 24210 for a summary of point and spit designations and the reasoning behind the decisions made in these areas.

Balance between ORV access and vehicle-free mileage- Alternative F as revised in the FEIS proposes more miles of year-round vehicle-free areas –26.4 miles would be vehicle free year-round, 27.9 miles would be designated as year-round ORV routes , and 12.7 miles would be seasonally open to ORVs five to six months of the year. This compares to approximately 16 miles of vehicle-free areas, 23 miles of seasonal ORV routes, and 29 miles of year-round ORV routes under the DEIS alternative F. Additional year-round vehicle-free areas under revised alternative F include the inlet and sound shoreline at Bodie Island Spit, the area between Ramp 23 and MP 24.5, the area between (new) Ramp 32.5 and Ramp 34, the area from just west of Cape Pont to MP 47 on South Beach, and Ramp 68 to just south of the Ocracoke Day Use Area. New year-round ORV access was added between new ramp 59.5 and new ramp 63. In addition to balancing the mileage and providing more nonbreeding bird protection and opportunities for pedestrian only experience, this designation eliminates much of the uncertainty and makes the plan more understandable and simpler.

Pedestrian accessibility –Alternative F as modified enhances pedestrian access in several areas, including at Ramp 23 south of Salvo, at MP 26, and along the interdunal road at Cape Point. Numerous small parking areas and associated pedestrian access are proposed to provide access to more places along the beach without having to take a vehicle on the beach to reach desired locations.

Village beaches – Under modified alternative F, Rodanthe north of the pier and Buxton would be vehicle-free year round, while the other village beaches would be managed as seasonal ORV routes that are open to ORV use from

November 1 to March 31 (5 months), and vehicle free from April 1 to October 31 (7 months) See response to Concern 24222 for a discussion of village beach management under the revised alternative F.

Reduction in number of new ramps – Based on concerns to minimize new construction through the dunes, the revised alternative F consolidates several of the previously proposed ramps. Between ramps 23 and 27, there would be a new pedestrian parking area and one new ramp 25.5 with parking area, rather than two new ramps; previously proposed ramp 39 was eliminated since there would be sufficient access at ramp 38 for the stretch of beach open to ORV in that area; previously proposed ramps 47 and 48 along the new interdunal road between ramps 45 and 49 would be replaced with just one ramp between these locations at Cape Point; and on Ocracoke Island ramp 59 would be relocated to just south of the MP 59.5 parking lot and previously proposed ramps 62 and 64 would be replaced with just one ramp closer to MP 63.

**Concern ID: 24226**

**Concern Statement:** Commenters recommended maintaining or improving soundside ORV routes to reduce damage to adjacent wetlands.

**Representative Quotes:**

**Corr. ID:** 732                      **Organization:** Coastal Conservation Association

**Comment ID:** 133158           **Organization Type:** Unaffiliated Individual

**Representative Quote:** Trail maintenance would also help to alleviate one of the major concerns of ORV users leaving designated roads to avoid standing water. The majority of standing water problems I have witnessed are the result of ruts and large depressions (sometimes filled over 1 foot deep with water) caused by a lack of trail maintenance. Users simply cannot risk getting stuck in these remote areas of beach trail. The areas I have specifically witnessed are the trails that access Hatteras inlet, and sound-side trails on Ocracoke. I have also seen several ramps, including the popular one leading out to Cape Point, become virtually impassable either due to ruts or soft sand conditions that could have been controlled by NPS if they had a trail maintenance budget.

**Corr. ID:** 15111                   **Organization:** NC Division of Water Quality

**Comment ID:** 138020           **Organization Type:** State Government

**Representative Quote:** It was noted that wetland impacts are occurring on the sound side from drivers deviating from designated drive paths. It is recommended that access roads on the sound side should be improved enough to allow reasonable access during high water to help reduce wetland impacts from off road traffic and/or closed until vegetation can reestablish.

**Response:** The preferred alternative, alternative F, provides that protective signage would be installed at all soundside access points to reduce the potential for resource damage from ORV use. Any decision to re-engineer access routes or ramps to change natural drainage must conform with NPS management policies, pertinent environmental regulations, and Seashore access, safety, and environmental concerns. All these are factored into any decisions to change drainage on access routes or ramps. Such factors are routinely documented and made available to pertinent government entities and the public before a decision is made to take action. With respect to soundside access via trails and the soundside land-water interface, NPS must balance, and avoid, minimize, and/or mitigate the potential for adversely affecting the environment and safety concerns before a specific action is taken. When it is determined that access is a public safety concern, access is prohibited until conditions change or improvements can be made.

**Concern ID: 24229**

**Concern Statement:** One commenter suggested that ORV routes be located behind the dunes and away from pedestrian corridors.

**Representative Quotes:**

**Corr. ID:** 3455                      **Organization:** Not Specified

**Comment ID:** 135102           **Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the concept that vehicle transport corridors are not always behind dunes. They should be as well as being separated from pedestrian corridors. Corridors from near the Cape Hatteras Lighthouse southwest to Frisco and where there is room, in the False Point area near Hatteras Inlet should suffice.

Corridors such as these make sense because they can be moved inland until there is no more room as sea levels rise.\* \*See USGS Fact Sheet FS-076-00 June, 2000, variable #6.

\*Personal communication from Dr. E. Robert Thieler of the US geological Survey, Woods Hole, MA, regarding the particular vulnerability of sink sedimentary material making up the Albermarle Embayment. April 4, 2010.

**Response:** Routes behind the dunes would be more damaging to the environment because the land behind dunes is not hard, bare beach sand but is instead loose sand with vegetation and other wildlife. Additionally, interdunal roads would not allow access along the length of the coast for the recreational activities that visitors use ORVs to get to. Under alternative F, as modified, certain ORV ramps, such as ramps 2 and 59, would be relocated or replaced with new ramps further down the coast to remove them from vehicle-free areas and provide more ramp access to year-round ORV areas to retain access to the beach in the event of a resource buffer/closure.

**Concern ID: 24230**

Concern Statement: One commenter suggested that beaches that are not safe to drive on not be included in the total miles open to ORV use.

**Representative Quotes:**

**Corr. ID:** 2588

**Organization:** CCA NC

**Comment ID:** 132015

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Am also concerned that the maps I view showing beach open to driving are beaches where no one can truly drive. Like most of the beach north of Buxton to Avon. No way anyone could drive on that bad beach. It should be listed as inaccessible by nature and not counted as open beach

**Response:** The NPS took public comments into consideration and modified alternative F to recognize that many of the beaches that traditionally have been safety closures based on beach conditions may not be accessible to ORV use. The revised alternative F designates these areas as vehicle-free year-round, including the very narrow stretch just north of Buxton to MP 39, and between Frisco and Hatteras Village, as well as Rodanthe north of the pier and Buxton village beaches . The area from about MP 59 on Ocracoke to new ramp 63 is proposed to be open to ORV year-round under the revised alternative F. The Seashore staff have noted that there may be times of overwash from storms that render parts of this route inaccessible; however, it is expected that this route would be accessible most of the time, particularly during the summer when beaches tend to widen, and is a reasonable year-round ORV route.

**AL1190 - Alternative Elements: User/Carrying Capacity**

**Concern ID: 24129**

Concern Statement: Commenters expressed disagreement with implementing a carrying capacity, stating that it would be difficult to enforce, would create overcrowding in other areas, and that the proposed vehicle limits are arbitrary. Commenters also questioned the methodology of determining carrying capacity for areas of the Seashore. Of concern was why carrying capacity was different for Bodie Island, Ocracoke Island, and Cape Point and why carrying capacity limits are in effect outside of breeding season.

Commenters suggested extending carrying capacity limits to all areas of the Seashore, allowing vehicles to stack more than one deep, implementing limits on pedestrian use, and increasing or decreasing the proposed vehicle limits.

**Representative Quotes:**

**Corr. ID:** 732

**Organization:** Coastal Conservation Association

**Comment ID:** 133157

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I believe that the carrying capacity restrictions are extremely unrealistic, however, especially when it comes to enforcement issues. There are simply too many beach access points, and it would require too many NPS personnel to monitor beach usage. The only place I have seen this work is at the Assateague N.S., but they have only one beach access point.

**Corr. ID:** 3376      **Organization:** *Not Specified*  
**Comment ID:** 137027      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The carrying capacity limits listed in the table are arbitrary and unnecessary. Carrying capacity would be difficult and expensive to enforce at Cape Hatteras National Seashore. Carrying capacity is actually self regulating in the real world. If users perceive an area to be too crowded, they will move to a less crowded area or they will return during a less crowded time. I recommend that carrying capacity limits not be included in the ORV plan.

**Corr. ID:** 3455      **Organization:** *Not Specified*  
**Comment ID:** 135104      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** I disagree with stacking limits one vehicle deep since this does not address carrying capacity relative to weight as this relates to the sinking sedimentary material of the Albemarle Embayment comprising Hatteras beaches with the possible exception of soapstone deposits off Salvo.

**Corr. ID:** 3490      **Organization:** *Not Specified*  
**Comment ID:** 141198      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Why is capacity more restrictive on Bodie Island and Ocracoke than at Cape Point? (p. xxiv). (Bodie Island & Ocracoke -260 vehicles per mile and Cape Point -400 vehicles per mile). This seems to be in conflict with the earlier assessment made by NPS regarding "Carrying Capacity".

**Corr. ID:** 13303      **Organization:** *Not Specified*  
**Comment ID:** 136199      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** I question the statement of as per the DEIS: "Carrying capacity would be a 'peak use limit' determined for all areas based on the linear feet of beachfront?" If you close off huge sections of the beach, you force more people into smaller areas, potentially resulting in more resource impairment and diminished visitor experience.

**Corr. ID:** 13807      **Organization:** American Bird Conservancy, Center For Biological Diversity, et al  
**Comment ID:** 137421      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** In administering permits, the Park Service should also sharply reduce its recommended ORV carrying capacity of 260 vehicles/mile allowed in alternative F, which would result in over 13,500 ORVs being able to use the Seashore beaches at certain times of the year, to a level that will better protect resources and reduce pedestrian/ORV conflicts.

**Corr. ID:** 14408      **Organization:** *Not Specified*  
**Comment ID:** 140883      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Based on past breeding history and the closures required by this alternative Bodie Island Spit, Cape Point and South Point would all be closed to access during major summer holidays. Why is it necessary to have carry limits outside of the breeding season.

**Corr. ID:** 14831      **Organization:** *Not Specified*  
**Comment ID:** 137132      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The DEIS presents weak information for determining the carrying capacity of any of the designated ORV use areas. The proposed 20-foot space between vehicles on the ocean beach is a space about as wide as two parking spaces in a paved shopping mall parking lot. The DEIS makes no case for this distance. Allow parking lots at the surf's edge to be real parking lots. If drivers find this too crowded, human nature will take its course. - Reduce the distance between parked vehicles to 10 feet.

**Corr. ID:** 15043      **Organization:** Southern Environmental Law Center  
**Comment ID:** 137453      **Organization Type:** Conservation/Preservation  
**Representative Quote:** The final ORV management plan should reduce the carrying capacity of 260 vehicles/mile allowed in the preferred alternative, which could result in 13,500 ORVs on Seashore beaches, to a level that will better protect natural resources and reduce pedestrian/ORV conflicts.

**Corr. ID:** 15045

**Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137941

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Alternatives C, E, and F propose the establishment of carrying capacity limits as a "peak use limit" determined for all areas based on the linear feet of beachfront with specified physical space requirements for certain districts within the unit. DEIS at 108. Peak use periods would trigger carrying capacity limitations for vehicles but not for people. However, the Univ. of Idaho study indicated a percentage of respondents felt crowded, though not specifically by vehicle use. Such crowding was presumably felt in non-ORV areas by pedestrian overcrowding, particularly at high-use pedestrian areas. Though this document purports to be an Off-Road Vehicle Management Plan, since the NPS included other types of recreational considerations within the scope of the analysis carrying capacity limits should be analyzed for every area of the sea shore. Furthermore, analysis should be undertaken for the consideration of prohibiting pedestrian use in some ORV areas to minimize conflicts, particularly at ORV access ramps and other travel corridors known to be widely used for traversing from one desirable recreation spot to another.

**Response:** Different Carrying Capacity for Ocracoke Island - Alternative F has been revised to implement a consistent carrying capacity limitation of 260 vehicles per mile for the entire Seashore. Because it would apply to all locations of the Seashore, carrying capacity limits would prevent an excessive number of vehicles in small areas.

Enforcement Issues - The NPS realizes that enforcing carrying capacity year-round at all Seashore locations could be burdensome. However, based on experience, NPS anticipates that carrying capacity limits would only be reached during holiday weekends or on particularly busy summer weekends in the more popular areas. Law enforcement staff currently monitor vehicle use at the Seashore and enforce temporary emergency ORV closures if ORV traffic at ramps or parked on the beach threatens to impede traffic flow. Carrying capacity limits would be enforced in a similar manner, which is already familiar to law enforcement staff

Establishment of ORV Limits - The 260 vehicle per mile limit is based on a physical space requirement of 20-feet per vehicle, which would allow enough space for vehicles to be parked side by side with their doors open without touching each other and with room for a person to pass between them safely. This would improve visitor experience and visitor safety during busy weekends. Carrying capacity limits were not developed as a natural resource management tool and thus adjusting the number of vehicles allowed per mile would not be used to manage natural resource impacts. The NPS already has the authority to install temporary closures if resource damage would occur from visitor use impacts. However, if warranted by an increase in visitor use conflicts, the NPS would consider reducing the carrying capacity limit to fewer than 260 vehicles per mile as part of the periodic review process.

Pedestrian Limitations - The NPS established carrying capacity limitations primarily as a visitor safety mechanism to reduce the potential for vehicle-vehicle and pedestrian-vehicle conflicts that can occur in areas where vehicles and pedestrians coexist. Because the potential for these conflicts does not exist in vehicle-free areas, pedestrian carrying capacity limitations were not necessary for this plan and were not included in the EIS. In addition, pedestrian safety requirements are included in alternative F to address any potential vehicle-pedestrian conflicts at ramps and in ORV corridors. Alternative F (DEIS p. 106) provides that pedestrians should not block ramps and should use pedestrian ramps/boardwalks where available. If a pedestrian walkover is not available, pedestrians should walk to the side of ORV ramps, not in the tire tracks. The NPS acknowledges the need for additional pedestrian boardwalks, which may be included in the proposed access infrastructure (new parking areas, ramps, and interdunal roads) mentioned in alternative F.

Vehicle Parking Requirements - Alternative F has been revised to include the one-deep vehicle requirement as described under alternative D. This was done as a safety measure to ensure that two-way traffic would not be impeded during times of high ORV use. Although vehicle stacking (parking multiple rows deep) may seem desirable to some visitors, law enforcement staff have documented that it has resulted in parking configurations that block vehicle travel lanes, impede safe traffic flow, foster disorderly behavior, or result in a potentially dangerous situation in the event of an emergency.

## ***AL1200 - Alternative Elements: Law enforcement/fines***

### **Concern ID: 24132**

**Concern Statement:** Commenters stated that law enforcement on the Seashore should be increased, and there should be heavy fines/penalties for violations.

#### ***Representative Quotes:***

**Corr. ID:** 48

**Organization:** *Not Specified*

**Comment ID:** 128842 **Organization Type:** Unaffiliated Individual

**Representative Quote:** I say go back to the old way and if someone violates the protected areas, then ban them from driving on the beach.

**Corr. ID:** 610

**Organization:** *Not Specified*

**Comment ID:** 134134 **Organization Type:** Unaffiliated Individual

**Representative Quote:** The only way those rules would have any effect is if they were strictly enforced with stiff penalties imposed on the first infraction. This requires additional staff at a time when budgets cuts and staff shortages are the norm.

**Corr. ID:** 9961

**Organization:** *Not Specified*

**Comment ID:** 133862 **Organization Type:** Unaffiliated Individual

**Representative Quote:** YOU SHOULD NOT ALLOW ORV USAGE WITHOUT PROVIDING FUNDING FOR A LARGE ENFORCEMENT STAFF. Enforcement should include large fines, not just warnings. Serious issues should be punishable by CONFISCATION OF THE ORV.

**Response:** As indicated on page 108 of the DEIS, an ORV permit may be revoked for violation of applicable park regulations or terms and conditions of the permit, which would include a violation of resource protection closures.

Most of the violations observed at the Seashore have been considered petty offenses (Class B Misdemeanors) in the federal court system, which carry a maximum fine of \$5,000.00 and/or six months in prison. The monetary amount of fines is governed by the Collateral Forfeiture Schedule (CFS), which must be approved by the Chief Judge of the Eastern District of North Carolina. The last update to the CFS was approved by the court in 2004. The NPS would update the CFS in the next year or two and may request higher fines for ORV related offenses.

Note: Please refer to response to Concern ID 24253 for information on funding for additional NPS staff at the Seashore.

### **Concern ID: 24133**

**Concern Statement:** Commenters expressed concern that alternatives that expand buffers for resource violations could result in deliberate violations which could lead to abuse of this provision.

#### ***Representative Quotes:***

**Corr. ID:** 10505

**Organization:** *Not Specified*

**Comment ID:** 131773 **Organization Type:** Unaffiliated Individual

**Representative Quote:** I could not find vandalism buffer extensions in other than option A and B, if they are in there they should not be. Vandalism extensions motivate activists to game the system and vandalize to increase protection and prevent human use of the beaches. A zealous NPS employee could declare a windblown sign or a child's transgression a deliberate act of vandalism and deny thousands access to their country's resources. Punishing all for vandalism has other adverse impacts. Citizens will be less likely to help maintain the park such as fallen signs protecting turtle egg sites if reporting the problem results in a beach closure due to "vandalism". Another issue with vandalism extensions is the incredible injustice it imparts on society. Imagine if every public park was closed off for the season when vandalism occurred. Pretty soon children would have no access to public parks. Establish laws and prosecute violators but do not punish innocent people for the transgressions of others.

**Corr. ID:** 14954      **Organization:** *Not Specified*  
**Comment ID:** 138021      **Organization Type:** Unaffiliated Individual

**Representative Quote:** The way it is policed now, it is too easy for pro closure groups to violate their own area to increase enclosures and make the ORV crowd look responsible. On top of this, the fact is that most of the violations come from pedestrians. I will not get into the details of the different closure proposals as it all makes very little sense unless we want a massive policing operation. The way these things usually go are when stipulations are put in place, policing is attempted and more regulation will come

**Response:** Alternatives A, C, D, E, and F do not contain requirements for buffer expansions when deliberate violations occur. See response to Concern ID 24073 for a discussion on why buffer expansion requirements were not considered in the action alternatives and Concern ID 24132 for what enforcement and penalties have been included for closure violations.

### ***AL1260 - Alternative Elements: Predator Removal***

#### **Concern ID: 24135**

**Concern Statement:** Commenters question predator removal practices of the NPS and asked if the impacts of this removal, including cumulative impacts to the ecosystem, have been considered. They further suggested that various recreational uses at the Seashore could have beneficial impacts to reduce predators and felt that predator management techniques should be looked at now, instead of the future, and that the current approach to predator management is in violation of the law and the NPS Organic Act and also encourages certain predators like ghost crabs.

#### ***Representative Quotes:***

**Corr. ID:** 57      **Organization:** US Taxpayer  
**Comment ID:** 128873      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Another policy that I strongly oppose is predator control for the plovers. My interpretation of the Organic Act is that predator control in national parks is permissible to rid the park of animals which are detrimental to the park's purpose. Since the seashore was created as a recreational area and is not a bird refuge, how can the park service justify killing fox, otter, mink, raccoon and other native mammals to protect piping plovers? Personally, I prefer otters to plovers, so what gives the federal government the right to affect the balance of nature and choose which species lives or dies? Furthermore, since these animals do not pose any danger to humans, there is no justification for killing them.

**Corr. ID:** 811      **Organization:** *Not Specified*  
**Comment ID:** 132720      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Studies do show, that without foot traffic and ORV traffic, certain predators (one the USPS cannot target with their Predator Removal Program (i.e. Ghost Crabs) will in fact have dramatically easier access to shorebird and turtle eggs. Simply put, the data collected so far, even using USPS studies, does not show an adverse negative impact on local shorebird and turtle populations. So why is this access being reduced/eliminated?

**Corr. ID:** 1013      **Organization:** *Not Specified*  
**Comment ID:** 132238      **Organization Type:** Unaffiliated Individual

**Representative Quote:** I am opposed to the way the NPS does predator control. The wanton killing of hundreds of indigenous mammals each year for the benefit of other wildlife is wrong. Has the NPS addressed the effects of the removal of the mammals on the rest of the ecosystem?

**Corr. ID:** 3883      **Organization:** *Not Specified*  
**Comment ID:** 133201      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 482 of DEIS states the NPS Organic Act directs national parks to conserve wildlife for future generations and to protect native animal life as part of the park unit's natural ecosystem. Does trapping and killing native mammals protect them?

**Corr. ID:** 7036

**Organization:** OBPA

**Comment ID:** 136996

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Over 1,200 various predator species, have been "removed" from the CHNSRA habitat since the inception of the Consent Decree, that majority being "native" species. Not only has this huge expenditure in both life and resources shown no appreciable positive impacts toward protected species, it has also led to less biodiversity within the CHNSRA animal kingdom. It is also a travesty to remove predator species from their habitat during their own breeding seasons, leaving behind countless litters of offspring to simply die of starvation. The early species management policies in CHNSRA also included mammalian creatures under the umbrella of protection. What has changed since that time? There can truly never be a predator-free ecosystem on these barrier islands, and it is misguided to attempt to make it such.

**Corr. ID:** 11709

**Organization:** *Not Specified*

**Comment ID:** 135267

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree Predator management techniques may be reviewed in the future (pg 124). Why not make this a priority and do it now. (54% of the problem)

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140223

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Predator control was not included in the DEIS. This is a substantial public issue with much opposition. NPS has decided to promulgate predator control as a separate plan. The animals currently exterminated were protected under the enabling legislation. This is another example of NPS in conflict with the law.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140261

**Organization Type:** Unaffiliated Individual

**Representative Quote:** While on the topic of predators, consider the ghost crab which is a prime predator of eggs, young birds, and turtle hatchlings. On pages 28-29, a recent study at CHNSRA has cited that the ghost crab is extolled as an important indicator species of ecosystem health. The study claims that ghost crab populations are destroyed by ORV's operating on the beaches. Under the Organic Act (page 482), through the 2006 Management Policies, the NPS is to protect the ecosystems from harm by human activities. Ghost crabs as crustaceans are on the long list of plants and animals to be protected. That list also contains insects, worms, and microscopic plants and animals. All such organisms can be impacted by motor vehicle operation. It is obvious that NPS is trying to substantiate the removal of human use of the beaches. By enlarging the turtle closures, the NPS restores the ghost crab/turtle ecosystem balance thus fulfilling the Organic Act mandate. This is unfortunate for the logger head species recovery, but after all, those humans must be brought under control. It is odd that predator crabs are protected but predator mammals are killed by the NPS. This serves as an example of the gross distortion perpetrated by the NPS on the CHNSRA enabling legislation and the undue influence of bird activists.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140260

**Organization Type:** Unaffiliated Individual

**Representative Quote:** On page 220 is the statement, "Foxes were first seen at the Seashore in 1999 and on Hatteras Island in the winter of 2001-2002." There is inadequate data to indicate exactly when and where various predators took up habitation nor does there need to be such information. There is also no information as to what constitutes the natural population of predators. Since these islands first emerged as barren spits of sand 1200 years ago, every organism now present was initially invasive. The 1938 NPS Prospectus contained a list of animals present in the Seashore which were to be protected in the primitive wilderness as it existed when the enabling legislation was drafted. That list includes raccoon, opossum, foxes (plural), mink, and otter. All these protected species are targeted for death by the revisionists NPS. Most other park managers believe that predators make up part of their ecosystem which should not be altered because of the constrictions of "unintended consequences". They prefer to protect their species of concern by use of predator excluded devices. This is another example of CAHA being in violation of the founding law. The villages that were embedded within CHNSRA carried with them a population of woodland opossum, raccoon, and cats both feral and domestic. This is a natural condition of small village life and is expected to continue as a steady source of such animals.

**Corr. ID:** 15064      **Organization:** *Not Specified*  
**Comment ID:** 140552      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Predator Management

- Coalition: NPS should more aggressively consider experiences at other East Coast locations in the development of an overall, integrated predator management policy.
- WHY -Is it ok to tamper with nature in some cases but not others?
  - o The adaptive management decisions reflected in the DEIS show a clear bias to implement actions that will adversely affect the visitor experience but to avoid actions that would benefit both natural resources and visitors.
- NPS: OK to replace South Point wetlands with parking area because beach will be closed to ORVs.
- NPS: OK to relocate Turtle Nests when storms are imminent, but not before (coincidentally the high risk nests are in prime ORV corridors).
- NPS: OK to set aside areas of beach to replant the "extirpated" seabeach amaranth, but not OK to clear vegetation at Cape Point ponds to create more favorable piping plover habitat (outside of the prime ORV corridor).
- NPS: OK to kill predators (greatest risk to birds and turtles), not OK to drive on the beach at night (deterrent to predators, low risk to turtles and birds).

**Response:** The NPS recognized the potential for impacts of predator removal efforts as separate cumulative impacts associated with ongoing predator management at the Seashore (DEIS table 49). Therefore, impacts to federally listed threatened or endangered species, state-listed or special status species, wildlife and wildlife habitat, visitor use and experience, and Seashore management and operations as a result of predator management activities were analyzed in the cumulative impacts sections in Chapter 4 for the specific impact topics mentioned above. Any impacts associated with a possible increase of mammalian predators due to increased human activity were also discussed as indirect impacts to wildlife species in chapter 4 of the DEIS.

Specific predator removal practices at the Seashore will be addressed in a separate planning document currently being prepared, which is the Seashore's Predator Control Program for Protected Species Management / Environmental Assessment. Comments related to specific predator management practices are not within the scope of this EIS and should be submitted during the public comment period for that EA.

### ***AL1270 - Alternative Elements: Pets***

#### **Concern ID: 24139**

**Concern Statement:** Commenters expressed concern about the elements of the preferred alternative that prohibit pets from certain areas of the Seashore from March 15 to July 31. They felt that pets should be allowed, on a 6-foot leash as is currently permitted stating that following these regulations, pets would not impact Seashore wildlife. They also expressed concern that these restrictions may impact visitation to the Seashore if visitors cannot bring their pets or horses.

#### ***Representative Quotes:***

**Corr. ID:** 3912      **Organization:** *Not Specified*  
**Comment ID:** 131273      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Current NPS regulations require pets with pedestrians to be on leashes no longer than six feet. This requirement is more than adequate to prevent pets from damaging protected species. Pets on leashes do not damage protected species. Statements in the DEIS that reference reports citing damage to protected species from pets are not accurate reflections of conditions where pets are required to be on leashes. Prohibiting pets completely from beach areas, particularly in front of villages, will significantly disrupt vacationer experiences and cause vacationers to seek other more pet friendly beach areas such as in Currituck County. Implementing the NPS proposed actions regarding pets would significantly affect demand for rental properties on Hatteras Island, a hardship that is not accurately reflected in the DEIS.

**Corr. ID:** 12002      **Organization:** *Not Specified*  
**Comment ID:** 134201      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 211. The DEIS states, "For example, a study conducted on Cape Cod, Massachusetts, found that the average distance at which piping plovers were disturbed by pets was 46 meters (151 feet), compared with 23 meters (75 feet) for pedestrians." 46 meters is well below the buffers listed for Plover. It would appear that

even with a reasonable safety factor, pets should pose little problem as long as leash rules are followed. It is likely that FWS guidelines included pets as a consideration when setting recommendations for Buffers. Again, I am opposed to restricting pets as proposed in Alternatives C, D, & F - it is not supported by reasonable interpretation of the science.

**Corr. ID:** 12011 **Organization:** *Not Specified*

**Comment ID:** 134044 **Organization Type:** Unaffiliated Individual

**Representative Quote:** I strongly disagree with the restriction of access of pets on the beach anytime for dogs and horses. The dogs should be kept on a 6' leash and the horses should be properly supervised by their owners or handlers. There is no documentation that I know of that relates to horseback riding on the beach creating any adverse effect on nesting birds or turtles. There should be daytime law enforcement patrol to better monitor any violations regarding the lack of properly supervised pets.

**Corr. ID:** 13461 **Organization:** Park user

**Comment ID:** 138628 **Organization Type:** Unaffiliated Individual

**Representative Quote:** 2c. The rationale for the pet restrictions is totally lacking in scientific evidence and logical rigor. Firstly, it appears to have been pulled out of the air with no scientific basis. None of the studies cited in Appendix A identified leashed pets as even a minor factor in destruction of shorebird nests. Over and over, study after study, and I will use as just one example Patterson 1991 on page A-5, found that 90% of losses were due to predation by wild species.

Secondly, the ban lacks any logical basis. Nowhere in the DEIS is it explained how a leashed pet poses a risk to a shorebird nest. To the contrary, if you stationed a leashed pet every 100 yards along the beach, it is more likely that they would deter and scare away the mammalian predators that are the main cause of nesting failures.

**Corr. ID:** 15265 **Organization:** *Not Specified*

**Comment ID:** 141328 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Additional restrictions and those from previous regulations also require factual data and logic. For example, if you require that pets be banned from certain areas you must realize that "no pets means no people". The simple, logical fact is that those people that have pets consider them, for the most part, family members and will not readily leave those pets for a weekend or more to visit the Outer Banks. They will take their family to other locations and the loss of revenue will be felt by the businesses of the area, not by the rule-makers.

**Response:** After reviewing public comments, the NPS has revised the proposed pet restrictions under alternative F. Under revised alternative F, pets will continue to be required to be on a 6-foot leash at all times. Pet restriction language and regulations would be clearly stated in the ORV permit education process and provided to pedestrians throughout the Seashore. Pets would be allowed in all areas of the Seashore where ORVs and pedestrians are allowed, except for pedestrian shoreline access seaward of pre-nesting areas during the breeding season, so as not to disturb breeding and nesting activities. Similar to ORVs and pedestrians, pets would not be allowed in resource closures. Language from Table 8 (page 113) and throughout the DEIS under alternative F has been revised in the FEIS to read "Pets are permitted subject to the 6-foot leash requirement and prohibited where posted. Pets would be prohibited in pedestrian shoreline access areas in front of (i.e., seaward of) bird pre-nesting areas." This change will also be made in Table 55 of the FEIS, under American Oystercatcher – ORV and Other Recreational Use, Alternative F, to replace information that was incorrect regarding pet regulations as published in the DEIS. As is currently occurring, law enforcement will continue to patrol during the daytime and enforce this regulation. Alternative F was also revised to increase the number of areas where visitors on horses can access the beach. Under revised alternative F, the current regulations for the use of horses would continue (see DEIS p. 113) plus:

- Horse use would be allowed in some vehicle free areas and on a limited number of trails to be designated in the Superintendent's Compendium after ORV routes are determined.
- Horse use would be allowed on village beaches from Sep 16 to May 14.
- Horses are prohibited in resource closures and in pedestrian shoreline access areas in front of (i.e., seaward of) bird pre-nesting areas.

Although the areas where horses would be permitted would increase, some restrictions would still apply because, as noted on page 210 of the DEIS, human activity, which would include horseback riding, is a known risk factor for piping plover.

***AL1300 - Alternative Elements: Desired Future Conditions***

**Concern ID: 24218**

Concern Statement: Commenters stated that the Seashore should establish management targets for migrating, wintering, and breeding species in the DEIS. Some commenters stated that the species recovery goals in the DEIS desired future conditions are too low, and that the Seashore can support a higher number than what is stated. Further, one commenter suggested that the Seashore expand its desired future conditions beyond species management. Commenters suggested that data from previous colonial waterbird surveys be taken into account. Some commenters suggested that the long-term piping plover target of 30 breeding pairs is based on outdated data and is thus unrealistic.

***Representative Quotes:***

**Corr. ID:** 5751 **Organization:** Defenders of Wildlife

**Comment ID:** 140795 **Organization Type:** Unaffiliated Individual

**Representative Quote:** A plan must include clear goals and milestones for wildlife recovery. Where there are management targets in the DEIS, they need more thorough vetting based on the potential of the Seashore to support wildlife rather than on its recent degraded abilities. Where birds, turtles and plants are not coming back as planned, based on annual reviews, additional protective measures should be implemented until recovery goals are met. These goals, and adequate management to realize them, should be for migrating and wintering species as well as breeding ones.

**Corr. ID:** 13438 **Organization:** National Parks Conservation Association

**Comment ID:** 140924 **Organization Type:** Unaffiliated Individual

**Representative Quote:** We request that NPS expand the "desired future conditions" section beyond species management and include goals from the management policies on least impacting vehicles and motorized equipment (Management Policies 2006, 8.2.3; 8.2.3.1; 6.4.3.3), noise (Management Policies 2006, 4.9), appropriate uses (Management Policies 2006, 8.1.1), and wilderness (Management Policies 2006, Ch. 6). These policies are essential guideposts for determining whether a recreational use is appropriate and causing unacceptable impacts in National Park System units. In addition, we believe they are critical for determining whether or not the agency is upholding its management duties under the Organic Act. We would urge the agency to develop a set of desired future conditions for 1) motorized equipment 2) noise 3) appropriate use and 4) wilderness.

**Corr. ID:** 13438 **Organization:** National Parks Conservation Association

**Comment ID:** 140915 **Organization Type:** Unaffiliated Individual

**Representative Quote:** First, with regard to desired future conditions (species recovery goals) we believe that NPS is choosing long-term targets, and possibly short-term targets that are too low. For piping plover (DEIS, p. 8), the long term target is 30 breeding pairs. However, the footnote indicates that CAHA could potentially support 30-60 pairs, and actual population growth at other sites has exceeded the projections. Consequently, if CAHA could potentially support more than 60 breeding pairs, the long term target should be at least 60 breeding pairs.

**Corr. ID:** 13438 **Organization:** National Parks Conservation Association

**Comment ID:** 140918 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Second, in the section on "Issues and Impact Topics" (DEIS, p. 29), it states that "Nesting sea turtles at the Seashore include the loggerhead, green, and leatherback turtles." However, when desired future conditions are discussed (DEIS, p. 8), loggerheads are the only species for which short-term and long-term targets are stated. Again, the long-term loggerhead target is set low at 115 nests, when the footnote states the 50 year projection as being 201 nests. If there is a scientifically based 50 year projection, then why is a lower number being chosen for a long-term target? What is the basis for this choice?

**Corr. ID:** 14002

**Organization:** U.S. Fish and Wildlife Service

**Comment ID:** 139447

**Organization Type:** Federal Government

**Representative Quote:** While we support the desired population growth rates for colonial waterbirds, we note that the baseline population levels for these species were drawn from a period during which populations of these species at CAHA were historically low. As such, the 10 and 20 year population targets described in the desired future conditions are likely lower than what could be supported at CAHA with sustained management. We anticipate that with continued implementation of management actions such as those described in Alternative F, populations of these species could easily exceed the desired future conditions as currently defined. We encourage the NPS to take another look at the historic data set to determine a more appropriate baseline, or prepare to re-calibrate the desired future conditions for these species at the first 5-year review period to reflect population levels that more closely reflect the likely ability of CAHA to support these species.

**Corr. ID:** 15043

**Organization:** Southern Environmental Law Center

**Comment ID:** 137451

**Organization Type:** Conservation/Preservation

**Representative Quote:** The final management plan should replace artificially low desired future conditions for threatened, state listed, and special status species on the Seashore with higher targets that are consistent with the carrying capacity of the Seashore and appropriate species management.

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137788

**Organization Type:** Conservation/Preservation

**Representative Quote:** We are particularly concerned about the failure of the NPS to include North Carolina Wildlife Resources Commission data in determining the targets. The DEIS states that the "targets did not take into account data from any surveys conducted prior to 2007 due to the uncertainty associated with survey methods, survey timing, data management, and data compiled for each survey year." DEIS at 10. However, in the State Listed and Special Status Species section of the DEIS, Table 30 at 241, the NPS does list the colonial waterbird data from surveys prior to 2007. If the data are reliable enough to use in the section that discusses the status of species, they also are reliable enough to be used to set targets. The data are used to determine the status of waterbird populations in North Carolina (including consideration of endangered, threatened, and special concern status), regional waterbird populations in the southeastern United States and national waterbird populations. We also note the early colonial waterbird surveys were conducted by Dr. James Parnell, who is now an emeritus professor from the University of North Carolina at Wilmington, and a nationally noted expert on colonial waterbirds. The colonial waterbird surveys were conducted by personnel who are experienced with detecting and counting colonial waterbird nests, and certainly such data are better than having no data at all for the entire period. As the DEIS notes in discussing the colonial waterbird data, "[a]lthough different survey protocols have been used at the Seashore between 1977 and 2009, recent estimates of colonial waterbird nests at the Seashore are clearly much lower than they were 30 years ago (see table 30). DEIS at 240. Using data from 2007 and later allows the NPS to mask the very large decline in colonial waterbird numbers that has occurred at the Seashore. Furthermore, it uses data from the time at which waterbird populations were the lowest ever recorded on the Seashore.

**Corr. ID:** 12002

**Organization:** *Not Specified*

**Comment ID:** 134151

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Table 1, page 8. The goal of 1.5 chicks per pair for Piping Plover productivity seems too optimistic.

To establish a goal for Plover productivity one could look at Cape Lookout National Seashore. The Barrier islands of the Cape Lookout National seashore are not inhabited and there is only limited vehicle usage so it should represent the high end of productivity for Piping Plover in North Carolina. Heat-stress and weather are the primary factors for low fledg rates noted at Cape Lookout in their Annual Piping Plover Report. These conditions would certainly also apply to Cape Hatteras. The highest fledgling success rate ever recorded at Cape Lookout Seashore was 0.92 (chicks fledged per pair) in 2004.

Yet, the DEIS simply uses FWS information and sets a 5-yr average goal of 1.5 chicks per pair as a long term goal. That's more than 50% higher than an uninhabited area that has almost no ORV. Since the goals established for Cape Hatteras under the DEIS appear unreasonably high, it appears that NPS is currently assessing unreasonably high impacts associated with ORV use in Cape Hatteras Seashore.

Further, the study titled "GIS-based analysis of human disturbance on piping plover abundance, distribution and productivity on the barrier islands of Long Island, New York" by SK Thomsen, May 2006 found productivity of 1 for areas completely restricted from ORV use; in cooler climates where productivity would be high; with large Plover populations (in the hundreds); and over a three year period that averaged out variability of productivity. This best case scenario only resulted in productivity rates of 1.0, therefore, the DEIS goal of 1.5 is not reasonable.

These high goals also seem to imply that the impacts of ORV are being overstated in the DEIS. More reasonable goals should be established.

**Corr. ID:** 13279

**Organization:** *Not Specified*

**Comment ID:** 140629

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 8: Long term Piping Plover target of 30 breeding pairs from 1996 study of USFWS. Comment: Since the available data of 1992 there have never been more than 21 nests. This is a 14 year old study. Setting a long term goal on a 14 year old study is not fair. Too much has changed and it set unrealistic goals that can never be met. This is only laying the ground for more restrictions on activities to achieve an unreachable goal.

**Corr. ID:** 14408

**Organization:** *Not Specified*

**Comment ID:** 140847

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Historically the park has supported few if any Piping Plovers. Breeding pairs of plovers spend a small part of their life in the park. Is it realistic to expect in the short term to meet the maximum number of breeding pairs and in the long term to double the number experienced in the last 110 years?

**Response:** Multiple factors may contribute to the current low productivity rates of piping plovers at Cape Hatteras and Cape Lookout National Seashores, and they may differ between the two Seashores.

Desired future conditions are based on targets identified in the FWS Piping Plover Recovery Plans. NPS believes these targets are reasonable based on this literature as well as consultation with the USFWS. The short-term target (10 years from now) for piping plovers is to match the number of breeding pairs observed at the Seashore in 1989. The long-term target (20 years from now) for piping plovers is to achieve the number of breeding pairs that the FWS Piping Plover Recovery Plan determined is possible for the Seashore. If the FWS updates the species recovery plan prior to that time, the Seashore will adjust the targets accordingly.

NPS also notes that with increased protection from disturbance in effect under alternative B for the last 3 breeding seasons the number of breeding pairs (11 in 2008, 9 in 2009, 12 in 2010) has increased from the low of 2 in 2002 and 2003.

Goals for federally listed species are based on U.S. Fish and Wildlife Service (FWS) Recovery Plans for those species. The long-term target for the number of piping plover breeding pairs of 30 is taken from the FWS's Piping Plover Recovery Plan. Sixty pairs far exceeds any documented numbers at the Seashore, and is not supported by the Recovery Plan or the amount of potential habitat at the Seashore. Therefore, NPS has not changed this long-term target.

NPS has considered the additional information provided by commenter about the pre-2007 colonial waterbird surveys and agrees that it is reasonable to consider this data for the purpose of setting targets. NPS has re-examined the historic data set for colonial nesting waterbirds and revised targets in the DEIS (Table 5, p. 10) in the FEIS (Chapter 1, Desired Future Conditions for Threatened, Endangered, State-listed, and Special Status Species, Table 5) to take into account higher historic numbers of nests at the Seashore as a factor in the determination of desired future conditions for colonial waterbirds as follows:

## Desired Future Conditions for Colonial Waterbirds at Cape Hatteras National Seashore

Variable	Short-term <sup>a</sup> target	Long-term <sup>b</sup> target	Source
Annual peak number of least tern nests	5-year average of 462 nests	5-year average of 577 nests	Long-term target equals 2009 peak count. Short-term target is mid-point between recent average (2007-2010) and the long-term target.
Annual peak number of common tern nests	5-year average of 292 nests	5-year average of 533 nests	Long-term target equals the average number of nests that occurred in 1977-2004. Short-term target is the mid-point between recent average (2007-2010) and the long-term target.
Annual peak number of gull-billed tern nests	5-year average of 21 nests	5-year average of 40 nests	Long-term target equals the average number of nests that occurred in 1977-2004. Short-term target is the mid-point between recent average (2007-2010) and the long-term target.
Annual peak number of black skimmer nests	5-year average of 132 nests	5-year average of 244 nests	Long-term target equals the average number of nests that occurred in 1977-2004. Short-term target is the mid-point between recent average (2007-2010) and the long-term target.

<sup>a</sup>Short-term target is to achieve the midway point between the long-term target and the average of the data points from the Seashore's 2007 - 2010 counts.

<sup>b</sup>Except for least terns, the long-term target is to achieve the 1977-2004 level of nesting at the Seashore. Least terns are currently nesting in greater numbers than the 1977-2004 average; therefore, the long-term target is to maintain a 5-year average count equal to the 2009 peak count.

Commenters differ on the targets for American oystercatcher. NPS has considered the comments and determined that it agrees with the FWS opinion that the future conditions for this species appear reasonable. The targets represent an increase above current conditions and are consistent with the recommendations in the American Oystercatcher Conservation Action Plan (Schulte et al. 2007).

NPS has not developed desired conditions for migrating and wintering species because we did not feel we had sufficient historic data upon which to base targets.

The periodic review process described in the DEIS (p. 74) and in Table 10 has been revised in the FEIS in Table 10-1 and in Chapter 1 to provide a process for modifying management when recovery goals are not met. The following text revision has been added to the FEIS Chapter 1: Desired Future Conditions: "Where progress is not being made toward the attainment of desired future conditions, periodic review and adaptive management may result in increased restrictions on recreational use."

Desired future conditions have not been developed for green and leatherback turtles because they nest in such low numbers in this part of their range that they do not provide a good basis for the adaptive management process. The long-term desired future conditions for loggerheads is a 20-year projection that places the Seashore on the trajectory towards the 50-year target identified in the Recovery Plan.

Developing desired conditions for motorized equipment, noise, appropriate use, and wilderness is outside the scope of this plan but may be considered during the planning process for the General Management Plan which is scheduled to begin in 2012. NPS plans to prepare a wilderness suitability study jointly with the General Management Plan.

## ***AL4000 - Alternatives: New Alternatives Or Elements***

### **Concern ID: 24231**

**Concern Statement:** Commenters requested that the NPS adopt the alternative developed by the Coalition for Beach Access in their position statement.

#### ***Representative Quotes:***

**Corr. ID:** 4441

**Organization:** NCBBA

**Comment ID:** 140568

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I strongly urge the NPS to carefully consider the Coalition for Beach Access Cape Hatteras National Seashore Recreational Area ORV Access Environmental Impact Position Statement The positions stated in that document and its attachments represent a common sense, reasonable approach to address two of the most significant responsibilities the National Park Service must fulfill within the ORV Management Plan.

**Corr. ID:** 14887

**Organization:** NC Marine Fisheries Commission

**Comment ID:** 137646

**Organization Type:** State Government

**Representative Quote:** Our commission, along with the Division of Marine Fisheries, had representatives on the Negotiated Rulemaking Advisory Committee which ended without consensus. We find that many of the statements and positions of the Coalition for Beach Access are consistent with the work of the Negotiated Rulemaking Advisory Committee; therefore, we endorse and support the following portions of the position statement of the Coalition for Beach Access relative to the Draft ORV Management Plan/EIS (DEIS) for the Cape Hatteras National Seashore:

- 3.0 Importance of Public Beach Access
- 3.1 Traditional and Cultural Values
- 3.2.3 Fishing
- 3.2.8 High Recreational Value Ocean Beaches
- 3.2.9 High Recreational Value Sound Side Locations
- 3.3 Commercial Values
- 5.0 Selected Legislation and Management Policies Relevant to an ORV Plan
- 6.1 ORV Ocean Side Ramps
- 7.0 Conclusion

**Response:** The NPS has examined the recommendations in the Coalition for Beach Access's Environmental Impact Position Statement. In the revised alternative F, specific areas where the NPS has revised routes to be more in line with the Coalition's recommendations include year round ORV access between 1.5 miles south of Ramp 23 and Ramp 27. In other cases, such as the vehicle free area from Ramp 1 to ½ mile south of Coquina Beach, the NPS has elected to keep those beaches vehicle-free under alternative F to provide a large pedestrian and day use area for Seashore visitors. Additionally, ML1 species management measures have been eliminated from the revised alternative F. Instead, standard buffers with increased monitoring, equivalent to the ML2 measures in the DEIS, will be used at all locations, when bird breeding and nesting activity is observed, to appropriately protect species while providing more predictable access for ORV and pedestrian visitors. For complete responses to other specific suggestions recommended by the Coalition, please see Concern Statements 24192 (use of corridors), 24194 (buffer distances), 24150 (protection of non-federally listed species), 24143 (turtle relocation), 24263 (ecosystem methodology), 24281 (use of Pea Island for visitor use areas), 24146 (habitat creation), 24135 (predator management), 24087 (false crawls), 24089 (night driving), 24193 (turtle closures), 24087 (nest lost due to human activity), 24096 (fees for permits), and 24160 (cultural analysis). Although some suggestions from the Coalition for Beach Access have been adopted, Alternative F has been modified to also include additional vehicle-free areas to ensure a wide range of visitor use and activities.

### **Concern ID: 24233**

**Concern Statement:** Commenters recommended that the Seashore adopt the turtle management policies contained in Larry Hardham and Robert Davis' position paper.

**Representative Quotes:**

**Corr. ID:** 14248

**Organization:** *Not Specified*

**Comment ID:** 141021

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Furthermore, I recommend that NPS turtle management policy be amended to reflect local knowledge and experience. This requirement can easily be met at the Seashore by adopting the proposed policies recommended by Larry Hardham and Robert Davis as these individuals have more collective knowledge of sea turtle nesting at CHNSRA than probably any employee of the Service or NCWRC. Their approach is adaptive and sound. Similar approach has been shown to be highly successful. It must be remembered, its not the number of nests that ultimately count but the number of hatchlings that make it to the sea. Their work can be found at: <http://www.obpa-nc.org/turtles/TurtleMgmtProgram.pdf>

**Response:** Under revised alternative F sea turtle management procedures at the Seashore are based on the latest scientific research and are consistent with the latest U.S. Fish and Wildlife Service Recovery Plan for the Northwest Atlantic Population of the Loggerhead Sea Turtle (2008) and NCWRC guidelines which have both been developed by scientific experts in the field of loggerhead sea turtle biology and conservation.

For additional information regarding why the NPS is not considering relocating more turtle nests, using hatcheries and/or corrals, and an analysis of the “the number of hatchlings that make it to the sea,” as a factor in management, etc., see the NPS response to Concern ID 24143. For more information regarding the trained volunteer program for sea turtles see the NPS response to Concern ID 24115.

**Concern ID: 24236**

**Concern Statement:** Commenters stated that, while there is an environmentally preferred and an NPS preferred alternative, there should also be a user preferred alternative.

**Representative Quotes:**

**Corr. ID:** 10917

**Organization:** *Not Specified*

**Comment ID:** 131929

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The residents and property owners of the area should be allowed to vote on any changes to beach use policies, rather than said policy changes being made as a result of legal action or other directives from parties that are not actively using the island.

**Corr. ID:** 15167

**Organization:** Coastal Conservation Association

**Comment ID:** 139597

**Organization Type:** Conservation/Preservation

**Representative Quote:** But what's very disturbing is that there's no -- there is a Environmental Preferred Option, an NPS Preferred Option. There is no User Preferred Option. There is no option in here that describes what the predominant users of the park would like to have in their option, for access to the beach. To suggest that a recreation area as this Park was established, should have closures with no human activity on the surf zone is absolutely absurd.

**Corr. ID:** 15236

**Organization:** *Not Specified*

**Comment ID:** 138844

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Point number two, of the six plans outlined, which one is advantageous for fishermen, surfers, and other beach users? It is clearly identified which is the environmental plan, Option D. And, also, the PNPS prefers Option F, but one major important option is missing; that is the one for the people who want to access their beach. Sadly, I did not find it in these 3 -- 800 pages.

**Response:** Identification of the environmentally preferable alternative and the agency preferred alternative are required by the Council on Environmental Quality NEPA regulations (40 CFR 1505.2(b), 40 CFR 1502.14(e)) and the NPS Director's Order #12 Handbook, Conservation Planning, Environmental Impact Analysis, and Decision Making (sections 4.5.E.9 and 4.5.E.8). There is no legal or policy requirement that a “user preferred option” be identified. In any case, various user groups and individuals expressed preferences for different alternatives in their comments on the DEIS.

**Concern ID: 24238**

Concern Statement: Commenters offered a variety of new elements to the alternatives, such as:

- designating a "backcountry" zone where pedestrians can walk
- establishing 2 marked travel paths on the beach, with a decreased speed limit
- constructing an "access trail" to be put in place that runs parallel to the Sound Side Beach with appropriate parking provided at different spots along the trail
- increase trail maintenance
- dividing the seashore by recreational uses
- contacting the management staff at Pismo Beach (CA) to see how they have accomplished their automobile traffic on the beach
- study the feasibility of implementing an environmentally sensitive mass transit system
- allow ORV corridors as a reward when species population numbers increase or as species are removed from the Endangered Species List
- the NPS should allow buffers where visitors could remain in their vehicles to observe bird life, as is done at Padre Island National Seashore, which would allow for closer observation.

**Representative Quotes:**

**Corr. ID:** 3851

**Organization:** *Not Specified*

**Comment ID:** 137493

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The Tern and Plover Conservation Partnership uses a voluntary, proactive approach to avoid and minimize bird-people conflicts and to reduce or eliminate the need for law enforcement personnel to be involved in tern and plover management. There were no conflicts or need for law enforcement recorded in 2009, as was the case in 2008.

Before terns and plovers returned to Nebraska and the field season began, TPCP met with the production managers of all area sand and gravel mines. At these meetings, we discussed the mining companies' production plans for the season, safety regulations, and site access. We paid particular attention to concerns mine personnel had regarding previous on-site activities of the TPCP and changes to MSHA (Mine Safety and Health Administration) policy as it applies to non-mine personnel. We also met with homeowners associations at the lakeshore housing developments. At these meetings, we discussed the construction plans for the area and site access. We paid particular attention to property owners' concerns regarding previous on-site activities of the TPCP. See Table 1 for a list of active and inactive sand and gravel mines and lakeshore housing developments in the Lower Platte River.

Based on our pre-nesting season conversations with mine production managers and homeowners' associations, we mapped out the areas where it would be best if the terns and plovers did not nest. These were the areas within the mine property that were going to be dredged during the nesting season or where heavy equipment was going to be operating. At the housing developments, these were the areas where buildings were to be constructed or utilities were to be installed.

A result of each of these meeting was site-specific management and monitoring plans; an equally valuable result was becoming acquainted with the people living and working at these sites. As the season progressed, this made our management efforts easier to implement. Throughout the season, we maintained close contact with these individuals so we could respond to any on-site changes that developed as the season progressed.

<http://fieldguide.mt.gov/detail/ABNNB03070.aspx>

**Corr. ID:** 5757

**Organization:** *Not Specified*

**Comment ID:** 133384

**Organization Type:** Unaffiliated Individual

**Representative Quote:** As at other Seashores, I would prefer to see a numerical limit placed on ORVs using certain access ramps. With no limit set, an unsustainable number of vehicles could accumulate and ruin both the recreational experience as well as degrade the environment.

**Corr. ID:** 12656

**Organization:** *Not Specified*

**Comment ID:** 140045

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pismo Beach is a beautiful strand of light brown sand in California. It has had years of automobile traffic on the beach as well as dune buggies and other off road vehicles back in the dunes. Pismo Beach State Park manages the beach and Oceano Dunes State Vehicle Recreation Area manages the dunes.

There was an ongoing battle over the use of vehicles in this area, but it has been solved finally with a little give and take between the conflicting groups, mainly beach goers, vehicles, fishermen, and environmentalists.

Some areas of the beach are completely closed to all vehicles except state park ranger patrols. The off road dune area is strictly managed and limited to keep the sands from becoming free to shift and move, which had been resulting in the dunes encroaching on farmland. Wildlife--plants and animals--are protected.

I suggest and even recommend that you talk with the rangers at these two state parks in order to see how this has all been accomplished. You might ask how they could improve upon the situations if they could do it over.

**Corr. ID:** 13368

**Organization:** *Not Specified*

**Comment ID:** 137991

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would suggest that we have 2 marked travel paths only on the beach with a speed limit of 6 mph.

**Corr. ID:** 13368

**Organization:** *Not Specified*

**Comment ID:** 137998

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Also marked paths every 1/4 to 1/2 mile with a stairway over the dunes that could be retrieved on the ocean side in event of a storm washaway.

**Corr. ID:** 13388

**Organization:** *Not Specified*

**Comment ID:** 138075

**Organization Type:** Unaffiliated Individual

**Representative Quote:** MAYBE THERE IS A WAY TO SEPARATE THE SURF FISHERMAN FROM THE RECREATIONAL BEACH GOING ORV'S. POSSIBLY SOME BEACHGOERS SHOULD HAVE ACCESS TO NORTHERN BEACHES AWAY FROM THE POINTS AND SURF FISHERMAN ACCESS TO MORE SOUTHERN RAMPS AND THE POINTS. THIS COULD SEPERATE THE MORE WILDLIFE CONCIOUS FISHERMAN FROM THE TOURIST AND BEACH GOERS. IF POSSIBLE MAYBE A SEASON COULD BE DESIGNATED FOR FISHING ACCESS TO THE POINTS.

**Corr. ID:** 13438

**Organization:** National Parks Conservation Association

**Comment ID:** 140921

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In 2005, the SAFETEA-LU legislation established a new program called the Alternative Transportation in Parks and Public Lands program, changed in 2008 to the Paul S. Sarbanes Transit in the Parks program. Administered by the Federal Transit Administration in partnership with the Department of the Interior and the Forest Service, the program funds capital and planning expenses for alternative transportation systems in national parks and public lands. The goals of the program are to conserve natural, historical, and cultural resources; reduce congestion and pollution; improve visitor mobility and accessibility; enhance visitor experience; and ensure access to all, including persons with disabilities.

Programs, resources, and expertise now exist that CAHA can access and could employ to answer the questions: Are there feasible alternatives to recreational ORV use in getting visitors on and off the beach including those with fishing equipment? Specifically, NPS should be contemplating whether some sort of environmentally sensitive mass transit system could accomplish the objective of getting people efficiently on and off the beach while reducing the number of vehicles and vehicle trips. If such a study is too complex for the FEIS, then the FEIS should assert and spell out that such a study is needed, will follow the FEIS, and that NPS will adaptively adjust its management in light of an alternative transportation study. Moreover, such a study should be complementary to the wilderness suitability study, previously discussed, to distinguish precisely between those areas where mass transport of visitors is suitable and those where it is not (i.e. wilderness).

**Corr. ID:** 13766

**Organization:** *Not Specified*

**Comment ID:** 135548

**Organization Type:** Unaffiliated Individual

**Representative Quote:** An "access trail" needs to be put in place that runs parallel to the Sound Side Beach with appropriate parking provided at different spots along the trail. This will provide an off set when areas of the ocean front have to be closed. This would provide access as per the back side of Hatteras Island south of the Ferry Dock. In addition, a Sound Side Public Beach needs to be put in place that is comparable to the Ocean Side Public Beach on Ocracoke. This will provide an alternative for Park Users when the Ocean Front Beach is less than desirable as to weather conditions (wind) and parts of the Ocean Beach is closed for environmental/habitat reason.

**Corr. ID:** 14642

**Organization:** *Not Specified*

**Comment ID:** 139147

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Corridors are fine for pedestrians but ORV corridors have a greater negative impact on T/E species attempting to breed, feed, germinate, etc. in this particular barrier island habitat. Save them as a reward when T/E species numbers are routinely up to those needed to take them off the Endangered Species Listing.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140262

**Organization Type:** Unaffiliated Individual

**Representative Quote:** There is an important recommendation not found in the DEIS. If the NPS were interested in providing a quality visitor experience they would recommend that visitors remain in their vehicles to observe bird life. This recommendation has been used for many years at Padre Island National Seashore since they recognized that birds are not as easily disturbed by vehicles which allows for closer and more meaningful observation. NPS lacks such a balanced view in the DEIS. This wasn't much help for birds within closures since they will be too far away for any observation in a vehicle.

**Corr. ID:** 15038

**Organization:** *Not Specified*

**Comment ID:** 137996

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Another element of the Assateague program should be used at Hatteras, namely the designation of a "backcountry" zone where visitors can walk a few miles, perhaps camp overnight away from motorized traffic, and enjoy the sights and sounds of the wild beach and the ocean. This is one of the great values of a national seashore.

**Response:** Backcountry Zone: Designation of a backcountry zone is not within the scope of this project. However, the Seashore will more appropriately address park management zones in the revision of the General Management Plan (GMP) for the Seashore.

Two Marked Travel Paths and 6 mph Speed Limit: While marking travel lanes in ORV routes along the length of the Seashore would not be possible nor desirable because of the visual impact, alternative F requires that two-way traffic remain unimpeded within ORV routes and provides the Seashore with the authority to close down a section of beach if two-way traffic is impeded. Alternative F reduces the speed limit from 25 mph to 15 mph year round. Reducing the speed limit to 6 mph Seashore-wide may be overly burdensome and could result in ORVs getting stuck in areas of deeper soft sand.

Build Access Trail to S. of Hatteras Ferry Dock : Over the past several years the Seashore has provided ORV access to the back side of Hatteras spit whenever it is not in conflict with safety, bird nesting or foraging, and it would not cause additional damage to the vegetation and general ecological attributes of the area. Some of the sound shoreline area is very narrow with a small strip of sand that is subject to flooding at high tide unless one drives on the vegetation, including wetland vegetation, that bounds it on the land side. Because it is problematic to access the Sound from Pole Road at other points, alternative F provides for ORV access to the Sound behind the Coast Guard Station, at Cable Crossing and at Spur Road.

Add Public Soundside Beach on Ocracoke: NPS believes that this suggestion has merit. However, it is outside the scope of the ORV plan/EIS. It would be an appropriate topic for the upcoming GMP process.

Divide the Seashore by Recreational Use: The purpose of the plan is to develop regulations and procedures that carefully manage ORV use/access in the Seashore to protect and preserve natural and cultural resources and natural

processes, to provide a variety of visitor use experiences while minimizing conflicts among various users, and to promote the safety of all visitors (DEIS, p. 1). While it is recognized that individuals who use ORVs do so for a variety of purposes or to pursue different recreational interests, developing a nuanced approach to designating ORV areas based on the different individual interests would be extremely difficult and is beyond the scope of this plan. By offering a variety of designated ORV routes and vehicle free areas, visitors will have the opportunity to select the locations best suited for pursuing their respective interests, whether it be fishing, swimming, shell collecting, bird watching or other uses.

Learn from the Experiences of Pismo Beach: In developing the draft plan/EIS, NPS has considered information on management and experience at a number of other areas. However, management at the Seashore must be responsive to federal law and policy which differs from that governing state managed areas. For example, the Pismo Dunes State Vehicular Recreation Area (currently named “Oceano Dunes”) was established specifically for the recreational use of ORVs and allows modification of the natural environment to enhance the recreational experience (CAL. PRC. CODE § 5090.43). The Seashore has a much different purpose and significance. Therefore, regulatory requirements and management considerations are markedly different between these two areas.

Environmentally-sensitive mass transit system: Under alternative F (DEIS p. 111), the NPS would consider applications for commercial use authorization to offer beach and/or water shuttle services, which are types of mass transit, when not in conflict with resource protection measures. When considering permitting a beach shuttle system, the Seashore would continue to operate under the wise energy use guidelines and requirements stated in the NPS 2006 Management Policies, Executive Order 13123 (Greening the Government Through Effective Energy Management), Executive Order 13031 (Federal Alternative Fueled Vehicle Leadership), Executive Order 13149 (Greening the Government Through Federal Fleet and Transportation Efficiency), Executive Order 13514 (Federal Leadership in Environmental, Energy, and Economic Performance), and the 1993 NPS Guiding Principles of Sustainable Design. The NPS has developed and submitted proposals to seek funds that would conduct an alternative transportation feasibility study. This study would help determine the viability of a transportation system to move visitors within and destined to the points, spits, and key recreational areas within the Seashore. Based on the outcome of a feasibility study, additional funding options could be pursued to support the development and implementation of a transportation system.

Allow ORV-corridors when Species Numbers Increase: The DEIS establishes long-term goals (“desired future conditions”) for protected species affected by this plan/EIS (DEIS, pp. 7-10) and adaptive management and periodic review processes (p. 74) for evaluating progress toward achieving those goals. When desired future conditions for resources are met or exceeded, periodic review and adaptive management may allow for more flexible management of recreational use, provided adverse impacts of such use are effectively managed and wildlife populations remain stable. When desired future conditions for resources are met or exceeded, it may allow for more flexible management of recreational use, provided adverse impacts of such use are effectively managed and wildlife populations remain stable. The populations of protected species that meet or exceed the goals set forth in this section would continue to be protected in accordance with applicable federal and state laws and regulations. See response to Concern ID: 24127

Visitors remain in ORVs when birding, like Padre Island: Padre Island National Seashore does not have a program that recommends visitors remain in their vehicle while observing birds or other wildlife.

#### **Concern ID: 24289**

**Concern Statement:** One commenter suggested that the NPS conduct a soil survey and look at low impact development alternatives.

#### ***Representative Quotes:***

**Corr. ID:** 14242

**Organization:** ENVISCI3330 Land Use Management

**Comment ID:** 140406

**Organization Type:** Unaffiliated Individual

**Representative Quote:** One thing the NPS might want to ask itself is has all the alternatives been considered? Was there proper consideration of a soil survey and have all low impact development alternatives been considered.

**Response:** Soils and the possibility for disturbing sand, compacting sand, creating ruts, and changing the local topography, was dismissed under the “Geologic Resources” impact topic in Chapter 1 (pages 31 of the DEIS). While ORV use could result in increased erosion, the Seashore is a dynamic ecosystem and visual impacts from ORVs are quickly erased by tides, winds, rain, hurricanes, and other storm events. With the use of designated ramps, which are strictly enforced throughout the Seashore, ORV impacts to dunes are a rare occurrence. Alternative F includes the construction of new ramps and parking areas. As indicated in the impact analysis in chapter 4 of the EIS, ramps and parking areas would be designed and constructed with a semi-permeable clay/shell base, turf block, or some other porous material, using environmentally sensitive standards to minimize stormwater runoff. Given these conditions, it was determined that impacts to geologic resources, including soils, would be less than minor and therefore this was not carried forward for further analysis in the DEIS and a soil survey was not warranted. The FEIS, under “Issues Considered But Dismissed From Further Analysis – Geologic Resources” will include additional text stating that the impacts would be minor or less. It should also be noted that issues related to sand compaction are included in the DEIS in the discussion of how ORV use impact invertebrates at the Seashore (DEIS starting on p. 484)

**Concern ID: 24640**

**Concern Statement:** One commenter suggested the DEIS should have a no action alternative that reflects the regulations being enforced in 2004 that were adopted from the 1978 draft plan with updates through superintendents' compendiums.

**Representative Quotes:**

**Corr. ID:** 14152

**Organization:** *Not Specified*

**Comment ID:** 140705

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The baseline socioeconomic analysis does not recognize the de facto plan that was in place in the years leading up to the "interim plan", unofficial only because of bureaucratic failures. The DEIS should have an No Action Alternative that reflects the regulations being enforced in 2004 that were adopted from the 1978 draft plan with updates through superintendents' compendiums. The cumulative impact of the NPS' Preferred Alternative F policies on the visitor experience and the regional economy should be assessed relative to their pre-interim plan baseline.

**Response:** Analysis of impacts for all impact topics, including socioeconomic analysis, is conducted on the no-action alternative as the baseline. NPS analyzed impacts under the two alternatives identified for the plan as the "no-action" alternatives: Alternative A (the interim protected species management strategy) and alternative B (the consent decree), which describe current management during the development of the Plan/EIS. Commenter's suggested "no action" alternative, comprising management in 2004 and earlier, predates the beginning of the planning process for the ORV Management Plan/EIS. Additionally, management in 2004 and earlier would not meet either of the purposes of a "no-action" alternative as described on p. 59 of the DEIS. It would not represent a viable alternative for meeting the agency's purpose and need to regulate ORVs in a manner that is consistent with applicable law, and appropriately addresses resource protection (including protected, threatened, and endangered species), potential conflicts among the various Seashore users, and visitor safety. It would not bring the Seashore into compliance with the criteria of Executive Orders 11644 and 11989 for designation of ORV routes. It also would not meet the second purpose of a "no-action" alternative to serve to set a baseline of existing impacts continued into the future against which to compare the impacts of action alternatives. The existing impacts are encompassed under Alternatives A and B.

***AL5000 - Alternatives Considered but Dismissed: Consider Pea Island Wildlife Refuge when Considering Use Areas***

**Concern ID: 24281**

**Concern Statement:** Commenters requested that the FEIS consider Pea Island when calculating the amount of space available to visitors, specifically available to pedestrian use. They also questioned why it was considered in previous planning efforts and is not being considered now.

**Representative Quotes:**

**Corr. ID:** 13261

**Organization:** *Not Specified*

**Comment ID:** 140530      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Pea Island is a prime, ORV-free pedestrian area in close proximity Rodanthe-Waves-Salvo. This must be included in the calculations. Respectfully, exclusion of this area simply due to management by a different governmental entities is nonsensical and is non-inclusion of species of concern in areas in close proximity to the Seashore.

**Corr. ID:** 14956      **Organization:** *Not Specified*

**Comment ID:** 137338      **Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the DEIS complete dismissal of Pea Island National Wildlife Reserve as a resource that affects the visitor experience and therefore the ORV Plan / Environmental Impact Statement. I understand that the use of PINWR is managed by a different arm of the DOI, and that this area is not available for consideration for ORV use. However, the value of PINWR must be recognized when assessing the DEIS for the Seashore. The strategic location of PINWR provides ready access to 13 miles of pedestrian only beaches to visitors. The location is strategic because it is convenient to both the visitors staying outside the Seashore in the towns north of Oregon Inlet as well as to the visitors staying in the villages within the boundaries of the Seashore. It is irresponsible for the NPS to exclude these miles of beach from the analysis as if they did not exist. The resulting implication that fewer miles are available for the pedestrian only experience is false and misleading. I'm not suggesting these beaches should be open to ORV use, only that their value to the visitor experience be recognized in the overall assessment. The typical visitor to the seashore has limited, if any, awareness of the differences between PINWR and CAHA, other than the driving restrictions and certainly consider this area when considering their overall experience. The NPS continued refusal to recognize PINWR as an available resource used by the typical CAHA visitor seems to be based on an intention to manipulate its assessment of Seashore needs rather than an intention to recognize the reality of the visitor AND resource experience.

**Response:** As explained in the DEIS, the Pea Island National Wildlife Refuge (Refuge) is administered by the U.S. Fish and Wildlife Service (FWS) and therefore the NPS cannot direct the management of visitor use at the Refuge. The Seashore's 1978 draft interim ORV management plan affirmed that the Refuge Manager has management responsibility for posting closures on beaches within the Refuge as he or she may find necessary to implement the regulations of the FWS. (DEIS p. 23) In 2006 the FWS published the Pea Island National Wildlife Refuge Comprehensive Conservation Plan that describes how the Refuge will be managed over the next 15 years as mandated by the National Wildlife Refuge Improvement Act of 1997.

NPS recognizes that approximately 12.1 miles of beach within the Refuge has been closed to ORVs for a number of years and at present provides an opportunity for visitors to the north end of Hatteras Island to walk on the beach in the absence of vehicles. NPS also recognizes that there are times and locations on Nags Head and Cape Lookout National Seashore beaches, where ORVs may and may not be driven, providing additional opportunity for recreation with and without vehicles.

Under the Organic Act, the NPS is responsible for managing activities in the Seashore to conserve the natural resources unimpaired on NPS-managed lands within the Seashore, which includes protecting the wildlife and its habitat. Similarly, under the Seashore's enabling legislation, NPS is mandated to preserve the unique flora and fauna and physiographic conditions. The presence of a species outside the Seashore does not mitigate, eliminate, or affect the authority and responsibility of the NPS under both the Organic Act and the Seashore enabling legislation to preserve unimpaired the Seashore populations of wildlife.

In the FEIS, NPS has added a column for the Refuge beaches at the end of Table 7 (DEIS p. 101) and in Table 7-1 in the FEIS in response to the comment that the Refuge beach mileage should be disclosed so the public is aware of the total miles of beach that are designated as ORV routes or vehicle free from the northern to the southern boundary of the Seashore.

### ***AL5090 - Alternatives Considered but Dismissed: Relocate birds and turtles***

**Concern ID:** 24143

**Concern Statement:** Commenters requested that the relocation of turtle nests be considered in the range of alternatives and suggested references that indicate the benefits of turtle nest relocation. They further stated that this

management approach is used at Pea Island and should be used within the Seashore. Commenters also stated that hatcheries for turtles should have been considered in the DEIS, with some suggesting this could be done with additional educational programs.

**Representative Quotes:**

**Corr. ID:** 10559

**Organization:** *Not Specified*

**Comment ID:** 136560

**Organization Type:** Unaffiliated Individual

**Representative Quote:** 5. Turtle management and protection far exceeds requirements. North Carolina has only 1% of the nesting of turtles as compared to Florida with 91%. Yet Florida relocates nests and allows human use of the beach with turtle nests marked off by stakes. More devastating to turtles are weather related events. With 1% of the turtle nests, why should North Carolina have the most prohibitive restrictions? NPS should advocate nest relocation, captive rearing, or hatcheries as do other areas. Educate the public. Provide NPS sponsored "watch the hatchlings" supervised and managed events. Relocate nests in danger of weather related events. Marking the nests and educating the public will allow co-use of the beach by humans and wildlife - don't over-regulate by restricting overly large areas.

**Corr. ID:** 11206

**Organization:** *Not Specified*

**Comment ID:** 135458

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I support adopting more proactive techniques used at other east coast locations to encourage turtle nesting success but the NPS seems to ignore these "best practices". The NPS does not address environmental issues that have proven more detrimental to turtle recovery success than ORVs or pedestrians (p. 392-396). The DEIS states (p 87 and 219) that 38.5% of nests had no hatchings due to weather events. The NC Wildlife Resource Commission relocation guidelines are inadequate based on the fact that 55% of the Recreational Area and 60% of the State Leatherback nests have been lost over the past 10 years. Other states use the "average high tide line" rather than "seaward of debris line marking spring high tide" to identify which nests need to be relocated. The NPS should review the success of practices used at Cape Lookout which show better hatch rates when nests are moved. Data from other states shows that there is 50% probability of a successful hatch when nests are moved and that rate has been shown to approach 90% if the move is accomplished in a scientific manner. It is interesting that the NPS position on nest relocation supports moving the nests when storms are imminent but not before. It is also an interesting coincidence that these high risk nests (based on weather) are located in prime ORV corridors. Moving the nests in a scientific manner would benefit both the turtles and the ORV users - a win-win situation.

**Corr. ID:** 14248

**Organization:** *Not Specified*

**Comment ID:** 140937

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Turtle management as proposed within Alt. (F) will, in all likelihood, result in a documented and stable, nearly 40% loss in viable nests. It is ironic that within PINWR, though still within the Seashore, an entirely different set of protocols are observed with a much higher nest success rate. Turtle management at CHNSRA needs be proactive. Our beaches change daily, though in some cases are seasonally predictable in form. When turtles nest in high risk areas, we as a community attempt to inform NPS that a given nest needs relocating. We have usually been ignored only to see the Service plow the nest into the sea because it was collectively deceased. The Service has a long history of ignoring local knowledge which is in conflict with its own policy. In spite of this rejection of local knowledge and in spite of years of night driving on the beaches of CHNSRA, the Seashore still presents a better false crawl ratio than that USFWS expects from a totally undisturbed beach.

**Corr. ID:** 14308

**Organization:** *Not Specified*

**Comment ID:** 140415

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Why will the Cape Hatteras National Seashore Recreational Area not take more proactive measures to increase the success of hatching sea turtles as is done in other turtle nesting areas throughout the world? Other areas throughout the world:

- a.) Dig the nests and relocate them to a secure area
- b.) Use incubators with great success to ensure optimal hatching rates
- c.) Release hatchlings into the water beyond the surf zone eliminating one of the most hazardous steps in the survival of young turtle hatchlings

**Corr. ID:** 14760

**Organization:** *Not Specified*

**Comment ID:** 137011

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In order to truly assist the turtle population, improved management should be employed . Since the female turtle, leaves the nests once laid. the nests should be moved (page 86) in order to truly protect it from storm activity and predators. I t is understandable that the eggs should be allowed to hatch naturally due to the turtles behavior. However, it seems appropriate and prudent to help the survivability by something as simple a moving the nest, if in fact we are serious about helping the turtles.

It is common practice for the nests to be moved when there are expected storms. Unfortunately, it is often too late to attempt to move that many nests and many nests are lost Utilizing management techniques that allow vehicle and pedestrians to pass at night is a more balanced approach than simply shutting down the beach. Additionally, CHNSRA has a lower false crawl ratio than that of other areas that does not have the lighting that Cape Hatteras does. There is precedence of other turtle management techniques employed in other locations along the eastern seaboard as referenced on page 86-87.

The DEIS identifies the various risks of moving nests. These risks must be competently weighed against the benefits and contributing economic impact that an OSV management plan is and will certainly have on Cape Hatteras.

**Corr. ID:** 14765

**Organization:** *Not Specified*

**Comment ID:** 135677

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Massive turtle closures and other stringent regulations under the CD have shown no appreciable beneficial effects, as nesting numbers within the park have mirrored those at PINWR, statewide and along the entire Atlantic seaboard, where the CD mandates were not in place. Large closures allow for more unrestrained movement and burrowing of Ghost Crabs within the fencing. Light abatement enclosures made from solid-weave materials further exacerbate the predation issue, as ghost crab and other mammalian predators are given a visible target for the location of the egg clutch. These light barriers also trap blowing sand within them placing further weight and depth -of sand upon the eggs, and they are notorious for trapping water and/or causing erosion over the egg clutch during period of overwash, putting the eggs and risk of drowning. Once again, PINWR uses protocols quite different and more effective than those just 60 miles southward.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140251

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Over the past 10 years the total weather related nest losses amount to the destruction of 27,700 eggs. Failure to protect against such loss was a deliberate decision by the NPS. During this time period they have rejected numerous times the information presented to them by others and myself. We have informed the local staff with procedures used nearby in North Carolina as well as those in other Atlantic and Gulf Coasts that have been extremely successful. The best example of increasing the number of an endangered sea turtle species is that of Padre Island National Seashore.

There by relocating all Kemps Ridley nests to a hatchery and protected release of all hatchlings, approximately 90% of the eggs laid produce hatchlings to the water. The turtle program under the DEIS will continue the destruction and further endanger the Loggerhead, the endangered Leatherback and Green Sea Turtle species. These losses must be considered as a "Take" under the ESA and NPS should be prosecuted under the provision of that law. The NPS may see protection by claiming they are operating under the USFWS and NCWRC recommendations but it is the NPS boots that are on the beach sand. NPS is the agency that is solely responsible to husband this resource.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140258

**Organization Type:** Unaffiliated Individual

**Representative Quote:** On page 87, corrals (a form of hatchery) were rejected because of catastrophic events and predator concerns. This is sheer hypocrisy. Corrals would be located in safe areas of both Ocracoke and Hatteras Islands. One corral would be on the north/south oriented beach of Hatteras and another on the east/west beach to minimize the effects of hurricanes. Direct hit from a category five (5) hurricane wipes out everything. Predator control in a corral is far superior to the program selected by the DEIS. Catastrophic losses as documented on pages 219 and 220 ranged 16% to 54% which is identical to the nest losses routinely produced by NPS management and projected forward through the DEIS. A positive turtle program is set forth by the access/conservation group in a separate document and is recommended. The document entitled, "Sea Turtle Management", can be found at <http://obca-nc.org/turtles/turtleMgmtProgram.pdf> (Copy attached).

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140449

**Organization Type:** Conservation/Preservation

**Representative Quote:** The NPS's stated concerns with regard to nest relocation also bear further examination. Changes in temperature (which may result in changes to the sex ratio) as well as increased hatch failure are known issues that can be addressed through the proper handling of eggs by properly trained personnel. Moreover, relocation can actually be beneficial to the sex ratio by taking advantage of temperature gradients to increase the percentage of female hatchlings. This is similarly the case with potential storm damage and predation at relocation sites. These issues can be addressed through utilization of multiple relocation sites, and appropriate corrals and screening to prevent predation. In fact, data from the Seashore and other coastal areas such as Cape Romain National Wildlife Refuge in South Carolina and Cape Lookout National Seashore in North Carolina consistently show that relocated nests have better hatch success than nests left in-situ. See, e.g., Cordes, J. and Rikard, M., Cape Lookout National Seashore 2005 Sea Turtle Monitoring program; [http://www.fws.gov/caperomain/text/Sarahforweb\\_poster.pdf](http://www.fws.gov/caperomain/text/Sarahforweb_poster.pdf) (stating that "[h]atcheries should continue to be used on Cave Island as a management tool" due to the 2 A - island's high erosion rate and other factors). With adherence to appropriate protocols, these risks can be addressed in a manner that ensures that relocation benefits, rather than harms, the species.

In sum, natural nesting has and can be expected to continue to be associated with a decline in turtle species populations. Rather than dismiss routine nest relocation out of hand as inconsistent with species protection, with no scientific support, the final EIS should seriously evaluate and consider routine nest relocation as a legitimate and beneficial species protection measure to address the special hazards to sea turtle breeding at the Seashore.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140448

**Organization Type:** Conservation/Preservation

**Representative Quote:** Rather than consider relocation of sea turtle nests as a viable measure to protect and enhance sea turtle populations at the Seashore, the DEIS, without any meaningful analysis, quickly dismissed nest relocation from further consideration as an alternative element. DEIS at 87. Although the DEIS discussed some of the concerns with nest relocation, it erroneously concluded-without scientific or other support-that conditions at the Seashore other than recreation do not present a high risk to sea turtle nests.

As a premise for its dismissive treatment of nest relocation, the DEIS states that "The revised Loggerhead Sea Turtle Recovery Plan (NMFS and USFWS 2008) recommends the use of the least manipulative method to protect nests and states that as a general rule, nests should only be relocated if they are low enough on the beach to be washed daily by tide or if they are situated in well documented high-risk areas that routinely experience serious erosion and egg loss." DEIS at 87. The DEIS, however, inexplicably concludes that the Seashore is not such a well documented high-risk area and does not present "special conditions" warranting further consideration of nest relocation as a species protection measure. Id. It should go without question, however, that the beaches of the Outer Banks, and particularly Ocracoke and Hatteras Islands, are part of an extraordinarily dynamic system that experiences strong ocean currents and wave action, significant storm activity, high tidal action, and rapid erosion rates. These having nothing to do with recreation-present severe challenges to successful sea turtle reproduction. The DEIS's conclusion that they do not present a high-risk situation or special circumstances for sea turtle nesting and hatchling survival simply cannot be justified.

Data from the Seashore's annual reports indicate that nests laid late in the season (i.e., after July 9) have a more than 50 percent chance of being lost. Many of these nests would benefit from relocation, owing to the special, high-risk, non-recreation related conditions present at the Seashore.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140445

**Organization Type:** Conservation/Preservation

**Representative Quote:** Because most of the extensive sea turtle nest loss historically experienced at the Seashore cannot be attributed to ORV use, the highly restrictive buffers and closures that would be required under Preferred Alternative F are an inappropriate and unnecessary tool to protect sea turtle species. Nesting success has been particularly poor near the Seashore's points and spits due to the especially high erosion rates at those locations. Hatchlings in these areas also face significant risk of mortality due to being swept into inlets upon entering the ocean or getting caught up in the violence of Cape Point without sufficient energy to escape. Nests in these areas should be relocated to improve the likelihood of successful emergence and hatchling survival.

**Corr. ID:** 15045

**Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137915

**Organization Type:** Unaffiliated Individual

**Representative Quote:** 2. Failure to provide technical references.

The DEIS dismisses from further consideration routinely relocating turtle nests based in part, on reference to studies indicating that the "determination of the hatchling sex ratio depends on the temperature at which the eggs incubate". DEIS at 86. This portion of the DEIS fails to offer citation to which study or studies it makes reference to. When federal agencies evaluate technical issues or apply specialized expertise, NEPA requires them to rely on valid sources and to disclose methodology, present hard data, cite by footnote or other specific method to technical references, and otherwise disclose and document any bases for expert opinion. 40 C.F.R. § 1502.24; *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150 (9th Cir. 1998). 42 U.S.C. § 4332(A); 40 C.F.R. § 1502.6. NEPA does not envision undocumented narrative exposition, instead requiring:

Agencies shall insure the professional integrity, including the scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.

**Corr. ID:** 14993

**Organization:** *Not Specified*

**Comment ID:** 137172

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Table 10. Species Management Strategies for Action Alternatives

#### Management Activities Sea Turtles

This section describes how sea turtles will be managed at CHNS for the next ten to fifteen years with a number of references to NCWRC "direction", "handbook", "consult with" and "work with". In a paper titled "Distorting Gene pools by Conservation: Assessing the Case of Doomed Turtle Eggs" written by N. Mrosovsky, the author states that "Much depends on local circumstances," and "Rigid rules applied to whole beaches may be inappropriate because the presence and position of flood cliffs along the beach, or of other features indicating almost certain destruction of eggs, may change within a season. Some flexibility and room for judgment is recommended, combined with periodic validation of predictions about the fate of particular clutches."

NPS must request site specific guidelines for this Seashore to change procedures of the last ten years that have lead to 36.4% of nests laid at CHNS producing no hatchlings and 43.3% when you add nests hatchling fewer than 20%.

Three changes must be demanded from NCWRC:

1. Use of the "debris line from spring high tide" rather than the "average high tide line" as is now in the NCWRC handbook as the guide for nest relocation.
2. Use of relocation areas or zones as are used at Cape Lookout and approved by NCWRC and USF&W.

3. Reduced buffer sizes for nests at the hatch window for nests that will be watched by a Nest Watch Program. There is no need for current excessive closures 24/7 when nests are watched at night. Use the procedures used at Pea Island for closures which are approved by USF&W.

**Corr. ID:** 15072

**Organization:** COUNTY OF HYDE

**Comment ID:** 138142

**Organization Type:** County Government

**Representative Quote:** Hyde County believes endangered sea turtles would benefit from management practices now in use at other federal seashores that are more proactive in efforts to achieve nesting success. This includes relocating nests to more desirable locations as is done in other state and federally controlled areas. The Cape Hatteras National Seashore Recreational Area is on the northernmost fringe of turtle nesting locations for the southeast. In this area, weather and predators represent the greatest threat to sea turtles. Nesting in the United States occurs primarily in four southeastern states as detailed in the USFWS & NMFS species "Recovery Plan"

North Carolina 1.0 % The northernmost area with the fewest nests

South Carolina 6.5 %

Georgia 1.5 %

Florida 91.0 % Primary area where the most nesting occurs

The Loggerhead Recovery Plan recognizes that, "Historically, relocation of sea turtle nests to higher beach elevations or into hatcheries was a regularly recommended conservation management activity throughout the southeast U.S." (2009, Second Revision, page 52) while the North Carolina Wildlife Resources Commission (NCWRC) sea turtle program currently recommends relocation only "as a last resort."

The National Park Service in page 125 of the DEIS relies upon the approach used by North Carolina Wildlife Resources Commissioner (NCWRC). This contradicts the U.S. Fish and Wildlife Service (USFWS) practice of relocating nests on the Pea Island Wildlife Refuge, located on the north end of Hatteras Island, North Carolina.

By not supporting nest relocation, the Cape Hatteras National Seashore Recreational Area has lost over 46% of the nests laid in the last II years. Meanwhile, South Carolina relocated 40.1% of its nests during 2009, resulting in an incredibly low lost nest rate of only 7.7% making a strong case for the relocation of nests.

The turtle management practices outlined on DEIS pages 125, and 392 to 396 should be modified to allow nest relocation as a tool for species recovery. Statistics compiled Dare County DEIS Position Statement materials - Appendix B - Sea Turtle Management Practices in The Southeast Coastal Region. (attached)

**Response:** The management of sea turtle nests at the Seashore from a proactive relocation standpoint is consistent with the guidelines set forth in the most recent loggerhead recovery plan (2008) and set forth by the state of North Carolina in the NCWRC turtle handbook to use the least manipulative method to protect nests. The 2008 recovery plan states that "As a general rule, nests should only be relocated if they are low enough on the beach to be washed daily by tides or if they are situated in well documented high risk areas that routinely experience serious erosion and egg loss (e.g., nests laid near river mouths or beneath eroding sea walls)."

The Seashore's management protocols are also similar to the management of sea turtles in other states such as Florida and South Carolina. In Florida, the guidelines state:

"...nest relocation is considered a management technique of last resort.

Natural events, like storms, that accelerate beach erosion and accretion can sometimes reduce hatching success in existing nests. While damage from storm events can be severe, it is difficult to predict the precise areas where the storm is most likely to inflict damage. Because of the negative effects of relocating eggs and the unpredictability of storm events, FWC does not generally authorize permit holders to move nests out of areas threatened by storms. As a general rule, nests should only be relocated if they are low enough on the beach to be washed daily by tides or if they are situated in well documented high-risk areas that routinely experience serious erosion and egg loss (e.g., nests laid near river mouths or beneath eroding sea walls)." (FFWCC 2007)

In South Carolina, the management guidelines state that:

“Moving marine turtle eggs may create adverse impacts. Movement alone is known to kill developing embryos by rupturing delicate membranes that attach to the top of the egg. We also know that the incubation environment greatly influences the developing embryo and that nest relocation can involve the transfer of eggs from an appropriate environment to an inappropriate one.

Nest relocation must be considered a management technique of last resort and only if the likelihood of the nest surviving to hatch is nil. Disposable gloves should be worn at all times. The most desirable alternative is to eliminate the problems that prompt relocation of the nest. Normally, the only situation that justifies nest relocation is when a nest is laid seaward of the debris line marking the spring high tide.” (SCDNR 2009).

As indicated in discussions with staff of the SCDNR Marine Turtle Conservation Program (Hope 2010), their protocols do not necessarily mean that every nest laid seaward of the debris line marking the spring high tide is automatically relocated; this is used only as a guideline. Based on the characteristics of the beach where the nest is laid (e.g. topography, slope, how quickly it drains etc.) nests are evaluated on an individual basis as to whether or not “the likelihood of the nest surviving to hatch is nil.” and are relocated only if they meet the primary criteria of “Will the nest be destroyed in situ?” Following these guidelines, 40% of all nests (880 out of 2194 nests) found in South Carolina in 2009 were relocated while in 2010 (as of August 23, 2010) 43% of all nests (1328 out of 3100 nests) have been relocated. However, as noted by SCDNR staff (Griffin 2010) the majority of the nests relocated in SC occur along the 5 miles of beaches on Cape Island which experience high rates of erosion. During 2009 67% of the nests on Cape Island were relocated while 26% of the nests throughout the rest of SC were relocated. To date in 2010, 60% of the nests laid on Cape Island have been relocated while 34% have been relocated throughout the rest of SC (SCDNR 2010). During this same timeframe, Cape Hatteras National Seashore relocated 31% of the nests found in Seashore in 2009 (32 of the 104 nests) and 41% of the nests to-date (as of August 19, 2010) in 2010 (58 of the 143 nests).

Seashore guidelines for relocating nests are discussed with NCWRC staff annually to determine the appropriateness of the criteria and their consistency with the NCWRC guidelines, the loggerhead recovery plan, and the goals of sea turtle management. However, because the location of “troughs” or flooding pools and other areas that are susceptible to erosion or frequent inundation change on a year-to-year basis, the specific guidelines for where nests will be relocated from/to will be evaluated and may change annually.

Despite misconceptions, the goal of the loggerhead recovery plan is not to place as many hatchlings in the water as possible. In the previous version of the recovery plan (NMFS & USFWS 1991), it advocated increasing nest success to 60%; however, this goal was originally set to encourage the management of human impacts to nesting success, such as lighting, vehicles, etc., and not storm events (pers. com. Michelle Bogardus, NPS, with Sandy MacPherson, USFWS). In the most recent recovery plan (NMFS & USFWS 2008), the goal of 60% nest success (i.e. hatching success) was removed. Recovery goals are now based on numbers of nests because it was felt that managers had gone beyond appropriate relocation measures to achieve the nesting success rate, even when nests did not need to be relocated, and this was not meeting the USFWS goal of providing protection for nesting females, nests and hatchlings while maintaining the natural process and behaviors to the maximum extent possible (pers. com. Michelle Bogardus, NPS, with Sandy MacPherson, USFWS).

Ultimately, nest hatching success is determined by environmental factors that cannot be controlled such as storms, temperature, sand-water content etc. While relocating nests that are laid low on the beach to areas higher on the beach protects nests from daily tidal inundation, relocating nests does not necessarily protect them from storm events. Storms are unpredictable as to if/when they will hit and where within the Seashore they will have an impact. As evidenced by the impacts of Hurricane Bill and TS Danny during 2009, storms can impact nests left in place as well as those that are relocated (7 of the 24 nests lost during these two storms had previously been relocated), and in fact, during the 2008 and 2009 seasons the nest success of relocated nests was lower than that of the in-situ nests. Also, NCWRC biologist Matthew Godfrey recently analyzed data from Bogue Banks, NC where due to a re-nourishment study; a 6-year moratorium was placed on Bogue Bank’s permit to relocate turtle nests. Godfrey compared the nest success from the 6-year moratorium period with the 6-year period prior to the moratorium when 30-40% of the nests on the island were being relocated. Overall, he found no statistical difference between the nest success during the two periods of time (pers. com. Michelle Bogardus, NPS and Matthew Godfrey, NCWRC).

While inundations of nests can reduce hatching success, studies have shown that nests that are partially inundated many times or completely inundated only once or twice still produce hatchlings (Foley et al. 2006).

While relocating nests can affect sex ratios in sea turtles, relocating nests can also alter other hatchling characteristics as well. Loggerheads naturally distribute their nests both temporally (nest several times throughout the nesting season) and spatially (locate nests low or high on the beach and in different sections along the beach). This not only helps to avoid completely losing their reproductive effort in case environmental factors, such as storms, temperature, sand conditions or other incubation environments preclude development of the hatchlings, but it also varies the incubation environment of the eggs. In addition to the sex ratio of the hatchlings, the incubation environment has also been shown to influence, among other things, size, early swimming behavior and early growth in hatchlings (Foley et al. 2006). Because the characteristics of hatchlings vary with incubation environments, a scattered nesting pattern also increases the variation of hatchling characteristics which may ensure that at all times, at least some hatchlings have characteristics that are appropriate for survival, when the exact characteristics that are best suited for survival vary unpredictably over space and time (Carthy et al. 2003). Relocating nests and/or concentrating them in one area of a beach (e.g. hatchery or corral areas) may very well reduce the variety of incubation environments that could influence the development of hatchling characteristics that increase survival rates (Foley et al. 2006).

The use of corral systems is also discouraged in the recent recovery plan that states management efforts should “phase out the use of hatcheries.” This is a result of increased understanding of the potential adverse effects associated with nest relocation, restraint of hatchlings, and concentrated hatchling releases (NMFS & USFWS 2008). Concentrating nests in a single location (corral) can increase the potential for disease, such as fungal problems, to spread to all nests and result in egg mortality. A single storm could wipe out all of the nests concentrated in one area, whereas if they have been left in-situ scattered about the beach some nests might otherwise survive and while corral systems may be able to help against predation during the incubation period, using corrals usually results in hatchlings being released in the same location, which has the potential to increase predation in the ocean area surrounding the release site after the hatchlings reach the water.

The use of true hatcheries is also being discouraged. At Padre Island National Seashore all Kemp’s ridley sea turtle eggs are relocated to an incubation hatchery. The decision to use this type of hatchery was a last resort management decision made when the species was on the brink of extinction as a way to help the species recover, a situation that does not exist for the loggerhead, leatherback or green sea turtle. Prior to 2005, the number of nests located along the entire Texas coast that were brought to the incubation facility averaged less than 50. Within the last several years nest numbers are now approaching 200 nests along the entire coast. As a result, the latest Kemp’s ridley recovery plan indicates that future management needs to consider protecting nests in-situ as nesting abundance reaches levels that outstrip the capacity to translocate all nests to hatcheries (NMFS & USFWS draft 2010).

The protocols for relocating nests at Pea Island are used due to the lower number of nests there each year. Given the size of the Seashore and the number of nests each year, using the same protocols that Pea Island uses would not be logistically feasible. Additionally, the use of key-hole fencing as opposed to filter fencing is not beneficial for the sea turtles and does have negative impacts. At Pea Island, volunteers install key-hole fencing every night and then remove it when they leave, for they do not watch the nest through the entire nighttime hours. When they leave, they cage the nest so that any hatchlings that emerge after the volunteers leave are trapped in the cage and then picked up by the turtle patrol the next morning. They are then kept in a bucket in the office over the day and released the following night. Unless volunteers are able to spend an entire night watching a nest, key-hole fencing would need to be installed and removed. This practice results in hatchlings expending a lot of their energy before they even reach the water, which likely results in greater mortality when released. If the Seashore used the key-hole fencing but did not cage the nest before volunteers left, emerging hatchlings would not have protection from light pollution, which is a documented problem at the Seashore. If the key-hole fencing were left up all night, it could funnel water to the nest even more than filter fencing, increase predation, and trap hatchlings. While the current use of filter fencing is not the perfect system and does have some drawbacks - it is labor intensive, some hatchlings have become trapped in it, and in some cases it can funnel water to a nest - it does provide protection against light pollution and is currently the best alternative available, though the NPS will continue to examine its effectiveness and possible alternatives with the NCWRC and USFWS.

**Concern ID: 24145**

Concern Statement: Commenters suggested that bird chicks could be moved from the Seashore, suggesting Pea Island as a possible location. Commenters also provided examples of other areas where chicks have been captive raised and released, or moved from their current location to another location, as examples that the Seashore should consider in this process.

**Representative Quotes:**

**Corr. ID:** 14393

**Organization:** *Not Specified*

**Comment ID:** 139916

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Reading different articles on the Piping Plovers it seems the use of "enclosures" is an effective way of notifying people where the birds are nesting and keeping the predators away. If one of the nests are found in a heavy traffic area and it is in emanate danger; move it as in the case of a Hurricane. No need to close the beach and grant the bird so much real estate. Post signs within a reasonable limit of the nests so everyone with binoculars can observe nature's beauty if they like. If someone is caught doing intentional harm to any of the wildlife on our beaches they should be prosecuted.

**Corr. ID:** 14836

**Organization:** *Not Specified*

**Comment ID:** 135786

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pea Island is reserved for birds. Is it possible to relocate the endangered birds and move there eggs?

**Corr. ID:** 15017

**Organization:** *Not Specified*

**Comment ID:** 137903

**Organization Type:** Unaffiliated Individual

**Representative Quote:** - In Nebraska, plovers are discouraged from nesting in certain areas, and encouraged to nest in other areas. ([fernandplover.unl.edu/Marcus%20et%20a1%20paper.pdf](http://fernandplover.unl.edu/Marcus%20et%20a1%20paper.pdf))

- In Montana, plover nests are moved up and away from rising water around reservoirs.

- In Montana, vegetation is burned, bulldozed and generally gotten rid of to help plovers. In Montana, a reservoir was NOT LISTED as "Critical Habitat" so the area could be altered. "This reservoir was excluded from the critical habitat designation because of a Memorandum of Understanding between the Bureau of Reclamation, the U.S. Fish and Wildlife Service, and the local irrigation districts. The memorandum, in combination with a biological opinion from the USFWS, guides management actions at this location (USFWS 2003)."

- In Montana, captive plovers are reared and released to the wild.

- All Montana- <http://fwp.mt.gov/wildthings/tande/plover.html>

- In Canada, plover first nesting attempt eggs are gathered and captive raised. They know the plovers will relay their eggs.

o <http://www.swa.ca/~Publications/Documents/Piping%20Plover%20Captive%20Rearine%20Protocols.pdf>

**Response:** Appendix G of the 1996 Atlantic Coast Piping Plover Recovery Plan represents the U.S. Fish and Wildlife Service's best professional advice regarding the management options that will prevent direct mortality, harm, or harassment of piping plovers and their eggs due to recreational activities. The recovery plan emphasizes the protection of piping plover nesting habitat, nests and chicks from human disturbance in the natural environment, rather than programs to relocate eggs to a hatchery or raising captive-reared piping plover chicks for release into the wild. The recovery objective for this species is to achieve a well-distributed increase in numbers and productivity of breeding pairs, and provide for the long-term protection of breeding and wintering plovers and their habitat.

A captive breeding program or relocation program would not be compatible with the underlying principles established in NPS Management Policies 2006. Management Policies 2006 states that natural processes will be relied upon to maintain native plant and animal species. They also state that "The Service will not intervene in natural biological or physical processes, except when directed by Congress; in emergencies in which human life and property are at stake; to restore natural ecosystem functioning that has been disrupted by past or ongoing human activities; or when a park plan has identified the intervention as necessary to protect other park resources, human health and safety, or facilities." The Seashore is also required to "successfully maintain native plants and animals by preserving and restoring the natural abundances, diversities, dynamics, distributions, habitat, and behaviors of native plant and animal populations and the communities and ecosystems in which they occur."

***AL6010 - Alternatives Considered but Dismissed: Create new habitat***

**Concern ID: 24146**

Concern Statement: Commenters suggested that the NPS look at creating additional habitat for these species. Suggestions included creating dredge spoil islands, as well as clearing vegetation around the salt pond and ephemeral ponds at Cape Point. One commenter suggested that the NPS provide information about the potential impacts of habitat creation and stated that manipulation of habitat requires funding and may not be legal.

***Representative Quotes:***

**Corr. ID:** 1172

**Organization:** *Not Specified*

**Comment ID:** 132212

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would like to see the area around the salt ponds cleared for a bird habitat. When it was cleared before, birds used it and flourished.

**Corr. ID:** 2747

**Organization:** *Not Specified*

**Comment ID:** 131658

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS states that the effort it would take to create habitat for plover and other species by clearing vegetation around the Point ponds would be prohibitive, based on other similar experiences. This area serves as cover at least, and likely habitat, for foxes, nutria, opossum, raccoon, feral cats and other species the NPS expends great effort to kill as part of predator management. This position is inconsistent.

**Corr. ID:** 11852

**Organization:** *Not Specified*

**Comment ID:** 134854

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The pro-active adaptive management initiatives identified in the DEIS (pg. 124) would enhance both resource and visitor access if they were carried out by the NPS. If the vegetation & habitat management protocols were implemented (especially at Cape Point) the seashore bird populations would increase. The ideal habitat required for most of the seashore birds at Cape Hatteras does not exist as it once did, because the NPS does not practice the necessary management plans. This is most evident at Cape Point as I have witnessed the decline of the nesting birds in this area myself over the past 25 years of visiting the seashore. The vegetation around the salt ponds and the encroaching vegetation at the point in general discourages the seashore birds to nest. Those areas should have been maintained to encourage the birds to nest. The NPS should not include plans that they themselves have no intention to adhere to.

**Corr. ID:** 13030

**Organization:** *Not Specified*

**Comment ID:** 140479

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Why wouldn't the NPS consider creating additional suitable habits such as the dredge islands?

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140254

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Creation of shell fish bars and AMOY habitat on the sound side of Hatteras and Ocracoke should be considered. Sand pumping or sod removal could accomplish good habitat for AMOYS.

**Response:** As described on page 88 of the DEIS, the creation of habitat was considered but dismissed as a viable alternative element for this plan without further study. Based on previous habitat-creation projects, these actions are labor-intensive while the results are short-lived. The DEIS (p. 124) does allow for this concept to be further studied through the creation of a pilot program to evaluate methods for managing vegetation and improving habitat and wildlife access to available habitat in the Cape Pont dredge pond area, and evaluating the effectiveness of similar measures in other areas. Overall, the NPS has recognized that the creation of habitat is a viable option under certain circumstances, however it is not an appropriate substitute for providing adequate protection of existing habitat, as outlined under the plan/EIS.

***AL6020 - Alternatives Considered but Dismissed: Fence chicks away from the ORV corridor***

**Concern ID: 24148**

Concern Statement: Commenters suggested that fencing or other barriers be used to separate chicks from ORV use.

***Representative Quotes:***

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140256

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Fencing to protect chicks from vehicles was another positive approach rejected by NPS on page 88. Application of a little common sense on use of fencing would be beneficial in reduction of buffer size to provide access by the public.

**Corr. ID:** 15042

**Organization:** *Not Specified*

**Comment ID:** 137958

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I feel that during nesting season, temporary barriers could be constructed around the nesting wildlife with quite large fines for anyone caught disturbing the barriers and/or the protected species.

**Response:** As described on page 88 of the DEIS, piping plover and American oystercatcher chicks require access to the intertidal zone and moist substrate habitat for foraging and chicks of all beach nesting bird species may utilize those same areas for thermal regulation. Therefore, fencing chicks away from these areas would be in direct conflict with conservation of those species and would essentially reduce their chances of survival. Therefore, fencing was dismissed as an alternative element.

***AL6030 - Alternatives Considered but Dismissed: Do not provide protection for the Seabeach Amaranth***

**Concern ID: 24149**

Concern Statement: One commenter suggested that the seabeach amaranth not be introduced into the park, asking when the last verified sighting of the plant was.

***Representative Quotes:***

**Corr. ID:** 12493

**Organization:** *Not Specified*

**Comment ID:** 138788

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the Park Service plan to introduce Sea Beach Amaranth into the park. Is there any proof that it was ever on Hatteras Island. If so when was the last verified sighting?

**Response:** As discussed in Chapter 3, page 221, of the DEIS, seabeach amaranth is an annual plant native to barrier-island beaches along the U.S. Atlantic Coast. Within the Seashore, the plant numbers ranged from 550 to 16,000 between 1985 and 1990. This number has dwindled in the past ten years, with no plants found since 2005. The last confirmed plant sighting was in 2005. As discussed on page 88 of the DEIS, the seabeach amaranth is protected as a federally-listed threatened plant species and federal agencies are required to protect threatened and endangered species. Additionally, Section 4.4.2.3 of the 2006 NPS Management Policies state that the NPS will "reestablish extirpated populations as necessary to maintain the species and habitats on which they depend."; therefore reintroduction of this species would be consistent with NPS policies. As shown on table 10 (page 126), the DEIS includes a provision for the possibility of future studies to assess the feasibility of restoring plant populations, with no immediate plans to start reintroduction activities.

***AL6040 - Alternatives Considered but Dismissed: Give special consideration only to flora and fauna listed as threatened and endangered***

**Concern ID: 24150**

Concern Statement: Commenters stated that the American oystercatcher and species of colonial waterbirds should not be offered the same level of protection as those species with a federal threatened or endangered status as they are classified as species of special concern by the state and not the federal government. They further stated that the protections, including buffers and pre-nesting closures, afforded to them in the DEIS were excessive and this level of protection is not warranted by the state because of the state listing.

***Representative Quotes:***

**Corr. ID:** 3610

**Organization:** *Not Specified*

**Comment ID:** 133285

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The management buffers described in DEIS pages 121 to 127 should be modified to allow pre-nesting closures for only endangered or threatened species. This would result in establishing pre-nesting closures exclusively for the, Piping Plover, the only threatened bird species in the seashore. Also, pre-nesting closures are not warranted for the non-endangered and non-threatened American Oystercatchers. Because Colonial Waterbirds do not return to the exact same place for nesting each year, establishing pre-nesting closures for these birds is both unpredictable and unnecessary.

**Corr. ID:** 3887

**Organization:** *Not Specified*

**Comment ID:** 133197

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Excessive resource closures/buffers established for non-ESA listed species. These species (American Oyster Catchers, Black Skimmers, Common Terns, Least Terns & Wilson's Plover) are listed in the "Protected Wildlife Species of North Carolina" as "North Carolina Special Concern Species". The excessive closures as defined within the DEIS Species Management Strategies (pages 121-127, Table 10) in no way reflect the protection afforded these species by the state of North Carolina. The excessive closures granted these species by NPS has and will close more beach access than the closures afforded the ESA listed Piping Plover. We recommend that NPS not establish closures in excess of those defined/established by the state of North Carolina.

**Corr. ID:** 14932

**Organization:** *Not Specified*

**Comment ID:** 136852

**Organization Type:** Unaffiliated Individual

**Representative Quote:** AMOYS are on a North Carolina list of concern. By being placed on this list, North Carolina is monitoring and counting birds in a very limited fashion, but doing otherwise nothing to protect them. USFW does no enclosures in Pea Island Wildlife Refuge until an egg is laid. The management procedure is to "approach AMOY until it flushes then back away 15 yards for the closure." No more than this procedure should be used in the NPS area, keeping in mind that this is a recreational area first and a resource area second. If you state that you have only the Endanger Species Act (ESA) to go by for protecting a bird that is only on a list of concern in North Carolina, then either give it no protection or have regulations that are similar to the state procedures.

Colonial Waterbirds: The management procedures should be the same as the AMOY protection.

**Corr. ID:** 14942

**Organization:** NC Wildlife Resources Commission

**Comment ID:** 136794

**Organization Type:** State Government

**Representative Quote:** The treatment of state-listed species of special concern as if those species were federally listed is inconsistent with the letter and intent of the statutes that authorize the state-listing process.

Therefore we request the NPS not use state listing of species of special concern as justification for recommending actions required by federal listing, or in lieu of federal listing. Rather, we request the NPS consult with WRC biologists to understand specific monitoring other conservation actions warranted by state listing.

**Corr. ID:** 15044

**Organization:** *Not Specified*

**Comment ID:** 137811

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In view of the enabling legislation, no wildlife should be considered in restricting recreational access unless the animal is explicitly identified as "endangered" or "threatened" under the Endangered Species Act. The Supremacy Clause of the U.S. Constitution does not permit "state-listed" or "special status" wildlife to infringe on the enabling legislation.

**Response:** In addition to the Endangered Species Act, the NPS has responsibilities under many different regulations, policies, and requirements regarding species management, including the NPS Organic Act, the Migratory Bird Treaty Act (MBTA), Executive Order 13186, and NPS Management Policies 2006.

Section 4.4.1 of the NPS Management Policies 2006 says that "The National Park Service will maintain as parts of the natural ecosystems of parks all plants and animals native to park ecosystems...by preserving and restoring the natural abundances, diversities, dynamics, distributions, habitats, and behavior of native plant and animal populations and the communities and ecosystems in which they occur...and minimizing human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them." NPS Management Policies 2006 (sec. 4.1) provide that "Natural resources will be managed to preserve fundamental physical and biological processes, as well as individual species, features, and plant and animal communities...including the natural abundance, diversity, and genetic and ecological integrity of the plant and animal species native to those ecosystems." Section 4.4.1.1 of the NPS Management Policies addresses the NPS responsibility to maintain "all native plant and animal species and their habitats inside parks." Section 4.1 of the NPS Management Policies also provides that "There may be situations in which an area may be closed to visitor use to protect the natural resources (for example, during an animal breeding season..." Simply put, the NPS has obligations under the Organic Act, other applicable laws and policies to protect wildlife, listed or not, even if it means some restrictions on access.

NPS Management Policies 2006 (sec. 4.4.2.3) also state that "The Service will survey for, protect, and strive to recover all species native to national park system units that are listed under the Endangered Species Act. The Service will fully meet its obligations under the NPS Organic Act and the Endangered Species Act to both proactively conserve listed species and prevent detrimental effects on these species." To meet the above obligations, the management policies direct the NPS to "conduct actions and allocate funding to address endangered, threatened, proposed, and candidate species." The policies further indicate that "the National Park Service will inventory, monitor, and manage state and locally listed species in a manner similar to its treatment of federally listed species to the greatest extent possible. In addition, the Service will inventory other native species that are of special management concern to the parks (such as rare, declining, sensitive, or unique species and their habitats) and will manage them to maintain their natural distribution and abundance."

In addition to NPS's responsibilities under the Organic Act and NPS Management Policies, Executive Order 13186 directs Federal agencies to minimize their negative impacts on migratory birds, promote conservation of migratory bird populations, and to perform certain actions to further implement the MBTA. This executive order requires that federal agencies "support the conservation intent of the migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions" and to "ensure that environmental analyses of Federal actions required by the NEPA or other established environmental review processes evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern." Furthermore, the executive order requires agencies to "identify where unintentional take reasonably attributable to agency actions is having, or is likely to have, a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors" and to "develop and use principles, standards, and practices that will lessen the amount of unintentional take, developing any such conservation efforts in cooperation with the Service." All of the bird species that are described under the "State-Listed and Species Status Species" sections of the DEIS are listed in 50 CFR § 10.13, which indicates species that are subject to the protections of the MBTA. These species are also designated as Birds of Conservation Concern (USFWS 2008b) and/or Migratory Nongame Birds of Management Concern in the United States (USFWS 1995) which qualifies them as species of concern according to Executive Order 13186. Therefore, the NPS is required to protect these species according the provisions of both the executive order and the MBTA. Pursuant to the executive order, in April 2010 NPS and FWS entered into a memorandum of understanding (MOU) to establish how the two agencies will jointly promote the conservation of migratory birds by incorporating bird conservation measures into agency actions and planning processes.

NPS has obligations under the Organic Act and the Seashore's enabling legislation to protect these species, whether they are listed or not. NPS management policies clearly provide that the Seashore is to manage species of concern in a manner similar to the management of federally-listed species. As a result, the species management tables in the DEIS were developed to provide protective mechanisms for state-listed and special status species that are similar in practice to those established for the federally listed piping plover, but differ based on each species' breeding and migrating behavior, habitat requirements, and reaction to disturbance.

**Concern ID: 24151**

**Concern Statement:** Commenters stated that the DEIS does not show that the red knot is native and protection is warranted. They further stated that its proposed listing does not offer the same protection under the Endangered Species Act as a listed species.

**Representative Quotes:**

**Corr. ID:** 15045 **Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137925 **Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS states that NPS Management Policies require it to "inventory other native species that are of special management concern to parks and will manage them to maintain their natural distribution and abundance (emphasis added). DEIS at 419, citing to NPS 2006, sec. 4.4.2.3. The DEIS fails to demonstrate that Red Knot are native to Cape Hatteras National Seashore, thus protection under NPS 2006, 4.4.2.3 is unwarranted. In contrast, the International Shorebird Survey autumn (July to October) counts, 1974-1978, using maximum recorded counts, does not list any Red Knot in North Carolina. The counts listed in nearby Virginia between 1974 and 1978 are zero except for a count of 24% in 1977. Even if Red Knot are arguably of special management concern, protection by NPS under internal Management Policies is not warranted as Red Knot are not "native" species. Alternative F purposely seeks to reduce adverse impacts by instituting nonbreeding closures and provides further protection including four miles of "floating" closures. DEIS at 139.

**Corr. ID:** 15045 **Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137924 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Affording protection to species not listed by state or federal EPA is a violation of law. Red Knot is not listed by North Carolina or by the U.S. Fish and Wildlife Service (USFWS). Nonbreeding closures and "floating closures" of some areas is proposed with Alternative F to reduce impacts to Red Knot. DEIS at 139. The Endangered Species Act (ESA) provides no authority for the protection of species upon a mere "proposal" to list a species. To consider adverse effects on candidate species would be premature since the USFWS has yet to determine whether Red Knot or Red Knot habitat are in fact at risk. Imposing additional closures in the name of Red Knot protection is not warranted through public input and the processes required under the ESA. The Endangered Species Act (ESA) provides no authority for the protection of species upon a mere "proposal" to list a candidate species or a "proposal" to designate critical habitat. It is outside the authority of the NPS, and outside the confines of the ESA to reevaluate designation of public lands for the purpose of limiting or closing areas based on candidate species.

**Response:** Section 4.4.1.3 of NPS Management Policies defines native species as "all species that have occurred, now occur, or may occur as a result of natural processes on lands designated as units of the national park system" and exotic species as "those species that occupy or could occupy park lands directly or indirectly as the result of deliberate or accidental human activities". The USFWS considers the red knot to be a native species. (see 74 Fed. Reg. 57803-57878, "Endangered and Threatened Wildlife and Plants; Review of Native Species That Are Candidates for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions; Proposed Rule"). The Red Knot occurs statewide in North Carolina (<http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=BODM>) and uses lands in the Seashore during migration (DEIS at 248). Therefore, at the Seashore it is a native species and is subject to protection under the provisions of NPS Management Policies.

Although the red knot has been designated by the USFWS as a candidate for protection under the ESA (DEIS at 246), the NPS did not rely primarily on the authority of the ESA to establish protective measures for the red knot. NPS Management Policies 2006 state that "the Service will fully meet its obligations under the NPS Organic Act and the Endangered Species Act to both proactively conserve listed species and prevent detrimental effects on these

species.” To meet these obligations, the Service will “conduct actions and allocate funding to address endangered, threatened, proposed, and candidate species.” The protections provided by the NPS Organic Act and other applicable laws and policies apply to the red knot.

Please refer to the response to Concern ID 24150 for information regarding the protections afforded to red knot under the Migratory Bird Treaty Act (MBTA) and Executive Order 13186, as well as its designation as a Bird of Conservation Concern.

### ***AL6070 - Alternatives Considered but Dismissed: Provide an area for off-leash dogs***

#### **Concern ID: 24156**

**Concern Statement:** One commenter stated that the NPS should consider providing an area for off-leash dogs in this planning process.

#### ***Representative Quotes:***

**Corr. ID:** 12002

**Organization:** *Not Specified*

**Comment ID:** 134203

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 90, Chapter 2: Alternatives, Top of Page, Paragraph: Provide an Area for Off-Leash Dogs. This paragraph states "Creation of off-leash areas would not be consistent with 36 CFR 2.13 and would require promulgation of a special regulation allowing off-leash dog use, which is outside the scope of the plan/EIS." It would seem to be simple enough to cover the possibility of an off-leash area under the DEIS and go thru the process to promulgate a special regulation later. I oppose leaving this out of the DEIS. The DEIS is not a regulation per se, so inclusion of the possibility of an off leash area in the EIS wouldn't mean that it would become regulation until the proper CFR process was completed and even then it might be opposed so it might never become a reality. If it were included in the DEIS, then a major step would have been taken to modify the CFR later if it were found to be viable.

**Response:** Pet regulations, including the leash requirement, that apply throughout the National Park System, including Cape Hatteras National Seashore, are established in 36 CFR 2.15. To decide whether to propose a special regulation for a unit of the NPS for pets different than the national regulation would require its own planning process. As correctly stated in the DEIS, this is outside the scope of the ORV Plan/EIS. Additionally, unleashed pets have the potential to adversely impact wildlife at the Seashore, including beach nesting bird species and sea turtles. As described on p. 211 of the DEIS, unleashed pets have the potential to flush or kill piping plovers. Potential impacts from pets are also described on pages 232 and 233 with respect to disturbances to American oystercatchers. Pets are also identified in the DEIS as potential risk factors for colonial waterbirds and Wilson’s plover. The NPS will continue to enforce the existing pet regulation in 36 CFR 2.15.

The following editorial changes will be made to the text on page 90 of the DEIS:

Currently, pets at the Seashore are regulated under 36 CFR 2.15, which applies to all units of the national park system and prohibits pet owners from “failing to crate, cage, restrain on a leash which shall not exceed 6 feet in length, or otherwise physically confine a pet at all times.” Creation of off-leash areas would not be consistent with 36 CFR 2.15 and would require its own planning process and promulgation of a special regulation allowing off-leash dog use, which is outside the scope of the plan/EIS.

### ***CC1000 - Consultation and Coordination: General Comments***

#### **Concern ID: 24153**

**Concern Statement:** One commenter stated that the surf fishermen should have had more input into the DEIS.

**Representative Quotes:**

**Corr. ID:** 15197

**Organization:** *Not Specified*

**Comment ID:** 139333

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In closing, I want to say that this – that it is my opinion that surf fishermen did not have any input into the DEIS report. If they did have input, none of it ended up in this report. In other words, I believe that the report as written is biased. All I'm asking for is consideration and objectivity in the final report.

**Response:** Fishing advocacy groups were included and actively participated in the negotiated rulemaking process for the ORV management plan/EIS. Also, members of the American Sportfishing Association, Cape Hatteras Anglers Club, Recreational Fishing Alliance, and United Mobile Sportfishermen, as well as numerous other individuals expressing interest in related issues, submitted comments during the public comment period for the DEIS. The NPS received and evaluated comments from various user groups, including commercial and surf fishermen. The public notice mechanisms required by NEPA regulations afforded all stakeholders reasonable opportunities to provide input during the planning process.

**Concern ID: 24154**

**Concern Statement:** One commenter requested that any adaptive management process include the use of an oversight committee with external experts/scientists.

**Representative Quotes:**

**Corr. ID:** 5757

**Organization:** *Not Specified*

**Comment ID:** 133385

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In chapter 5, under Consultation and Coordination, I did not see mention of any type of oversight committee or board. As the NPS adheres to a policy of using adaptive management, it seems a review process by an external panel or committee made up of scientists and managers should be established to periodically review protocols and results of key management operations. This allows for future modification and flexibility in CAHA management.

**Response:** NPS will seek technical advice as appropriate from other agencies with the relevant scientific expertise, such as the USFWS and individual advice and review from other species experts, but does not intend to form a committee under the Federal Advisory Committee Act to advise on management.

**ED1000 - Editorial**

**Concern ID: 24155**

**Concern Statement:** One commenter requested that the FEIS include a definition of "essential vehicle."

**Representative Quotes:**

**Corr. ID:** 15132

**Organization:** *Not Specified*

**Comment ID:** 138117

**Organization Type:** Unaffiliated Individual

**Representative Quote:** There could at least have been a definition of essential vehicle given in the DEIS, instead of referring the reader to a piping plover document.

**Response:** The following definition of essential vehicle appears on page 647 of the DEIS:  
Essential vehicle - Vehicles used by the National Park Service, or its agents, to conduct authorized administrative activities, such as resources management, law enforcement or other park operations, related to implementation of this plan or other applicable management plan(s) or permit(s), or as needed to respond to emergency operations involving threats to life, property, or park resources, within areas that are otherwise closed to recreational ORV or visitor use.

## ***GA1000 - Impact Analysis: Impact Analyses (General)***

### **Concern ID: 24157**

Concern Statement: Commenters expressed concern that the document uses "would" instead of "will" to define impacts, suggesting it creates ambiguity.

#### ***Representative Quotes:***

**Corr. ID:** 175

**Organization:** *Not Specified*

**Comment ID:** 130037

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I disagree with the use of speculation when implementing such restrictions. There are numerous examples of non-factual speculation contained within "Table ES-1." "Habitat loss could also occur indirectly" is a statement overflowing with nonfactual ambiguity. Could it occur or does it occur? Also, is there any proof that "vehicular noise could create unsuitable habitat for Seashore wildlife", or is that speculation as well (use of "could" again)?

**Corr. ID:** 15046

**Organization:** Cape Hatteras Business Alliance

**Comment ID:** 139839

**Organization Type:** Business

**Representative Quote:** NPS needs to simply change the language in the DEIS and replace every could, might, may and possibly with: could or could not, might or might not, mayor may not, possibly or possibly not, then balance the possibilities against the "WOULDS", inject a healthy dose of common sense, and keep in mind that they are holding peoples lives in their hands.

**Response:** When preparing environmental assessments and environmental impact statements, it is common practice for all federal agencies to use "would" instead of "will" when describing impacts under the proposed alternatives, given that a selected alternative has not yet been determined. Once an alternative is selected for implementation in the Record of Decision, the NPS will change the language in the Record of Decision from "would" to "will", as the selected alternative has been approved and will occur. "Could, may, might, and possibly" are appropriately used in NEPA impact analyses because there are often varying levels of uncertainty implicit in predicting impacts. Effects that are completely speculative are not included in the impact analysis.

### **Concern ID: 24158**

Concern Statement: Commenters requested that the FEIS provide a better inventory of soundside access points.

#### ***Representative Quotes:***

**Corr. ID:** 13619

**Organization:** Virginia Coastal Access Now

**Comment ID:** 139543

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The sound side access locations in the document seem to be lacking. A better and more complete inventory of sound side access needs to be included in the final document.

**Response:** All soundside ramps are labeled by number and denoted by a yellow star in the "ORV Routes and Areas" maps (beginning on page 147 of the DEIS). Map 1 has been revised to show an access point at Oregon Inlet Marina. Additional parking areas along both the soundside and the ocean side are also labeled on all ORV Routes and Areas maps beginning on page 147 of the DEIS. The NPS feels these are adequate representations of the existing soundside access throughout the Seashore.

### **Concern ID: 24159**

Concern Statement: One commenter suggested that NPS conduct a study that compares the Seashore to an area with no/minimal vehicular activity such as Pea Island, to accurately assess the contribution of human activity on bird and turtle habitat.

**Representative Quotes:**

**Corr. ID:** 14930

**Organization:** *Not Specified*

**Comment ID:** 137126

**Organization Type:** Unaffiliated Individual

**Representative Quote:** An ideal control situation for Hatteras Island exists on Pea Island where there is no/minimal vehicular activity. NPS should work with its sister Federal Agency to conduct a statistically designed and interpreted study. Since vehicular activity is not a component on Pea Island you will be able to accurately assess the contribution from human activity on bird and turtle habitat in comparison to natural (storms) and predatory activity.

**Response:** Page 124 of the DEIS states that :

“the NPS may authorize qualified researchers associated with recognized academic or research institutions to conduct additional scientific research on the respective species that will add to the existing knowledge of shorebird species or improve resource protection within the Seashore.”

Therefore, if the proposal met the criteria stated on p. 124 of the DEIS, the NPS would consider authorizing a research study similar to the one suggested on Pea Island. NPS notes that Pea Island beaches are nourished beaches with a number of locations with high rates of erosion (“hotspots”), unlike the Seashore beaches, and may not provide the same habitat for birds or turtles.

**GA1050 - Impact Analysis: Issues Analyzed**

**Concern ID:** 24160

Concern Statement: Commenters stated that the DEIS did not adequately account for the cultural and historic significance of the Seashore. Specifically, some commenters felt that the Seashore qualified for the Traditional Cultural Property designation and this issue should have been carried forward and analyzed in the DEIS.

**Representative Quotes:**

**Corr. ID:** 241

**Organization:** *Not Specified*

**Comment ID:** 130528

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I do not understand how TCP information was not included in the DEIS. I spent a little less than an hour on the internet and here is what I found as posted on the [nemuseumofhistory.org/nchh/amerindian](http://nemuseumofhistory.org/nchh/amerindian).

North Carolina American Indian History Time Line

Pre-Sixteenth Century American Indian History Time Line- 700-1550 A.D. Many groups of American Indians live in the area now called North Carolina. These include the Chowanoke, Croatan, Hatteras, Moratoc, Secotan, Weapemoc, Machapunga, Pamlico, Coree, Neuse River, Tuscarora, Meherrin, Cherokee, Cape Fear, Catawba, Shakori, Sissipahaw, Sugeree, Waccamaw, Waxhaw, Woccon, Cherawah, Eno, Keyauwee, Occaneechi, Suponi and Tutelo Indians.

1584

Sir Walter Raleigh sends explores Phillip Amadas and Arthur Barlowe to North America in search of potential colony sites. At Roanoke Island the explorers meet American Indian Wingina and finds the site excellent for settlement. They return to England with two Indians, Manteo and Wanchese who learn English and are used to create publicity for Raleigh's colony.

From the [accessgeneology.com/native/northcarolina](http://accessgeneology.com/native/northcarolina) site:

Hatteras-Meaning unknown. Location-Among the sandbankc about Cape Hatteras east of the Pamlico Sound and frequenting Roanoke Island.

Village-Sandbanks of Cape Hatteras

History - Lawson (1860) thought the Hatteras showed traced of white blood ... In 1762 the Rev. Alex Stewart baptized 7 Indians and the mixed blood children of the Attamuskeet, Hatteras and Roanoke tribe.

Connection in which they have become noted- The possible connection of the Hatteras with the Croatan has been mentioned and their name has become perpetuated in the dangerous cape at the angle of the outer sand islands of their old country.

It seems to me, if there is historic documentation of the Hatteras Nation noting they lived on the cape of the outer sandbanks, and their blood line mixed with Sir Raleigh's colonists then, many of the people here, on Hatteras Island today, have historic as well as cultural properties in and about them, also. And since Native Americans are perpetuators in keeping their history & culture alive in their present, daily lives you can be sure the culture and history of the people of Hatteras Island perpetuate the same.

**Corr. ID:** 2675

**Organization:** *Not Specified*

**Comment ID:** 132132

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The series of Life Saving Stations (US Life Saving Service) within the Seashore are a symbol of the Cultural/Historic Value of surf zone access. These stations, in addition to rescue of crew & passengers of ships in distress, often served as community centers. These stations pre-date the establishment of the Seashore and co-existed with the park until the 1950's. I believe the DEIS fails to recognize this, or in fact any, Cultural/ Historical Value of surf zone access.

**Corr. ID:** 10862

**Organization:** Flowers Ridge Homeowners Assn

**Comment ID:** 136140

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Second, the NPS-commissioned report Ethnohistorical Description of the Eight Villages Adjoining the Cape Hatteras National Seashore and Interpretive Themes of History and Heritage, issued in 2005 and signed by Superintendent Mike Murray appears to have been totally disregarded in the drafting of the EIS/ORV management plan. The 300-plus years of traditional symbiosis that has linked the people of the Outer Banks with the sea, the seashore and the birds and other creatures that share it with its human residents have no effect on the NPS's mechanistic strategy for diminishing human presence and clearing the landscape for a wildlife refuge. Unless the DEIS can be revised to incorporate the human values and cultural traditions of the islands into wildlife conservation it must be discarded entirely.

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 139231

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The only groups that have any historical rights to all areas of the Seashore and are part of the cultural tradition are the legal residents of the village engaged in traditional (dory) commercial fishing. They should be entitled to fish in pedestrian access only areas.

**Corr. ID:** 14823

**Organization:** *Not Specified*

**Comment ID:** 137053

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In ignoring the formal identification of TCPs, the NPS has not fulfilled its NEPA obligations. It is further not in compliance with the Section 106 of National Historic Preservation Act of 1966, as Amended (NHPA), which mandates that federal agencies take into consideration the effect of their actions on historic properties. Historic properties in NHPA context (and under NEPA) refer to all cultural resources to include ethnographic resources, TCPs, and historic landscapes and their traditional uses.

The total failure to address the traditional cultural value of surf zone access in the DEIS is curious on several additional counts. For one, the DEIS describes ORV access as historical in nature (pg 83) and also both predating the Seashore and as being integral to the Seashores' public use by both residents and visitors. The document also illustrates and captions historical commercial fishing (pg 18), historical recreational fishing (pgs 15, 260) and historical general recreational activities (pg 259). These same traditional cultural activities are featured on the cover of the DEIS. The surf zone has long been not just a location for traditional economic activities such as surf dory seine net fishing but also other cultural activities as well. These include general beach recreation activities, social gatherings, and hook and line recreational/subsistence fishing. Collectively these activities are components of an unbroken pattern of land use that extend back many generations before the establishment of the Seashore and remain integral to the fabric of the historically unique Outer Banks communities. Further yet, the continuation of this traditional pattern of land use is central to maintaining the historic identity of these same communities.

**Response:** The Tuscarora Nation is the only affiliated tribe for the Cape Hatteras National Seashore. NPS is not aware of any historic properties that may be of religious and cultural significance to the Tuscarora Nation that would potentially be affected by the management alternatives described in the draft Plan/EIS. The Seashore has consulted with the Tuscarora Nation about the ORV Management Plan/DEIS and the Tuscarora Nation has not informed the Seashore of any historic properties of religious or cultural significance to them which would be potentially affected.

The FEIS continues to allow, as suggested by commenter, legal residents of the villages engaged in various commercial fishing activities under their park-issued commercial fishing permit to use ORVs to access areas otherwise closed to ORV use (i.e. vehicle free areas, safety and administrative closures), except in resource closures and on life-guarded beaches. There are a small number of commercial fishermen engaged in traditional haul seine (dory) fishing, and NPS believes it is not necessary to limit these access provisions to only that commercial fishing activity.

NPS has received a review of the Ethno history report, met with and considered information provided by Traditional Cultural Property (TCP) proponents, reviewed NPS Guideline 38 on Traditional Cultural Properties, consulted with NPS regional experts, and reviewed DEIS comments related to this topic. Since publication of the DEIS NPS has completed an analysis of the potential eligibility for the areas proposed by the Outer Banks Preservation Association as traditional cultural property. NPS determined the areas ineligible and provided its determination to the North Carolina Department of Cultural Resources, State Historic Preservation Officer (NCDNR/SHPO) and the NCDNR/SHPO offered no opinion.

Regardless of the ineligibility of the proposed areas as TCPs, NPS recognizes the interest of visitors (new and old) in accessing the beaches of the Seashore, whether by ORV or on foot, and has attempted in the preferred alternative to accommodate a diversity of opportunities for beach activities.

**Concern ID: 24161**

**Concern Statement:** Commenters noted impact topics they felt should have been carried forward for full evaluation in the DEIS including wilderness, the impacts of climate change specifically on the bird populations, the value of recreational fishing, and geology.

**Representative Quotes:**

**Corr. ID:** 3897

**Organization:** *Not Specified*

**Comment ID:** 132729

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Impacts of Climate Change

Studies predict that coastal barrier islands and their natural and cultural resources will be affected by sea level rise and potentially stronger storm events resulting from climate change. Relative sea level is currently rising in northeastern North Carolina at a rate of 16 to 18 inches per century, a substantially higher rate than the 7 inches per century one hundred years ago and the 3 inches per century rate 200 years ago

Stan Riggs & others;

<http://www.google.com/search?hl=en&q=stan+riggs+ecu+%2B+sea+level+rise&start=10&sa=N>

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IPCC (2001) PREDICTED MAXIMUM RATE OF GLOBAL SEA-LEVEL RISE = 0.88 M (2.89 FT) 2100

IPCC (2001) PREDICTED MEAN RATE OF GLOBAL SEA-LEVEL RISE = 0.49 M (1.61 FT) 2100

PRESENT RATE OF SEA-LEVEL RISE IN NORTH CAROLINA = 0.31 M (1.0 FT) PER CENTURY

-chart insert: showing sea-level changes through the Late Pleistocene, Holocene, present and future.

The above chart is wrong. IPCC (2001) prediction has not happened in CHNSRA. The present rate (solid line) has not happened. It cannot be demonstrated anywhere. If this prediction were true it would be evident on bridge pilings, dock pilings, breakwaters, seawalls, and most importantly all the beaches.

Erosion is not sea level rise. Reduced beach width is not sea level rise. Tidal & wind driven flooding is not sea level rise.

Subsidence is not sea level rise.

**Corr. ID:** 13438

**Organization:** National Parks Conservation Association

**Comment ID:** 140913

**Organization Type:** Unaffiliated Individual

**Representative Quote:** It is our position that it is absolutely essential that NPS protect the pedestrian visitor experience through environmentally appropriate access to primitive wilderness. As a consequence, we urge the National Park Service to execute and produce the wilderness suitability study for CAHA that is now 35 years overdue (see Management Policies 2006, Ch. 6).

**Corr. ID:** 13981

**Organization:** Recreational Fishing Alliance - South Carolina

**Comment ID:** 140105

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Recreational fishing has not been adequately represented for its economic, social and cultural value in the National Park Service's Draft ORV Management Plan/EIS for CHNSRA. The National Park Service should develop a consensus from as many interests as possible as it develops and recommends policy and regulations, and our strong concerns here should at least indicate that there is a great opportunity to be more inclusive of interests that are quite popular among the public not only in the Carolinas but in the entire country.

**Corr. ID:** 14094

**Organization:** *Not Specified*

**Comment ID:** 135767

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I do not see an analysis of the likely impacts of climate change. What is the affect of warmer coastal temperatures on the nesting range of the shore birds? Would the change in climate affect not only nesting but feeding habitat? Since Hatteras Island is the most southern point of the piping plover's nesting range would the continued increase in coastal temperatures, associated with climate change, naturally drive the nesting areas further north? If so the plan would be meaningless and obsolete. A study by the Audubon society has noted that significant numbers (46%) of shorebirds have been moving north as a result of global warming. I refer you to: <http://www.audubon.org/news/pressroom/bacc/pdfs/Birds%20and%20Climate%20Report.pdf>

**Corr. ID:** 14436

**Organization:** *Not Specified*

**Comment ID:** 139466

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I respectfully disagree with geologic impacts on beaches being left out of the EIS. The document said that " the Seashore is part of a dynamic coastal barrier ecosystem, and visual effects of ORVs on ocean beaches can no longer be visible in a matter of hours due to daily tidal action, winds, rain, hurricanes, and other storm events." (EIS). This is true but if the use of ORVs is not limited at all, then the tracks might be always visible because there will always be ORVs to make new tracks after the old ones have been washed away and it might be possible for a visitor to walk the beaches all day without enjoying a view unobstructed by tire marks on the beach. This leads me to a discussion on aesthetics.

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 139210

**Organization Type:** Unaffiliated Individual

**Representative Quote:** All visitors (ORV access and pedestrian access) should expect a choice for the type of experience they can participate in. Listed below is new information to consider which would identify and protect primitive wilderness experience in CHNS. The greatest potential for wilderness areas in this park is areas where access is by foot and the above attributes are present. Scenic features; natural visibility, both day and night; natural landscapes; natural soundscapes and smells")

- a. In an unaltered state with minimal adjacent Infrastructure,
- b. Natural coastal and dune building processes,
- c. Observable wildlife resources,
- d. Wide beach with minimal degree of slope,

1. Ease of egress, all egress through NPS property with Ramps, boardwalks or established breaks through the dune
2. Traditional pedestrian beaches, beaches that have been Used extensively for pedestrian access only in the past and have suitable established parking infrastructure

3. Diversity of experience
  - a. Areas convenient to NPS services
  - b. Remote areas

The areas suggested in Plan F misses the mark on scenic features by designating the majority of those places to ORV access.

**Response:** The NPS has not made any assumptions in the EIS that would rely on scientific predictions regarding sea level rise. NPS has not made any attempt to attribute impacts from sea level rise on park resources in the Seashore in the EIS. The following text on page 293 of the DEIS explains why the impacts of sea level rise were not analyzed.

“Given the complex interactions among multiple factors and the uncertainties over human response to climate change on the barrier islands, the level of uncertainty about possible effects on specific resources or impact topics over the 10-15 year planning period makes analysis for impacts of climate change in this document speculative. It is assumed that management that would build resiliency into the Seashore’s wildlife and plant resources (e.g., management measures to allow increases in populations of protected species during the next 10-15 years) would be beneficial to those resources as they adapt to changed conditions over future decades.”

The Seashore does not have any areas that are currently designated or proposed wilderness, and therefore it was not addressed as an impact topic in the DEIS. A study to explore the suitability of wilderness at the Seashore is outside the scope of this planning effort and will be addressed during the upcoming process to develop a new General Management Plan for the Seashore.

With regards to how recreational fishing was represented in the DEIS, as noted in the response to Concern ID 24186, various recreational uses occur at the Seashore and the NPS does not place greater emphasis on one form of recreation over another. Therefore, recreational fishing was discussed in the DEIS in the context of all of the other uses occurring at the Seashore.

Soils and the possibility for disturbing sand, compacting sand, creating ruts, and changing the local topography, was dismissed under the “Geologic Resources” impact topic in Chapter 1 (pages 31 of the DEIS). While ORV use could result in increased erosion, the Seashore is a dynamic ecosystem and visual impacts from ORVs are quickly erased by tides, winds, rain, hurricanes, and other storm events. With the use of designated ramps, which are strictly enforced throughout the Seashore, ORV impacts to dunes are a rare occurrence. Alternative F includes the construction of new ramps and parking areas. As indicated in the impact analysis in chapter 4 of the EIS, ramps and parking areas would be designed and constructed with a semi-permeable clay/shell base, turf block, or some other porous material, using environmentally sensitive standards to minimize stormwater runoff. Given these conditions, it was determined that impacts to geologic resources, including soils, would be less than minor and therefore this was not carried forward for further analysis in the DEIS. The FEIS, under “Issues Considered But Dismissed From Further Analysis – Geologic Resources” will include additional text stating that the impacts would be minor or less. It should also be noted that issues related to sand compaction are included in the DEIS in the discussion of how ORV use impact invertebrates at the Seashore (DEIS starting on p. 484). In relation to ORV tracks as an aesthetic issue, this was considered in the EIS under Visitor Use and Experience. Alternative F, as modified, addressed the desire of some visitors to have an experience without ORV tracks by increasing the number of vehicle-free areas in the Seashore.

## ***GA4000 - Impact Analysis: Impairment Analysis-General Methodology***

### **Concern ID: 24167**

**Concern Statement:** One commenter stated that alternative F would cause an impairment to park values because it does not provide enough places with the desired scenic value to those wanting a non-ORV experience.

#### ***Representative Quotes:***

**Corr. ID:** 14588

**Organization:** *Not Specified*

**Comment ID:** 139222

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Plan F will cause an impairment of "Park Values". Criteria to identify where areas of the Seashore that have Park values and appropriate means to protect them is lacking. Those looking for a non-ORV experience at the Seashore would experience long-term adverse impacts. There was more year round non-ORV areas in the Park in 2002 than proposed in plan F. In addition the areas proposed for non-ORV access are areas that so eroded and narrow that it is unlikely they would be open to ORV use. The majority of the proposed pedestrian areas are of marginal aesthetic value and would constitute an impairment of values under NPS Management Policies 2006 (1.4.6 What Constitutes Park Resources and Values)

**Response:** Alternative F has been revised in the FEIS to provide additional vehicle free areas.

The impairment that is prohibited by the Organic Act does not apply to topics such as visitor experience, socioeconomics, or park operations and therefore impairment findings are not made for these topics (NPS 2010h). The scenic value of the Seashore exists whether it is observed by anyone and independent of whether an area is designated as an ORV route or a vehicle free area. However, the subjective visitor experience of a particular scenic value may differ among visitors. For this reason NPS has provided a variety of vehicle free areas as well as ORV routes to accommodate a diversity of desired visitor experiences.

### **Concern ID: 24655**

**Concern Statement:** One commenter stated that alternative F would not allow for recovery of the seabeach amaranth and would result in impairment of the species.

#### ***Representative Quotes:***

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137740

**Organization Type:** Conservation/Preservation

**Representative Quote:** Most fencing intended to protect shorebird areas is removed after the nesting season; generally Labor Day. This allows seabeach amaranth the opportunity to produce some seeds, but it does not allow them time to produce as many seeds as they would if they were allowed to senesce naturally, later in the fall. Staff at Cape Hatteras National Seashore has noticed an increase in the number of vehicles on the beach in recent years.. Alternative F will not allow for the recovery of this species on the Seashore and will result in impairment of this federally-listed species.

**Response:** Resource closure areas that are to be reopened are surveyed for seabeach amaranth before reopening them to ORV use. As noted on page 222 of the DEIS, plants are usually visibly detectable beginning in June, which is before the reopening of most shorebird closures. Therefore, any plants within the resource closures would likely be found and protected with a 30-foot (9.1-meter) by 30-foot (9.1-meter) closure, allowing the plants to senesce naturally and set their full complement of seeds. In addition to already stated reasons why alternative F would not result in impairment (pages 416-417 of the DEIS), the NPS has revised alternative F to include more year-round vehicle free areas. A total of 26.4 miles will now be vehicle-free at the Seashore, including the historically important seabeach amaranth habitat located from approximately 0.3 miles west of the point at Cape Point to approximately mile post 47 and the ocean beach on Hatteras Inlet Spit; and another 12.7 miles designated as seasonal ORV routes would be vehicle free 6 to 7 months a year. (see also response to Concern ID24269 and Concern ID24653). Protection of seabeach amaranth in resource closures before reopening them to ORV use, the increased amount and location of beach area closed to ORV use year-round or seasonal ORV use 6 to 7 months per year under the revised alternative F, and the protection afforded the plant by other resource closures will afford greater protection of

seabeach amaranth habitat and the species itself if it reappears or is reintroduced to the Seashore, precluding impairment of this federally listed species.

## ***GA5000 - Literature Review***

### **Concern ID: 24168**

**Concern Statement:** One commenter stated that the literature review did not include many relevant studies related to the impacts of ORV use and human disturbances on natural resources. Another commenter stated that the DEIS ignored certain studies addressing resource protection buffers and other protection measures.

#### ***Representative Quotes:***

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140424

**Organization Type:** Conservation/Preservation

**Representative Quote:** In this regard, the DEIS also ignores certain studies presented during the negotiated rulemaking process, including studies addressing resource protection buffers and other protection measures. One of these studies, for example, among other things, supports the creation of buffers during the fall and winter that would allow ORV traffic in certain key shorebird colony sites, and concludes that beach closures "are unnecessary and are not likely to favorably impact breeding piping plovers on the islands." Jaime A. Collazo, J.R. Walters, and J.F. Parnell, Factors Affecting Reproduction and Migration of Waterbirds on the North Carolina Barrier Islands, Final Report to the National Park Service Cape Hatteras and Cape Lookout Seashores (1995) (cited in Addendum to the Final Report of the Proceedings of the Negotiated Rulemaking Advisory Committee for Off-Road Vehicle Management at Cape Hatteras National Seashore, American Sportfishing Ass'n, et al., Mar. 27, 2009, at 15-16). Another study seriously questions using the flushing of incubating American oystercatchers to determine the need for adjustments to pass-through corridor widths, by concluding that "there was little or no association between ORV traffic and the rate at which incubating oystercatchers made trips to and from their nests or the percent time they spent incubating." Conor P. McGowan, Simons, T.R., Effects of Human Recreation on the Incubation Behavior of American Oystercatchers, The Wilson Journal of Ornithology 11 8(4): 485-493, 2006, at 489 (cited in Addendum to the Final Report of the Proceedings of the Negotiated Rulemaking Advisory Committee for Off-Road Vehicle Management at Cape Hatteras National Seashore, American Sportfishing Ass'n, et al., Mar. 27, 2009, at 16).

**Corr. ID:** 15074

**Organization:** Southern Environmental Law Center

**Comment ID:** 137793

**Organization Type:** Conservation/Preservation

**Representative Quote:** Appendix A, DEIS, provides a literature review. This literature review fails to include many studies directly related to the impacts of off-road vehicle use and human disturbances on natural resources, and directly applicable to Cape Hatteras National Seashore. We provide the attached literature review which should include applicable scientific studies, conservation plans, recover plans, and other pertinent literature related to impacts of off-road vehicles and human disturbances on natural resources on beaches.

**Response:** The purpose of the literature review was to summarize what is known about impacts of ORV use on beach resources similar to those existing at Cape Hatteras National Seashore, and therefore did not include impacts of all human disturbances, conservation measures for areas outside of the beach environment (e.g. turtle excluder devices on fishing gear), or general studies about species. Regarding literature on sea turtles, some of the documents provided by the commenters are already included in the literature review appendix and/or used in the EIS, others provide information duplicated by studies already cited in the literature review (e.g. light pollution impacts, impacts of vehicle ruts), and others provide information that is not relevant to the environment experienced at Cape Hatteras National Seashore (e.g. effects of organized turtle watches, population modeling, at sea orientation mechanisms of turtle hatchlings, impacts of light pollution from heavily developed urban beaches in Florida, impacts of beach nourishment on nesting turtles, etc.). Several studies provided by the commenters do not pertain to ORV impacts and thus were not included in the literature review, but are nonetheless still useful. Studies pertaining to the effects of sand characteristics and the incubation environment on turtle hatchlings support the NPS's policy of relocating as few nests as possible. These references will be used to augment the existing discussions in Chapter 2 dismissing alternatives that would routinely relocate turtle nests and use turtle hatcheries.

In regard to bird species at the Seashore, while there are both historic as well as newly emerging studies that relate to the underlying science of the DEIS, the scientific studies we cited in the DEIS provide sufficient support for the

stated conclusions and management options. The suggested citations were reviewed and a subset of 53 peer-reviewed, published studies further evaluated. Of the studies evaluated, it was determined that they did not appear to relate in any substantial way to the underlying science of the DEIS, or they related to the DEIS in a way that supported conclusions already supported by one or more of the citations already used in the analysis.

The 1995 Collazo et al. report was a compilation of eight separate shorebird studies (chapters) conducted at Cape Lookout National Seashore and Cape Hatteras National Seashore. The NPS had considered the entire compilation and has again reviewed it. NPS believes that the excerpts of this report quoted by commenters, when evaluated in the context of the whole report and data from the park since the 1995 report was written, as well as the other literature considered in the development of the plan/EIS do not support changes in the plan/EIS. Specific comments are addressed below.

One commenter states that the Collazo report “supports the creation of buffers during the fall and winter that would allow ORV traffic in certain key shorebird colony sites, and concludes that beach closures “are unnecessary and are not likely to favorably impact breeding piping plovers on the islands.” The first part of that comment comes from Chapter 4 of the Collazo report (as written by Parnell and Barbee) which states the following, in full context: “To assure that important sites where nesting birds are successful and where management is possible we recommend that ORV traffic be allowed in such key colony sites as Cape Point Hatteras Inlet Power Squadron Spit and the west end of Shackleford Island during the fall and winter to assist in maintaining the bare or nearly bare upper beach habitat necessary for nesting terns and skimmers.”

It is important to appreciate the context of this recommendation - as a way to use ORV activity to help keep potential nesting substrates open and vegetation free for future skimmer and other colonial waterbird breeding. This statement is solely in the context of colonial waterbirds and solely regarding ORV activity in the fall and winter. The NPS has evaluated this recommendation and not considered it for detailed analysis as stated on page 88 of the DEIS and in Chapter 2 of the FEIS.

The second part of the comment states that the Collazo report concludes that beach closures “are unnecessary and are not likely to favorably impact breeding piping plovers on the islands.” The complete sentence from Chapter 5 which contains the language from the commenter states the following: “With the present rate and nature of human disturbance on these beaches, there is no need to terminate beach access to visitors. It is possible, however, that areas that might be used are avoided due to human disturbance, namely the ocean intertidal zone.” Again, understanding the context of this statement is extremely important. That statement was part of a discussion in Chapter 5 of the Collazo report (written by Philhower et al.) The authors of Chapter 5 indicated that they were unable to investigate the impacts of human disturbance directly through experimentation but refer to an “intrusion study” for which no methodology was provided. Although it is not clear where on the islands these disturbances were measured or what distances were involved, Chapter 5 of the Collazo report clearly indicates that plovers are susceptible to various types of disturbances, including predators, competing nesters, humans, and vehicles all of which elicited some sort of behavioral response. This chapter of the Collazo report documents numerous instances of human and vehicular disturbance to plovers including a situation where a plover chick that was feeding along the ocean shoreline was nearly hit by a passing truck. It also refers to a situation where a group of pedestrians elicited a behavioral response from a plover that was 50 meters away (Collazo et al, Chapter 5, page 9). Chapter 5 discusses many other factors with the potential to influence plover reproductive success, including weather events, temperature, geographic location, and predation, with predation and weather events being the largest contributors to direct nest loss, which is consistent with the data and conclusions in the DEIS and FEIS. Although the NPS cannot control factors such as weather events and temperature, the NPS can provide management options to reduce the potential for disturbance by humans, vehicles, and predators. Consistent with the recommendations of Chapter 5 of the Collazo report, the NPS is not proposing to terminate beach access to visitors.

In addition to the more general response provided above, the NPS offers the following perspective on the Philhower study based on experience of piping plover management observations at the Seashore:

The study was conducted and observations were made during the period (1992-1994) in which the number of piping plover pairs was near its maximum (avg 11.7 prs/yr) and ORV closures along the shoreline generally did not occur. It may have appeared that shoreline closures were not necessary based on conditions at that time. The hypothesis that shoreline closures were not necessary and were unlikely to make a difference was never systematically tested.

The study's observations of chicks preferring wet flats and mud flats, rather than the intertidal zone, to forage is consistent with recent observations. What is not described in the study is how far chicks can travel from nest site to the selected foraging site and how the level of human disturbance in shoreline areas adjacent to the nest or foraging site may (or may not) affect the amount of time or energy that chicks have to spend on foraging vs. responding/avoiding to disturbance, or to what extent human presence in adjacent shoreline areas affects levels of predation in chick foraging sites.

To provide some management context, it may be worth comparing the trend in the number of breeding pairs with the level of shoreline closures since the study occurred.

Period	Avg # pairs	# of pairs (first/last year)	Regular Use of Shoreline Closures
1992-1995 (includes Philhower study)	12.25	12/14	no
1996-2000	8.8	14/4	no
2001-2005	2.6	3/3	no
2006-2010	8.8	6/12	yes <sup>1</sup>

1A limited number of shoreline closures occurred in 2006-2007 under the Interim Strategy. Routine use of shoreline closures occurred in 2008-2010 under the Consent Decree

In other words, there was a steady decline in the number of nesting pairs 1996-2005 in the absence of shoreline closures. It is unclear what caused the decline, but it occurred during an extended period in which shoreline closures were not typically used as a management practice. It is not possible to rule out the level of human disturbance and the lack of shoreline closures as a contributing cause for the decline, perhaps by having a secondary effect on the availability of chick access to foraging areas and energy available to forage, and/or the level of predator pressure or other disruptive factors in foraging areas. On the other hand, there has been steady improvement in the number of breeding pairs since the use of partial shoreline closures in 2006-2007 and routine use of shoreline closures in 2008-2010. While it is not possible to draw statistically valid conclusions from this information, it raises serious doubts about the validity of Philhower's hypothesis.

A commenter also referenced a study (McGowan and Simons 2006) and suggested that it seriously questioned using the flushing of incubating American oystercatchers to determine the need for adjustments to pass-through corridor widths. The commenter indicated that the study stated that "there was little or no association between ORV traffic and the rate at which incubating oystercatchers made trips to and from their nests or the percent time they spent incubating." Although this quote is taken directly from the McGowan and Simons study, the commenter did not appear to properly consider the context and the results of the study in question. The purpose of the study was to determine potential effects of human recreation on the incubation behavior of American oystercatchers, and was not intended to identify adjustments to vehicle corridor widths based on flushing response. Although this study was cited in the DEIS and FEIS, it was used in the context of predation impacts, and how mammalian predators may be able to better locate disturbed nests because the adult oystercatchers would leave a scent trail each time they left the nest after a disturbance. Investigators also noted several shortcomings of their incubation study, including the inability to measure the distance between the disturbance and the nest because the field of view of the video cameras varied at each nest. These researchers recommended that future human disturbance studies include methods that would allow for the measurement of distance to disturbance sources. The NPS does not purport to use this study to determine proposed corridor widths or buffer distances for American oystercatchers.

Overall, NPS has concluded that none of the studies suggested would result in changes to the DEIS in either the management measures suggested or impact levels of the alternatives.

***GA6000 - Impact Analysis: Scientific Data Used to Determine Impacts (General)*****Concern ID: 24669**

Concern Statement: Commenters stated that the data and references used in the DEIS were not peer reviewed, scientifically sound, or were out of date, and therefore the conclusions of the DEIS do not have a valid basis. Some commenters specifically noted the USGS species management protocols, stating that they were not peer reviewed and, along with other cited references, were prepared by parties with a conflict of interest in this process. They also expressed concern that they were unable to readily find references cited in the DEIS.

***Representative Quotes:*****Corr. ID:** 3874**Organization:** Outer Banks Chamber of Commerce**Comment ID:** 139502**Organization Type:** Unaffiliated Individual

**Representative Quote:** The final draft of the document was reviewed by NPS personnel to ensure that the description of the recent status and management of these species at CAHA was accurately represented and that the report was consistent with our work agreement..." The document has been at the center of controversy since first referenced during the negotiated rule-making process. There are continuing questions about whether it was peer reviewed per the USGS guidelines and although the published version states that there is no new science or additions to it, there are a number of changes that are referenced as being the result of research that occurred after the original document was produced. Questioned about the peer review process, a spokesperson for USGS responded that the acknowledgments at the end of each chapter of the original document was actually the list of those who peer reviewed that particular section. Calls to some of those listed as such said that they had never seen the document and therefore had not peer reviewed it. Those acknowledgments are not at the ends of the chapters in the published version of the report. Federal environmental regulations are to be based on best available science, yet the process to ensure that seems to be missing in this instance. This matter should be referred to the Department of Interior Inspector General with a request that the science we reviewed and that an investigation be conducted to determine if in fact the USGS complied with its own peer review guidelines.

**Corr. ID:** 3874**Organization:** Outer Banks Chamber of Commerce**Comment ID:** 139500**Organization Type:** Unaffiliated Individual

**Representative Quote:** In March of this year, "A Review and Synthesis of the Scientific Information Related to the Biology and Management of Species of Special Concern at Cape Hatteras National Seashore, North Carolina" by authors Jonathan B. Cohen, R. Michael Erwin, John B. French, Jr., Jeffrey L. Marion, and J. Michael Meyers was published by the U.S. Geological Survey's Patuxent Wildlife Research Center (PWRC) which conducted the original study at the National Park Service's request in 2005. According to the published report's summary, the intention was to "review, evaluate, and summarize the available scientific information for selected species of concern at CAHA (piping plovers, sea turtles, seabeach amaranth, American oystercatchers, and colonial waterbirds). This work consisted of reviewing the scientific literature and evaluating the results of studies that examined critical life history stages of each species, and focused on the scientific findings reported that are relevant to the management of these species and their habitats at CAHA...Although no new original research or experimental work was conducted, this synthesis of the existing information was peer reviewed by over 15 experts with familiarity with these species...To ensure that the best available information is considered when assessing each species of interest at CAHA, this review included published research as well as practical experience of scientists and wildlife managers who were consulted in 2005. PWRC scientists evaluated the literature, consulted wildlife managers, and produced an initial draft that was sent to experts for scientific review. Revisions based on those comments were incorporated into the document.

**Corr. ID:** 3890**Organization:** *Not Specified***Comment ID:** 137409**Organization Type:** Unaffiliated Individual

**Representative Quote:** In a slightly modified introduction to the most recent release of the Protocols, the government official responsible for the document states: "Although no new original research or experimental work was conducted, this synthesis of the existing information was peer reviewed by over 15 experts with familiarity with these species. This report does not establish NP5 management protocols but does highlight scientific information on the biology of these species to be considered by NPS managers who make resource management decisions at CAHA."

The new publication was not accessible, peer reviewed, or fully explained by government authority at the time the DEIS was submitted to the public for comment in early March 2010. The literature reviews found in the USGS Protocols as currently published are significantly out of date. In fact many studies were decades out of date at the time the document was prepared in 2005. They are mainly non-replicated, selective papers and studies. Many citations are over 20 years old and most are not related to the Cape Hatteras National Seashore Recreational Area. The public does not have access to the literature reviewed in this essential report and most of the citations are so insignificant they cannot even be found in a major university library (UNC-CH).

**Corr. ID:** 10625      **Organization:** *Not Specified*  
**Comment ID:** 136512      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** - David Rabon, who worked in the U.S. Fish and Wildlife Service's Raleigh field office in 2005 and is now supervisor for the Red Wolf Recovery Program at Alligator River National Wildlife Refuge.

- And unnamed U.S. Fish and Wildlife biologists and managers at Pea Island National Wildlife Refuge.

Almost all of the named scientists have done work that is listed in the acknowledgments for the piping plover section or other sections of the protocols. So contributors have become peer reviewers.

The author, Jonathan Cohen, of Virginia Tech worked as a contractor for USGS, which was paid by the Park Service for writing the protocols, gave a declaration in the lawsuit against the Park Service, and signed the Audubon letter."

**Corr. ID:** 13275      **Organization:** *Not Specified*  
**Comment ID:** 140322      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The data used to prepare the DEIS needs to be authentic & validated by a real panel of scientists. A lot of the information we were presented with during the meetings that took place before this DEIS, was full of theories & conjecture, & comes from research papers written by students. According to the EPA the data is supposed to be reviewed by real scientists before it can be considered "law".

**Corr. ID:** 13461      **Organization:** Park user  
**Comment ID:** 138671      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The decisions on ORV restrictions are not supported by the science cited in the DEIS nor the obvious facts or investigations available. The literature review in Appendix A is inconclusive, at best, in supporting ORV restrictions as a way of increasing shorebird breeding success. For example, the following quotes are taken directly from that Appendix:

- "no difference in mean productivity of Plover nesting was observed among the levels of ORV use" (page A-4)

- "ORV use was directly investigated in this study the primary cause of nest failure on barrier islands was mammalian predation" (page A-5)

- "the study (Patterson, 1991) found that predators accounted for most of the known nest losses (91%) with only one nest lost due to direct human destruction and no evidence that suggested recreational disturbance was a factor in productivity" (page A-5)

- Even the Park service data do not support ORV damage as a significant cause of nest failure. Nest Failures are predominately due to non-human events. Using your own statistics, the mammalian predation is 54%, Storm / Lunar Tides: 29%, Nest Abandonment: 6%, Avian Predation: 5%, and Ghost Crab Predation: 3%. So human interference accounts for only 3%. Yet the Park Service wants to ban humans to solve the problem.

Please explain how in the face of this science, that ORV restrictions seem to be the approach of choice to increase shorebird breeding success.

**Corr. ID:** 14248

**Organization:** *Not Specified*

**Comment ID:** 140905

**Organization Type:** Unaffiliated Individual

**Representative Quote:** These protocols have yet to be shown as emanating from specific scientific, peer reviewed study and in fact by the governments own admission, "This report does not establish NPS management protocols but does highlight scientific information on the biology of these species to be considered by NPS managers who make resource management decisions at CAHA." As such, NPS preferred Alt. (F) is considerably flawed.

**Corr. ID:** 14408

**Organization:** *Not Specified*

**Comment ID:** 140827

**Organization Type:** Unaffiliated Individual

**Representative Quote:** An NPS Employee whose husband participated in the Negotiated Rulemaking process and consistently voted with the environmental organization seeking to close the beaches. 47 References to Marcia Lyons. These conflicts of interest were not disclosed in the document as required.

**Corr. ID:** 14421

**Organization:** *Not Specified*

**Comment ID:** 139639

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The 2005 USGS Protocols are indicated by NPS as the primary basis for the highly restrictive boundary distances that restrict public access to the national seashore. The USGS Protocols are cited as being "in press" 5 years after they first appeared on the Park Service website. The 2005 USGS Protocols were challenged two years ago as being in non compliance with USGS Peer Review Policy. At that time the documents were not dated, had no government publication number, and were not published in the open literature or Federal Register and were clearly unsuitable to be a credible scientific basis for government decision-making, especially costly regulation. The documents were sent back to USGS for "review" in 2009, five years after they were first made known to the public. NPS has indicated a new citation for the USGS Protocols. They are currently referenced on page 660 as: Cohen, J.B., R.M. Erwin, J.B. French Jr., J.L. Marion, and J.M. Meyers In press, Recommendations for Management of Endangered Species at Cape Hatteras National Seashore. U.S. Geological Survey Open-File Report 2009-1262.

NPS uses the USGS protocol recommendations as if they are "best available science." They are not science and have not been shown to be connected with specific scientific studies. The management options presented in the protocols are the policy and management recommendations and opinions of biased and non-reviewed contributors, deemed by USGS to the "experts." Nowhere is a specific science basis (study, data) for a given management option--established solely for the Cape Hatteras National Seashore Recreational Area--demonstrated. In a slightly modified introduction to the most recent release of the Protocols, the government official responsible for the document states: "Although no new original research or experimental work was conducted, this synthesis of the existing information was peer reviewed by over 15 experts with familiarity with these species. This report does not establish NPS management protocols but does highlight scientific information on the biology of these species to be considered by NPS managers who make resource management decisions at CAHA."

The new publication was not accessible, peer reviewed, or fully explained by government authority at the time the DEIS was submitted to the public for comment in early March 2010.

**Corr. ID:** 14421

**Organization:** *Not Specified*

**Comment ID:** 139668

**Organization Type:** Unaffiliated Individual

**Representative Quote:** There is an "appearance of impropriety" and "conflict of interest" associated with the primary science basis justification for the Alternative F recommendation.

As noted two years ago, the cited protocols are not reviewed consistent with published USGS peer review policy guidelines (<http://www.usgs.gov/usgs-manual/500/502-3.html>) especially with regard to full disclosures and conflicts of interests. In fact the Protocols were developed and prepared in large part by well known environmental activists who subsequently used them as the basis for law suit against NPS, thus creating a very clear conflict of interest in full view of the federal government. A review of the public record indicates that USGS commissioned well known environmental activist scientists to selectively review and discuss the science as they choose to represent it, and then formulate and recommend management options and policies. There was no outside questioning and review of their work--paid for by federal tax dollars.

It is clear to those of us who understand the scientific methods and process, objective scientific review, and the internal workings of federal government, that the 2004-2005 cooperative agreement review of the science (undertaken in part by members of the Audubon Society and other activist organizations) is biased and selective, misrepresented, fraught with speculation and opinion, and in many cases based on information that has nothing whatsoever to do with Cape Hatteras National Seashore.

In 2005 the architects of the access denying protocols were acknowledged for their contributions. For nearly three years now we have asked NPS and USGS to identify the "independent outside reviewers" of the USGS Protocols consistent with USGS Peer Review Policy. We are now being informed by USGS through their press office that the "science peer reviewers" are the original contributors and architects of the Protocols (which are not science at all, but policy and management opinions/recommendations that regulate the public and deny public access to the national seashore). We are also being informed by press officials that it is the policy of USGS to not identify outside independent peer reviewers or their comments. This is a violation of the Freedom of Information Act and the Federal Advisory Committee Act.

**Corr. ID:** 14421

**Organization:** *Not Specified*

**Comment ID:** 139670

**Organization Type:** Unaffiliated Individual

**Representative Quote:** For over 15 months of Regulation Negotiation Process, Golder, other environmental activist members, and the federal government never disclosed participants' roles in the design of the Protocols, but constantly referred to them as being the definitive "best available science" justification for closures. Golder and others now appear as "peer reviewers" of their own work. This is discrediting in and of itself, but what is most disturbing and unethical about this is the fact that this highly biased, pseudo science process, sponsored by the federal government, has denied thousands of citizens access to their national seashore and will continue to do so unless it corrected by NPS, the federal courts, or the congress.

The above is clearly a "apparent conflict of interest" known to NPS and USGS officials and calls into question the credibility of science which in the public policy making process--specifically that of denying public access to the national seashore--must be "objective" beyond any doubt. Local media have noted this "apparent conflict of interest" and brought it to the attention of NPS and USGS officials who refuse to offer an explanation or response.

The best course of action to resolve this matter is to turn the science review and update over the National Academy of Sciences or some other neutral party, to objectively, critically, and comprehensively review all relevant science, disclose the facts and restore some public trust in the scientific process used as the basis for environmental management decisions at Cape Hatteras National Seashore.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140428

**Organization Type:** Conservation/Preservation

**Representative Quote:** Despite its statements to the contrary, to the extent the scientific basis for its determinations are even apparent, the DEIS does not "incorporate the best available scientific literature applicable to the region and setting, the resource evaluated, and the actions considered in the alternatives," DEIS at 292, and therefore cannot be said to "be based upon the analysis and supporting data from the natural and social sciences and the environmental design arts" as required by 40 C.F.R. 5 1502.8. The DEIS is woefully lacking in sound scientific support. As discussed above, the DEIS fails to consider significant, relevant scientific studies and information that was presented to the NPS in connection with the ORV management planning process.

**Corr. ID:** 15045

**Organization:** United Four Wheel Drive Associations, Inc.

**Comment ID:** 137912

**Organization Type:** Unaffiliated Individual

**Representative Quote:** 1. No peer review of scientific evidence relied upon to rationalize decisions. Failure to utilize only scientific evidence that has been peer reviewed is a violation of Office of Management and Budget Peer Review Bulletin; violation of NPS Director's Order #11B Information Disseminated by the National Park Service; and a violation of commonly held practice within the scientific community to peer review via journal publications where editors or other scientists in the same field of study review the work and determine its quality and thus suitability for publication.

**Corr. ID:** 15045**Organization:** United Four Wheel Drive Associations, Inc.**Comment ID:** 137919**Organization Type:** Unaffiliated Individual

**Representative Quote:** 3. Citations to literature not peer reviewed and literature not applicable to DEIS location. The DEIS states that, "OHVs can churn up and damage delicate soils (Proescholdt 2007; Ouren et al. 2007; Webb 1982)". DEIS at A-2. Of the three pieces of literature cited, only one was presumably peer-reviewed; Webb 1982. However, the Webb study was conducted in the Mojave Desert in California where the annual precipitation is 5 inches. In contrast, soil compaction in North Carolina, particularly in Cape Hatteras National Seashore with annual precipitation of 57.8 inches, would vary significantly from that of the study area. The scientific data in the Webb study for Off Road Motorcycle use in the Mojave Desert of California is inadequate in making a determination, even by extrapolation, to Off-Road motorcycle effects on desert soils within Cape Hatteras National Seashore, if in fact soils at Cape Hatteras National Seashore can fairly be called "desert" soils.

**Corr. ID:** 15011**Organization:** Dare County Board of Commissioners**Comment ID:** 140659**Organization Type:** County Government

**Representative Quote:** Dare County formally requests as part of the NEPA process that the National Park Service provide peer-reviewed science that justifies a 1,000 meter closure in all directions as is currently outlined in the DEIS.

**Response:** NPS guidelines require that all scientific and scholarly information disseminated to the public in any format meets the requirements of NPS Director's Order 11-B: *Ensuring Quality of Information Disseminated by the National Park Service*, which may require peer review for activities and information used in the decision-making process (NPS Interim Guidance Document Governing Code of Conduct, Peer Review, and Information Quality Correction for National Park Service Cultural and Natural Resource Disciplines, January 31, 2008, available at <http://www.nps.gov/policy/Interimpeerreview.htm>). However, there is no requirement for all information used in a NEPA document to be peer reviewed. For example, the Handbook for NPS Director's Order #12: Conservation Planning, Environmental Impact Analysis and Decision Making (Section 4.5I) includes personal communications within cited references in an EIS. There are instances of Seashore staff providing species counts via personal correspondence, which are correctly used and cited in the DEIS. According to Director's Order 11-B (which was issued in response to the Information Quality Act), an exchange of information between individuals is not considered to be dissemination and is therefore not subject to peer review requirements. As listed in the References section in the FEIS (and on p. 657 of the DEIS), many of the references cited are from peer-reviewed scientific journals or are official agency publications, such as the U.S. Fish and Wildlife species recovery plans (including the piping plover recovery plan which recommends a 1,000 meter vehicle buffer for piping plover chicks), which have been reviewed by other scientific experts outside of the recovery teams that are knowledgeable of particular species. Interim guidance on Director's Order 11-B indicates that scientific or scholarly information published in peer-reviewed journals does not require additional peer review (NPS Interim Guidance Document Governing Code of Conduct, Peer Review, and Information Quality Correction for National Park Service Cultural and Natural Resource Disciplines, January 31, 2008, available at <http://www.nps.gov/policy/Interimpeerreview.htm>).

As stated in Chapter 2 of the DEIS and FEIS, the proposed 1,000 meter ORV buffer around piping plover chicks was derived, in part, from guidance provided in the USFWS' Piping Plover Revised Recovery Plan (USFWS 1996a), Appendix G: Guidelines for Managing Recreational Activities in Piping Plover Breeding Habitat on the U.S. Atlantic Coast to Avoid Take Under Section 9 of the ESA. Appendix G of the Piping Plover Recovery Plan was used as a basis for determining appropriate management measures under all of the action alternatives. This document provides guidance to beach managers and property owners seeking to avoid potential violations of Section 9 of the ESA (16 USC 1538) and its implementing regulations (50 CFR 17) that could occur as the result of recreational activities on beaches used by breeding piping plovers along the Atlantic Coast. These guidelines were developed by the USFWS Northeast Region, USFWS, with assistance from the U.S. Atlantic Coast Piping Plover Recovery Team. Appendix G of this recovery plan also references several studies that documented piping plover chicks moving hundreds of meters from their nests, with one study documenting a brood that moved more than 1,000 meters from its nest. For a detailed discussion of why the 1,000 meter chick buffer is supported at the Seashore, please refer to the response to Concern ID 24194.

The DEIS does not state that the USGS protocols (Cohen et al 2010) are the primary source of information used in the Plan. Information presented in the plan/EIS is based on a wide range of guidance and scientific data, of which

the USGS protocols are but one source. A combination of these data was used to determine potential impacts and to develop a range of reasonable alternatives for the plan/DEIS. NPS may consider the type of source, e.g. peer-reviewed journals, unpublished research progress reports, etc. in deciding what weight to give to a particular source, but is not limited in the types of information sources that it may use in the planning process. The age and the geographic location of a study are considered in determining weight and appropriate use of a reference along with other factors, but do not, by themselves, mean a reference may not provide useful information that may be considered. The NPS gathered hundreds of scientific journal articles and research papers prior to and during this planning process, and made a concerted effort to obtain reports and studies that were applicable to the species in question and the ecological characteristics of the Seashore. As noted in the References section in this EIS, the majority of the research that was relied upon was from peer-reviewed journals and official agency publications such as the USFWS species recovery plans. However, the NPS did review and incorporate the results of several studies that were completed by university researchers as part of their graduate theses or doctoral dissertations, as many of these research projects involved species found at the Seashore and also occurred in similar coastal or barrier island ecosystems. The NPS used a multitude of sources in the development of the species protection strategies contained in the EIS, in addition to the professional experience of Seashore staff implementing various species management measures under the Interim Strategy and the Consent Decree.

In sum, the NPS considered a wide variety of information sources to evaluate potential impacts in the EIS, the majority of which were from published peer-reviewed scientific journals or official agency publications, all of which have been part of the official administrative record for this project and were (and are) available for public review. The NPS believes that the information used in preparing the FEIS is of sufficient quality, objectivity, utility, and integrity to comply with the Information Quality Act and the OMB, DOI, and NPS policies and guidelines that address the Act.

Conflict of interest complaints about the USGS protocols should be directed by commenters to the USGS. The USGS protocols were peer-reviewed by species experts, whose names appear in the protocols themselves. NPS contact with the USGS indicates that the USGS has no reason to believe that the authors or reviewers of the protocols had a conflict of interest that would have precluded them from serving as peer reviewers. NPS has received no information from commenters or other sources to lead it to conclude that a conflict of interest existed. NPS also notes that it is normal practice for scientist whose scientific work is cited among that of other scientists in a journal article or report to serve as a peer reviewer of the article or report. They are not reviewing their own work, but the work of the author of the article or report.

One commenter noted that human interference accounts for only a small percentage of nest failure at the Seashore and that it was not necessary for the NPS to “ban humans to solve the problem”. The NPS acknowledges in the DEIS that human (or vehicle) disturbance is not the documented primary cause of direct mortality of species at the Seashore and has never proposed to “ban humans”. However, published studies have demonstrated that disturbance from vehicles and humans can result in adverse impacts to the breeding, resting, and foraging behavior of shorebirds. While the NPS cannot control disturbance factors such as weather and overwash events, it can reduce the potential impacts of human and vehicular disturbance through the implementation of the species protection measures included in the FEIS.

#### **Concern ID: 24170**

**Concern Statement:** Commenters stated that the DEIS did not include all available information including comments from the alternatives workbooks and materials provided by the Negotiated Rulemaking Committee.

#### ***Representative Quotes:***

**Corr. ID:** 14258

**Organization:** *Not Specified*

**Comment ID:** 139811

**Organization Type:** Unaffiliated Individual

**Representative Quote:** It appears by way of emphasis in the discussion in the DEIS that NPS has every intention to promulgate Alternative F in the next year, regardless of past or present public comment. There is virtually no significant reference to the workbooks the public provided in the early stages of the plan development process or to countless constructive comments made by the public during the 15 month Regulation Negotiation Process.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140422

**Organization Type:** Conservation/Preservation

**Representative Quote:** A great deal of information was made available to the NPS during the early stages of the planning process and the negotiated rulemaking process with respect to the development of the ORV management plan. Inexplicably, much of this information is neither addressed nor so much as acknowledged in the DEIS. For example, the DEIS states that the NPS received a total of 386 completed "Alternative Option Workbooks" during the public comment period. DEIS at 634-35. Yet, although the DEIS makes the assertion that "[a]ll workbooks were reviewed and considered during the alternatives development process" and acknowledges that "[m]ost comments offered options for protected species management, law enforcement, ORV permitting, closures, and ORV ramp and route configuration," DEIS at 635, the DEIS contains practically no reference to or consideration of these materials. Similarly, an enormous amount of information was presented as part of the negotiated rulemaking process, some of which directly questions the conclusions and recommendations made by NPS in the DEIS. Yet, again, the DEIS contains practically no reference to or consideration of these materials.

**Response:** As stated on p. 635 of the DEIS, the NPS reviewed and considered all workbook comments. Although many of the comments were outside the scope of the plan or would be in conflict with management policy, regulations, or legislation, many of the comments were included as elements in the six alternatives analyzed in the DEIS. For example, the following is a partial list of suggestions from the alternatives options workbooks that are currently included in alternative F:

Reduced speed limits  
Seasonal ORV-free areas in high use areas  
Increased parking opportunities  
Environmentally-friendly parking lot design  
Improved signage  
Pedestrian trails  
Vehicle equipment requirements such as a shovel, jack, or tow rope  
Gates at ORV access ramps  
Use permit fees to fund resource management activities  
Improvements to educational materials  
Seasonal ORV closure north of ramp 23  
Revocation of ORV permit following a violation

During the process of developing the DEIS, NPS considered all the information and input provided by members of the negotiated rulemaking committee and provided by the public during the negotiated rulemaking meetings' public comment opportunities. The DEIS addresses relevant issues raised by both committee members and the public. The comment did not provide any details as to which materials the commenter believed were not considered, which prevented NPS from responding more specifically to this comment.

### ***GA6200 - Cumulative Impacts (General)***

**Concern ID:** 24174

**Concern Statement:** Commenters suggested that cumulative impacts more extensively address past stabilization activities. Commenters also provided a list of actions that should be added to the cumulative impact analysis in the DEIS including:

- o Moderate to intensive residential and commercial development of beach habitats, with limited exceptions," from the North Carolina/Virginia line to South Nags Head, NC.
- o Moderate residential and commercial development of beach habitats in the 8 seashore villages (Rodanthe, Waves, Salvo, Avon, Buxton, Frisco, Hatteras, Ocracoke).
- o Off-road vehicle use with very limited restrictions on North Core and South Core Banks, Cape Lookout National Seashore, with accompanying high levels of disturbance to migrating and wintering shorebirds, and lower, but still significant, levels of disturbance to breeding shorebirds and colonial waterbirds.
- o Moderate to intensive residential and commercial development of beach habitats, with limited exceptions," from Morehead City, NC to the North Carolina/South Carolina boarder.

**Representative Quotes:**

**Corr. ID:** 15043      **Organization:** Southern Environmental Law Center

**Comment ID:** 137477      **Organization Type:** Conservation/Preservation

**Representative Quote:** An EIS must discuss and disclose cumulative impacts of proposed actions. 40 C.F.R. § 1508.25(c)(3). "Cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions .... Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. The DEIS, at Table 49, lists a "Cumulative Impact Scenario." DEIS at 294-296. The items that are listed appropriately belong in a cumulative impacts analysis. However, other past, present, and reasonably foreseeable actions also should be added to the list, including:

- Moderate to intensive residential and commercial development of beach habitats, with limited exceptions," from the North Carolina/Virginia line to South Nags Head, NC.

- Moderate residential and commercial development of beach habitats in the 8 seashore villages (Rodanthe, Waves, Salvo, Avon, Buxton, Frisco, Hatteras, Ocracoke).

- Off-road vehicle use with very limited restrictions on North Core and South Core Banks, Cape Lookout National Seashore, with accompanying high levels of disturbance to migrating and wintering shorebirds, and lower, but still significant, levels of disturbance to breeding shorebirds and colonial waterbirds.

- Moderate to intensive residential and commercial development of beach habitats, with limited exceptions," from Morehead City, NC to the North Carolina/South Carolina boarder.

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137705      **Organization Type:** Conservation/Preservation

**Representative Quote:** Even in the areas that are publicly owned, there has been large scale degradation of the extent and quality of shorebird and colonial waterbird habitat. In the DEIS, the NPS notes, as a cumulative impact, "Berm construction under the CCC and subsequent maintenance" and "Continued maintenance of NC-12 and berms," DEIS at 294, but these few words mask the significant adverse impacts to shorebirds and colonial waterbirds caused by stabilization activities in the Seashore. Indeed, in the section discussing stabilization, the adverse impact of the artificial dune at Cape Hatteras is specifically compared to the situation at Cape Lookout, where the USFWS notes that "by contrast, piping plovers nesting areas in 1990 included not only the spits at the current inlets, but several former inlets and large moist sand flats (McConnaughey et al. 1990)" Recovery Plan at 35. In addition, in the recently completed Status Review for the piping plover, the USFWS noted that "[h]abitat loss and degradation on winter and migration grounds from shoreline and inlet stabilization efforts, both within and outside of designated critical habitat, remain a serious threat to all piping plover populations." Status Review at 39. Berm construction under the Civilian Conservation Corps (CCC) provided dune stabilization that changed the habitat available to piping plover at the Seashore. These stabilization efforts provided for the establishment of NC-12 and subsequent development, removing this area from potential habitat. These past action resulted in long-term moderate adverse impacts to all bird species at the Seashore.

Similarly, continual maintenance of NC-12 and berm maintenance would have a short-term, minor to moderate, adverse impacts to the extent that it takes place during piping plover breeding season and if maintenance results in encroachment on any nest buffers or recreation closures. If encroachment occurs, it could result in habitat loss that would have a short-term, minor to moderate, adverse impacts to piping plover nesting and foraging could occur. Conversely, NC-12 widening (on Bodie Island) and berm maintenance could help to stabilize piping plover nesting habitat and in that case this activity would yield long-term moderate benefits. The degree to which this activity is positive or negative is a function of the timing and location of the activity itself relative to piping plover nesting and to the degree to which the activity results in the creation or stabilization of any high-quality piping plover habitat.

**Response:** Cumulative impacts, specifically related to species at the Seashore (covered under three separate impact topics: Federally listed threatened, or endangered species; State-listed or special status species; and Wildlife and wildlife habitat), addressed a wide range of activities. Included in these activities under past actions are the county

land use plans for Hyde and Dare County, including the development that has occurred under these plans and addressing the areas of concern raised by commenters. While this was included under past actions, the description of what these past actions entailed was not fully explained in the DEIS in chapter 1 (pages 51 and 52). Likewise, the cumulative impact analysis under each of the three impact topics also focused on future land use plans, and did not include past development actions as intended. To provide this additional information, the following text changes were made:

- The following text will be added in the FEIS (Chapter 1, “Relationship to Other Federal Planning Documents and Actions” section) to the description of the county land use plans to reflect the role of the land use plans in the past development of the region:

“Since 1974, when the North Carolina General Assembly ratified the Coastal Area Management Act (CAMA), each of the local governments in the twenty county coastal region have been developing and updating land use plans. These land use plans have directed development in these areas and are responsible for the pattern of development we see today in Dare and Hyde counties. Both of these plans recognize the development that has occurred and the corresponding need for an increase in services as a result. These past patterns of land use development have influenced the amount of land available for habitat throughout the county, including portions of the counties located within the Seashore”

- The cumulative impact analysis for Federally listed threatened, or endangered species; State-listed or special status species; and Wildlife and wildlife habitat was expanded to better describe the impact of past land use development. The following text was added to pages 327, 375, 401-402, 428 and 488 of the DEIS. The addition of this text does not change the overall impact findings for the cumulative impact analysis.

“Several of the local and NPS past, current, and future planning efforts can also affect locally sensitive bird species. For example, new development that has occurred in Dare and Hyde counties under their land use plans had increased the residential housing and related services in the areas within the Seashore. This land development within the Seashore, as well as throughout the counties, has reduced the amount of habitat available to species, resulting in adverse impacts. In addition to past actions, new development could result from the implementation of the County Land Use Development Plans for Dare and Hyde counties, including expected revisions to the Dare County Plan..”

The DEIS also addressed actions related to the species management actions occurring at Cape Lookout National Seashore. For example, as noted on page 428 of the DEIS, both the ongoing ORV planning process and the interim species management plan were considered. In order to clarify that past, present, and future species management actions at Cape Lookout National Seashore were considered, the following text was added in the FEIS:

- Chapter 1 under Relationship to Other Federal Planning Documents and Actions:

“Located south of Ocracoke Inlet, Cape Lookout National Seashore also developed an interim protected species management plan / environmental assessment. The Cape Lookout National Seashore Interim Protected Species Management Plan / Environmental Assessment will guide management practices for the protection of special status species occurring at Cape Lookout National Seashore until a long-term ORV management plan/EIS and regulation is developed. Prior to the implementation of the interim protected species management plan in 2007, Cape Lookout conducted a range of species management activities that were less protective, but still provided a level of protection to the Seashore federally listed species as well as state-listed and species of special concern through species monitoring and management, as well as protective buffers.”

- Chapter 4, Cumulative Impact, Table 49

“Species management at Cape Lookout National Seashore, including the implementation of the Interim Protected Species Management Plan” was added to Past Actions under Federally listed threatened, or endangered species; State-listed or special status species; and Wildlife and wildlife habitat.

- The cumulative impact analysis for Federally listed threatened, or endangered species; State-listed or special status species; and Wildlife and wildlife habitat was expanded upon to better describe the impact of past species management measures at Cape Lookout National Seashore. The following text was added to the cumulative impact analysis (under alternative A) of the FEIS. The addition of this text does not change the overall impact findings for the cumulative impact analysis.

“The Cape Lookout Interim Protected Species Management Plan provides long-term moderate to major beneficial impacts to piping plover at the neighboring Seashore through the management policies that it employs. However, even with those management measures in place, adverse impacts would still occur to the species as recreational uses, including night driving, would still occur, but would be mitigated to an extent by the management measures being employed. The measures that are in place now under the interim plan increase protections, in part, by providing earlier prenesting closures and allowing for buffers for protected species to expand if needed, as noted in the Cape Lookout Interim Protected Species Management Plan/EA.”

- In Chapter 4, Wildlife and Wildlife Habitat, the following discussion was added under cumulative impacts for alternative A.

“The Cape Lookout Interim Protected Species Management Plan provides long-term moderate to major beneficial impacts to species at the neighboring Seashore through the management policies that it employs. However, even with these management measures in place, long-term negligible to minor adverse impacts would still occur to the species as recreational uses, including night driving, as noted in the Cape Lookout Interim Protected Species Management Plan/EA. The outcome of the Cape Lookout National Seashore ORV Management Plan/EIS would also have direct long-term impacts on bird populations within the Seashore, as well as within the state of North Carolina. Specifically, it would provide increased protection to more habitat in the area for all species of birds. However, whether the impact of the ORV plan would be moderate to major beneficial or adverse to other bird species would depend upon the management decisions that are made and ultimately implemented.”

The DEIS on pages 294-295 includes stabilization activities of “berm construction under the CCC and subsequent maintenance” and “continued maintenance of NC-12 and berms” as actions in the cumulative impact scenario. Additional discussion on the cumulative impacts of stabilization has been added to the FEIS. The following text will be added to the discussion of cumulative impacts in chapter 4 Piping Plover:

“Berm construction under the Civilian Conservation Corps (CCC) provided dune stabilization that changed the habitat available to piping plover at the Seashore. These stabilization efforts provided for the establishment of NC-12 and subsequent development, removing this area from potential habitat. These past actions resulted in long-term moderate adverse impacts to all shorebird species at the Seashore. Similarly, continual maintenance of NC-12 and berm maintenance would have a short-term, minor to moderate, adverse impacts to the extent that it takes place during piping plover breeding season and if maintenance results in encroachment on any nest buffers or resource closures, these impacts would be greater. If encroachment occurs, it could result in habitat loss that would have short-term, minor to moderate, adverse impacts to piping plover nesting and foraging. The degree to which this activity is negative is a function of the timing and location of the activity itself relative to piping plover nesting and the degree to which the activity results in the creation or stabilization of any high-quality piping plover habitat.”

Similar language will also be added to the cumulative impact discussion for sea turtles, seabeach amaranth, state-listed and special status species, and wildlife and wildlife habitat, under the alternative A analysis.

### ***MT1000 - Miscellaneous Topics: General Comments***

#### **Concern ID: 24241**

Concern Statement: One commenter noted that NPS does not have a right to place stakes in the water around the pond at Oregon Inlet as this is considered ocean rather than sound area.

#### ***Representative Quotes:***

**Corr. ID:** 14826

**Organization:** *Not Specified*

**Comment ID:** 140646

**Organization Type:** Unaffiliated Individual

**Representative Quote:** NPS has no right to place stakes in the water around the pond at Oregon Inlet. The basis for the action by the NPS is the fact that in the sound you are allowed to fence 100 feet from shore areas. However, the pond area at the Inlet is east of the bridge and considered ocean rather than sound. The State of North Carolina clearly stipulates that waters east of the bridge fall under ocean rules and fishing laws reflect this. they should be removed now and are a clear hindrance to navigation. NPS rangers and Marine Fisheries Officers have issued warnings and tickets to anglers who were in possession of flounder and striped bass that met the sound limits but were in violation of ocean limits. You can't have two sets of conflicting rules governing the same area.

**Response:** NPS has authority to put markers around the Bait Pond because it administers the federally-owned submerged lands in Oregon Inlet, which include the submerged lands in the pond. This has no relevance to the enforcement of fishing regulations. NC Marine Fisheries and NPS enforce sound regulations west of Bonner bridge and ocean regulation east of Bonner bridge.

### ***ON1000 - Other NEPA Issues: General Comments***

#### **Concern ID: 24175**

Concern Statement: Commenters stated that the comment period was not long enough due to the length and complexity of the document, with some asking for an extension of the comment period. One commenter noted that if additional information, such as the socioeconomic study, is made available the comment period should be reopened.

#### ***Representative Quotes:***

**Corr. ID:** 13461

**Organization:** Park user

**Comment ID:** 138667

**Organization Type:** Unaffiliated Individual

**Representative Quote:** 6b. The DEIS also refers to some, as yet unpublished additional economic data. You realize, of course, that if you release this data, you will have to re-open the DEIS for additional comments or release a supplemental DEIS and re-open the public comment period.

**Corr. ID:** 14248

**Organization:** *Not Specified*

**Comment ID:** 140756

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would like to address the lack of a suitable public comment period.

The National Park Service took approximately 38 years from the issuance of the aforementioned E.O. 11644 to draft a proposal for a final ORV management plan. At 810 pages in length, this often contradictory document is, and has been, difficult for even the most knowledgeable members of the public to understand and formulate comment. For those members of the public without comprehensive understanding of the various and sundry issues related to access, wildlife management, and the future of the Seashore, a sixty day comment period is simply not enough time. This is especially true since at no point has the Service made any attempt at educating the public about the contents and ramifications of the proposed alternatives. By virtue of the fact that the as of yet incomplete economic impact study has not been proffered for public scrutiny, I believe that public comment should be extended until at least sixty days after the DEIS has been completed. Proposed extension has been requested numerous times by elected federal and state representatives, our community leaders and the public at large. If the Service is genuine in its appeal for comment as is required within a NEPA process, then NPS needs to respect the request for additional time and provide for such.

**Corr. ID:** 14408

**Organization:** *Not Specified*

**Comment ID:** 140899

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In the future the public comment period should be adjusted accommodate the complexity and size of the documents.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140425

**Organization Type:** Conservation/Preservation

**Representative Quote:** In sum, the considerable size and complexity of DEIS, and the DEIS's selective and incomplete use and explanation of scientific data make it difficult for the public to respond meaningfully to the DEIS and to provide specific criticisms and recommendations, particularly within the relatively short 60-day period provided for public comment. And rather than seriously consider requests for an extension of this period to allow sufficient time for the public to adequately review and respond to such a complex, lengthy, and significant document, the NPS has apparently determined to move full steam ahead on its current track, stating that organizations interested in the issue "were well represented and actively participated on the CAHA negotiated rulemaking advisory committee ?and related sub-committees and work groups . . . ." and that several of the alternatives-though notably not Preferred Alternative F purportedly are "substantially the same" as alternatives "described to the committee and released to the public at a committee meeting on November 14,2008." Letter from D. Vela, Regional Director, NPS to J. Simon, Van Ness Feldman (Mar. 29,2010). In effect, the DEIS appears to have become a fait accompli, immune from valuable public comment, and a fatally flawed tool for helping to develop an appropriate ORV management plan for the Seashore.

**Response:** The NPS believes that the 60-day comment period more than satisfied the requirements of the National Environmental Policy Act and provided ample opportunity for public involvement and comment. The NPS Notice of Availability for the DEIS was published in the Federal Register on March 5, 2010. The DEIS was posted online at <http://parkplanning.nps.gov/caha> on March 5, 2010. The U.S. Environmental Protection Agency Notice of Availability for the DEIS was published on March 12, 2010, which opened the public comment period and established the closing date of May 11, 2010, for comments. Within that public comment period, five public hearings were conducted April 26-29, 2010. The hearings were well attended and provided the public with an opportunity to provide oral comments, which were considered in the same manner as written comments. While the DEIS was made available to the public on March 5, 2010, a considerable amount of information related to it had been made available to the public for a longer period of time. For example, five of the six alternatives analyzed in the DEIS were very similar to the five alternatives (A-E) that NPS released to the public at a negotiated rulemaking advisory committee meeting on November 14, 2008. The sixth alternative (F) analyzed in detail in the DEIS was developed by NPS based on concepts that originated in, or were discussed by, the Advisory Committee, or its subcommittees and work groups, recognizing that the Committee did not reach consensus on a recommended alternative.

The NPS received thousands of public comments in written and hardcopy form within the established 60-day public comment period. Therefore, the NPS believed that the 60-day public comment period provided a reasonable opportunity to comment to all interested parties and did not extend the public comment period.

Available economic data was sufficient for the purposes of NEPA analysis of the impact of the alternatives before any of the studies were undertaken. During the negotiated rulemaking process some members of the committee asked for other data to be collected. NPS responded by funding the following studies referenced in the DEIS:

- (1) A survey of local village businesses.
- (2) A non-contact count of ORV at selected ramps.
- (3) A visitor intercept study of visitors on the beach.

The results of these studies have now been released and the relevant sections of the FEIS updated to reflect them. It is not unusual for newly available results of studies that were not available at the time a DEIS is written to be incorporated into the FEIS. Agencies would prepare a supplemental EIS (with an accompanying public comment period) for review if there is significant new information relevant to environmental concerns and bearing on the proposed action and its impacts (40 CFR 1502.9(c)(1)(ii)) In this case, however, the study findings do not provide

significant new information; they are consistent with the analysis provided in the DEIS; and a supplemental EIS is not required.

**Concern ID: 24177**

Concern Statement: Commenters stated that the public meetings should have been held at different times of the day (night meetings only) and in different locations (metropolitan Washington DC area) to more effectively include the public in this process.

**Representative Quotes:**

**Corr. ID:** 8563

**Organization:** *Not Specified*

**Comment ID:** 137054

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would like to begin by saying that this hearing on Ocracoke should have been held in the evening. It is unfair to ask the people of Hyde County to miss work or abandon their businesses to attend this important public hearing. In fact, the ferry from Swan Quarter does not even leave until 10 o'clock, making it virtually impossible for people on the mainland to participate in these hearings about their future. The timing of this hearing prevented the maximum level of participation from Hyde County citizens.

**Corr. ID:** 13092

**Organization:** Coalition of National Park Service Retirees

**Comment ID:** 140466

**Organization Type:** Unaffiliated Individual

**Representative Quote:** While the procedural provisions of NEPA have been closely adhered to during the development of this plan, the Coalition is concerned about the undue influence of local economic and political interests in the process. Local interests are often the most vocal and persistent in the planning process. However, in the end, Cape Hatteras is a unit of a national system and is recognized for its national significance. We note that the public meeting locations have centered around the area adjacent to Cape Hatteras and have not been held in areas of Northern Virginia or the metropolitan Washington DC area. These areas are home to many vacationers who enjoy the resources of Cape Hatteras as well as persons interested in the maintenance and survival of species and resources that may be influenced by OHV activity the park unit. We believe that a better cross section of the interested public could have been involved if public meetings were conducted in a broader geographic area.

**Response:** Although there is no legal requirement to hold public meetings during a DEIS public comment period, the NPS realizes that the ORV management plan/EIS is of great interest to the public, not only at the local level but also at the regional and national levels. Therefore, the NPS held a series of five public hearings to gather additional public comment. Unfortunately, due to logistics and travel requirements, it was not possible to hold all of the meetings in the evenings. Overall, attendance at all of the public hearings was high and many of those in attendance chose to speak. However, providing oral comments was just one of several methods that were established for submitting public comments. On March 5, 2010, the DEIS was posted online, where thousands of public comments were received. The NPS also accepted comments by regular mail and hand-delivery. All comments, whether oral, written, or electronic, were considered equally important and treated in the same manner by the NPS. Public comments were also accepted at the public meetings in February 2007 and January 2008, which included meetings in Washington, D.C. (2007) and Richmond, VA (2008) (DEIS at 634). Comments on the DEIS were received from all 50 states and the District of Columbia, indicating a broad level of public awareness and interest in this planning process.

**Concern ID: 24179**

Concern Statement: Commenters noted that the NPS policy of not accepting bulk comments prevented comments from local students from being considered.

**Representative Quotes:**

**Corr. ID:** 14668

**Organization:** *Not Specified*

**Comment ID:** 133993

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I wanted to take this opportunity to make it known that while the deadline for public comment is rapidly approaching, that voices from Cape Hatteras Secondary's Middle School students are not going to be considered. This unfortunate reality is apparently due in part to my own lack of research or proper protocol. However, on May 7th I hand delivered an envelope containing student letters to a secretary at the Manteo office on

National Park Drive, indicating to the recipient that the package contained numerous student letters. I was not informed that this method was unacceptable by park service personnel until I was conveniently contacted on May 11th, the final date of public comment. Park Service representative, Cindy Holder made it very clear that my students' comments wouldn't be official despite the authenticity of their signatures because I happened to combine them in a single envelope. The circumstantial timing of her phone call towards the end of a school day made it impossible for students to resubmit their statements prior to today's deadline. As a result, I did not want the assumption to be made that the youth of Hatteras Island are indifferent to the impact of beach closures in our area, and I apologize that any act of neglect on my behalf could possibly limit their opinions from being taken into consideration. I feel that it is necessary to document that evidence of our children's concerns are in possession of the National Park Service should their views happen to be of interest.

**Response:** The NPS regrets any confusion that may have arisen regarding the protocols for submitting public comments on the DEIS. However, the following information was issued as a press release, posted on the Seashore's website, and published in the *Federal Register* at the beginning of the public comment period:

"The NPS will accept comments on the DEIS until midnight (Mountain Daylight Time) May 11, 2010. Electronic comments may be submitted online at the NPS Planning, Environment and Public Comment (PEPC) web site by visiting <http://parkplanning.nps.gov/caha>, clicking on \*Open for Comment, clicking on the Off-Road Vehicle Management Plan /EIS, and then clicking on Comment on Document. NPS encourages commenting electronically through PEPC. If you wish to submit your written comments in hard copy (e.g. in a letter), you may send them by U.S. Postal Service or other mail delivery service or hand-deliver them to: Mike Murray, Superintendent, Cape Hatteras National Seashore, 1401 National Park Drive, Manteo, NC 27954. Oral statements and written comments will also be accepted during the hearing-style public meetings. Comments will not be accepted by fax, email, or in any other way than those specified above. Bulk comments in any format (hard copy or electronic) submitted on behalf of others will not be accepted."

The NPS received two packages containing third-party bulk comments and contacted the senders to inform them that the comments could not be accepted as submitted. However, as the deadline for submitting public comments approached, the NPS was receiving numerous letters ,in addition to thousands of online comments, every day, which meant that incoming comments could not always be processed on the same day they were received. All bulk comments received were handled in the same manner. The NPS received thousands of comments from citizens of the Outer Banks and applauds the community's enthusiasm and concern regarding this planning process at the National Seashore.

**Concern ID: 24181**

**Concern Statement:** Commenters stated that they felt the DEIS was deficient because it did not address environmental justice and was not written in neutral tone.

**Representative Quotes:**

**Corr. ID:** 237

**Organization:** NCBBA

**Comment ID:** 130522

**Organization Type:** Unaffiliated Individual

**Representative Quote:** My comment is more general in nature and addresses the tenor of the Draft Environmental Impact Study which, when read objectively, displays a clear bias against ORV use and for environmental concerns real or imagined. Additionally the tenor is somewhat condescending which is typical of documents written by bureaucrats. I would expect our US Department of the Interior to require its employees to maintain a more neutral position on issues as sensitive as the "Rights of Individual Americans" to continue to use the Hatteras Island beaches as they have for decades.

**Corr. ID:** 8853

**Organization:** *Not Specified*

**Comment ID:** 132323

**Organization Type:** Unaffiliated Individual

**Representative Quote:** NEPA requires environmental justice. I believe that it asks who is bearing the brunt of the rulings in the DEIS. By building on the Consent Decree you have placed the burden squarely on the shoulders of the beach users, both pedestrians and ORVs. The DEIS does not meet the NEPA requirements.

**Response:** As indicated on page 36 of the DEIS, environmental justice analyses are performed to identify disproportionate effects of high and adverse environmental or health impacts from proposed federal actions on minority or low-income populations, and to identify alternatives that could mitigate these impacts. The discussion provided on page 36 indicates that there are no minority or low-income populations that would be disproportionately impacted by the implementation of this plan/EIS. Therefore, the issue of environmental justice was not carried forward for analysis.

NPS believes the DEIS provides an objective analysis of the impacts of the alternatives. We are not aware of any instances of bias in the analysis, nor has commenter provided any specific details to which we can directly respond.

**Concern ID: 24635**

**Concern Statement:** Commenters stated that the DEIS did not follow the guidelines of NEPA and CEQ regulations as it was not written in a way decision makers and the public could understand. Commenter indicated that the DEIS is not concise, clear, or to the point, nor supported by evidence that NPS conducted the necessary environmental analyses.

**Representative Quotes:**

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140421

**Organization Type:** Conservation/Preservation

**Representative Quote:** Pursuant to CEQ's regulations, among other requirements, EISs "shall provide full and fair discussion of significant environmental impacts" and "shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses." 40 C.F.R. 5 1502.1. To achieve their purposes, EISs "shall be analytic rather than encyclopedic," "shall be kept concise and shall be no longer than absolutely necessary to comply with NEPA and with [CEQ's] regulations," and "shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made." 40 C.F.R. 5 1502.2. Moreover, EISs "shall be written in plain language and may use appropriate graphics so that decisionmakers and the public can readily understand them" and "be based upon the analysis and supporting data from the natural and social sciences and the environmental design arts." 40 C.F.R. 5 1502.8.

The DEIS is inconsistent with these provisions of CEQ's regulations in several key respects. First, the DEIS is neither concise, clear, to the point, nor supported by evidence that NPS has made the necessary environmental analyses, as required by 40 C.F.R. 5 1502.1.

Similarly, it is not written in a way that decision makers and the public can readily understand it, as required by 40 C.F.R. 5 1502.8. The DEIS is exceedingly long, and extraordinarily difficult to follow. Evaluation of, and comparisons between, the various alternatives, and their respective impacts, are extraordinarily difficult due to the repetition of information and conclusory statements that purport to be based upon scientific data, but, upon closer scrutiny, are not.

**Response:** Impact analysis in the DEIS is supported as needed by citations to the literature and expert, professional opinion. Conclusions drawn are supported by the impact analysis. The Executive Summary, which adds to the length of the document is required by CEQ regulations and, of necessity, repeats some information from the body of the DEIS. The length of the DEIS is necessary and appropriate because of the complexity of managing ORV use and the increased potential for human disturbance in the more remote areas of the park due to ORV access; the need for full disclosure of proposed management practices; the number of alternatives needed for a full range of alternatives; the number of impact topics and diversity of species affected; and the use of the DEIS as a Biological Assessment for consultation with the USFWS under section 7 of the Endangered Species Act. The document meets the requirements of NEPA both for content and organization. It is logically organized and provides information both in tabular and text format to meet the needs of different readers. In the places where comments on the DEIS have noted ambiguity, clarification has been made in the FEIS.

## ***PN1000 - Purpose And Need: Planning Process And Policy***

### **Concern ID: 24245**

Concern Statement: One commenter stated that the DEIS does not consider the Regulatory Flexibility Act and consideration of this law should be included.

#### ***Representative Quotes:***

**Corr. ID:** 3874

**Organization:** Outer Banks Chamber of Commerce

**Comment ID:** 139385

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In the beginning of the DEIS, there is a list of federal rules, policies, etc. that the DEIS must comply with. Missing from this list is compliance with the Regulatory Flexibility Act which requires "federal agencies to consider the effects of their regulatory actions on small businesses and other small entities and to minimize any undue disproportionate burden." The economic impact analysis in this document does not comply with that and thus should not be certified.

**Response:** The Regulatory Flexibility Act (RFA) and several other statutory or regulatory authorities are appropriately addressed in proposed and final rules rather than in the NEPA documents. For this reason, the RFA and these other authorities are not in the list of federal statutes, regulations, policies, etc., in the DEIS, nor is the RFA analysis part of the DEIS economic impact analysis, though some of the same data may be used in both. The RFA certification will accompany the proposed and final ORV special regulation when they are published in the Federal Register.

### **Concern ID: 24246**

Concern Statement: One commenter stated that the DEIS process lacked transparency and for that reason it is not in compliance with NEPA requirements.

#### ***Representative Quotes:***

**Corr. ID:** 10862

**Organization:** Flowers Ridge Homeowners Assn

**Comment ID:** 136141

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Third, the three-year process that has brought the Seashore and the Hatteras and Ocracoke communities to this point of crisis has been shot through with unnecessary and mean-spirited aggressiveness by the environmentalist groups, marginally competent facilitation of the Reg-Neg process by the consultants, and a total lack of transparency in the whole process by the federal court and the NPS. By itself, the flaws in the planning process to-date are clear evidence of non-compliance with the NEPA and other federal regulations and should be grounds for withdrawing the DEIS and starting the planning process over.

**Response:** The planning process for the ORV Management Plan/EIS meets the requirements of NEPA as described in the Council on Environmental Quality regulations (40 CFR parts 1500-1508) and NPS Director's Order #12 and its Handbook (Conservation Planning, Environmental Impact Analysis, and Decision Making). The negotiated rulemaking process, while guided by the Negotiated Rulemaking Act, is not mandatory and is not required under NEPA or any other statute. NEPA does not apply to judicial decisions, nor does it apply to the NPS implementation of the consent order from the federal court, because the terms of that order require NPS to take specific actions and do not leave room for NPS to consider alternative actions. Therefore, NPS has determined there is no legal basis for the commenter's request that NPS "withdraw the DEIS and start the planning process over."

## ***PN2000 - Purpose And Need: Park Purpose And Significance***

### **Concern ID: 24247**

Concern Statement: Commenters stated their interpretations of the Organic Act and the Seashore's enabling legislation with respect to the management actions proposed in the DEIS. Some commenters stated that the intent of Congress was to protect wildlife and wilderness and that takes precedence over ORVs and if there's a conflict between recreational use and natural resource protection the NPS must side natural resource protection. Others stated that the proposed action does not meet the intent of the enabling legislation of the Seashore because it does

not provide for adequate public access to the Seashore and would severely limit the ability of the public to enjoy the resources of the Seashore.

***Representative Quotes:***

**Corr. ID:** 803

**Organization:** *Not Specified*

**Comment ID:** 141023

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The Enabling legislation for CHNS clearly intended for this Park to be preserved as remote seashore. ("permanently reserved as a primitive wilderness")(2). ORV use has enabled large numbers of visitors to drive to areas of CHNS that otherwise would have been seldom visited, diminishing a wilderness experience.

**Corr. ID:** 814

**Organization:** regular park vacationer

**Comment ID:** 132701

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Denying access to recreational opportunities, many of which are specifically protected in the Enabling Legislation, denies the Seashore's current visitors the opportunity to enjoy the park's resources and values and denies future generations the opportunity to enjoy the park's resources in direct violation of Park Services Management Policies.

**Corr. ID:** 10869

**Organization:** High Country Audubon Society

**Comment ID:** 136130

**Organization Type:** Unaffiliated Individual

**Representative Quote:** As a unit of the National Park Service the Organic Act, which created the NPS, should be the guiding principle of how the park is managed. As we are sure you know, the Organic Act states that the parks should, "conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." In creating the NPS Congress decided that protecting wild life in such manner that they are unimpaired for future generations should be the over-riding theme. Congress did not say preserving wild life should be secondary to ORV use, fishing, swimming or even birding.

**Corr. ID:** 14248

**Organization:** *Not Specified*

**Comment ID:** 140864

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Clearly, even at this point, those that read this letter must agree that proposed Alt. (F) is in direct conflict with the above mentioned statutes and published policy. The derogation of the above described intended mission of the Seashore suggested within Alt. (F) infringes upon the guaranteed right of the legal residents of Hatteras and Ocracoke Islands to make a living by fishing. 16USC459 Sec.3 clearly provides: (in part) "That the legal residents of the villages referred to in section 1 of this Act shall have the right to earn a livelihood by fishing within the boundaries to be designated by the Secretary of the Interior, subject to such rules and regulations as the said Secretary may deem necessary in order to protect the area for recreational use as provided for in this Act." Neglected within Alt. (F) are measures to insure that this right, bestowed by Congress, is respected. The law does not indicate that this is a privilege that can be arbitrarily waived by NPS; but must be treated as what it truly is, a right guaranteed by Congress that is as important and legally defensible as is the freedom of speech asserted by Congress within the Bill Of Rights. In order for a fisherman to make a living by fishing, his nets must be set where the fish are likely to be found. As the structure of the beaches at Cape Hatteras National Seashore Recreational Area change daily, so do the locations of the targeted fish. The closures proposed by NPS preferred Alt. (F) will prevent the exercise of this right as provided by Congress and is, as such, a violation of federal law.

**Corr. ID:** 14248

**Organization:** *Not Specified*

**Comment ID:** 140808

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Further evidence of the intent of Congress to develop an area for recreational purpose can be discovered within 16USC459 Sec.3. Here Congress guarantees the right of the legal residents of the Islands the right to make a living by fishing "subject to such rules and regulations as the said Secretary may deem necessary in order to protect the area for recreational use as provided for in this Act." (emphasis added). This provision resulted in the creation of an area of the Seashore that was set aside specifically for the "protection and enhancement of recreational sports-fishing". 36CFR7.58.21.b. (6) (in part) - Specifically identifies boundaries "A zone is established for the protection and enhancement of recreational sport-fishing commencing at Beach Access Ramp No. 22 and continuing south and west along the ocean shore, including Cape Point (Cape Hatteras), to Beach Access Ramp No. 30. Within this zone commercial fishing, as specified in the Act of August 17, 1937 (50 Stat.

669), is permitted." Of note is that with the Beach Access Ramp number re-designation that has occurred since this statute was enacted, the aforementioned Ramp 30 is now designated as Beach Access Ramp No. 45. Enacting NPS preferred Alt. (F) will result in the closure of the majority of the above mentioned area without scientific justification or the ability to show that ORV and pedestrian use of the Seashore has caused harm sufficient to warrant the drastic measures outlined within the preferred proposal.

**Corr. ID:** 14248

**Organization:** *Not Specified*

**Comment ID:** 140870

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I submit that the Service has no authority to alter the mission of this Seashore from a recreational area as provided within 16USC459 CHNSRA (in part) ".said area shall be, and is, established, dedicated, and set apart as a national seashore recreational area for the benefit and enjoyment of the people and shall be known as the Cape Hatteras National Seashore Recreational Area..", (emphasis added) as NPS has no Congressional authorization to do so and as such, NPS preferred Alt. (F) carries the potential to be, and will be if enacted, in violation of federal law.

**Corr. ID:** 14248

**Organization:** *Not Specified*

**Comment ID:** 140852

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Furthermore, considering that the intent of Congress was to create an area within which the public could pursue ventures, "particularly swimming, boating, sailing, fishing, and other recreational activities of similar nature" (16USC459 Sec.4), the following NPS published policy must also be considered when management considerations are being developed for application within the bounds of the Seashore.

NPS Management Policies 2006 handbook, Introduction; "Hierarchy of Authorities" (in part) - "It is especially important that superintendents and other park staff review their park's enabling legislation to determine whether it contains explicit guidance that would prevail over Service-wide policy."

NPS Management Policies 2006 handbook, Para 1.4.4 (in part) - "The impairment of park resources and values may not be allowed by the Service unless directly and specifically provided for by legislation or by the proclamation establishing the park. The relevant legislation or proclamation must provide explicitly (not by implication or inference) for the activity, in terms that keep the Service from having the authority to manage the activity so as to avoid the impairment."(emphasis added)

NPS Management Policies 2006 handbook, Para 8.1 (in part) - "The 1970 National Park System General Authorities Act, as amended in 1978, prohibits the Service from allowing any activities that would cause derogation of the values and purposes for which the parks have been established (except as directly and specifically provided by Congress)"(emphasis added)

**Corr. ID:** 14288

**Organization:** *Not Specified*

**Comment ID:** 133755

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The National Park Service cannot ignore its responsibilities under the Organic Act and the National Seashore's authorizing legislation to protect all visitors and wildlife and the habitat on which it depends. Conserving Cape Hatteras for future generations and protecting its wildlife must take precedence over one form of recreation (ORVs), and any recreational use is required by law to leave the resource "unimpaired for the enjoyment of future generations."

When Cape Hatteras was established, Congress specifically designated it a park system unit for the following reason, "Except for certain portions of the area, deemed to be especially adaptable for recreational uses... , the said area shall be permanently reserved as a primitive wilderness...."

Thus, the intent of Congress was to protect the visitor experience of primitive wilderness, not ORV use.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140235

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Thus the phrase, "except for certain portions of the area deemed to be especially adaptable ..." was redefined to be the beaches of the three islands instead of the land between Corolla and South Nags Head. The new 1950's interpretation would still follow the precepts set in the 1938 Prospectors (DEIS page 12): "Primarily a seashore is a recreational area ...provide ample shoreline for all types of recreational purposes ... secondarily the area should include adjacent lands ... forestry, wildlife, or other interests ... to be preserved in the hinterlands."

The concept of water sports "swimming, boating, sailing, fishing" defined the kind of visitor usage to be experienced in this new type of park; a national seashore recreational area. Enjoyment from some place afar, as proposed by the current NPS, was not the prime purpose for this seashore. Visitor enjoyment here is a direct personal contact with wind, wave, and sand, and all other renewable resources.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140229

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS is a travesty as a government document. The DEIS will violate four laws:

- a. CFR459 et seq Enabling legislation: conversion of a recreational area into a wildlife refuge.
- b. 160SC 1531 et seq ESA: Destruction (take) of loggerhead eggs and hatchlings.
- c. 40CFR 1500 et seq NEPA: Loss of human amenities and standard of living.
- d. 18OSC 1961-1968 Anti Racketeering Law (RICO): Fraud in obtaining land.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140234

**Organization Type:** Unaffiliated Individual

**Representative Quote:** What is this pile of words cluttering up the Organic Act?

5. Is the enabling legislation of 1937 and 1940 simply a reaffirmation of the Organic Act or an amendment or modification of the old 1916 Act? Or does it stand by itself?

6. If congress was concerned with bird life and their habitat on the beaches, why didn't they just extend the Pea Island Refuge all the way to Oregon Inlet? Why wasn't the beach bird life mentioned at all? Recreational activities were certainly identified.

7. How does the DEIS continue to fulfill the old NPS request that the villages provide the services necessary for park visitors? How are the villagers encouraged to have a flourishing economy as promised by NPS to obtain the village land holdings to create CHNSRA?

8. When did the NPS 2006 Management Policies become a congressional amendment to the 1916 Organic Act?  
B. Development- These questions do have answers but most are not found in the 800 page DEIS. They can be secured by reading the complete enabling legislation instead of selected excerpts. Especially helpful is an appreciation of the tortured development of the CHNSRA as portrayed in the NPS 1938 Prospectus and the CHNSRA Administrative History. First, understand that CHNSRA was not created in one fell swoop of 1937. It may have been conceived in 1937 but was not born until 1958. Its twenty (20) year gestation was long and complicated and nearly aborted.

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140233

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Why did NC 12 get built right through the middle of Hatteras and Ocracoke Islands which were supposed to be preserved as a primitive wilderness with all its flora and fauna?

If congress intended CHNSRA to be administered and managed only by the Organic Act like any other park, why did they not say so? The simple statement in bold print on page 11 should have been enough. The current NPS acts as if that statement justifies all their programs set forth in the DEIS.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140416

**Organization Type:** Conservation/Preservation

**Representative Quote:** In establishing the Seashore, Congress drew a clear distinction between portions of the Seashore "especially adaptable for recreational uses" and other portions of the Seashore, and clearly mandated that

the two types of areas be developed and managed differently. In managing areas "especially adaptable for recreational uses," the NPS must, under the statute, consider and accommodate recreational uses. It is not to manage such areas as "primitive wilderness." Remarkably, except for a one-sentence reference on page 527, the DEIS contains no further reference to this requirement, and the DEIS contains no discussion about how this mandatory statutory language will be reflected in its management of ORV use at different areas of the Seashore. The DEIS inexplicably fails to acknowledge the differential treatment that it must accord to the two categories of lands under the statute, and therefore fails to comply with its directive to develop and manage those areas "especially adaptable for recreational uses ?as needed." The DEIS reflects little to no effort by the NPS to attempt to accommodate public access and use, particularly in those portions of the Seashore "especially adaptable for recreational uses." Indeed, the NPS appears inclined to accept the unreasonable goal of having the entire Seashore managed as a "primitive wilderness," regardless of the extent to which the specific area is adaptable for recreational use. The NPS's total failure to distinguish between areas that it may continue to manage as a primitive wilderness and areas that are especially adaptable for recreational uses is wholly inconsistent with the Seashore's enabling statute. Based upon the nature of the activities specifically identified in the enabling legislation, the location of those areas especially adapted for recreational use should include all waters and shorelines of the Seashore. See Position Statement at 11-15. These areas should not be managed as primitive wilderness, as would be the practical effect of the implementation of NPS's Preferred Alternative F, but in a manner that recognizes and accommodates the important recreational uses of these areas as contemplated and required by the seashore's enabling legislation.

**Corr. ID:** 15248

**Organization:** Southern Environmental Law Center

**Comment ID:** 138608

**Organization Type:** Conservation/Preservation

**Representative Quote:** What's also clear is that, under the law, if there is a conflict between the resources and the people, the Park Services must side on the side of the resources; that the Organic Act and the enabling legislation of the seashore, the regulations that are in place to guide ORV use, demand -- and National Park Service's demand that if there is a conflict between recreational use and Natural Resource Protection, that the Park Service must side on the -- with the Natural Resource Protection.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140412

**Organization Type:** Conservation/Preservation

**Representative Quote:** CHAPA believes that, as written, the DEIS and the NPS's Preferred Alternative F do not meet the NPS's dual mandate set forth by its Organic Act to promote and regulate the use of the national parks "by such means and measures as conform to the fundamental purpose to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment for the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." 16 U.S.C. § 1 (emphasis added). The closures and restrictions imposed as a result of the April 30, 2008 Consent Decree in *Defenders of Wildlife v. USFWS* (No. 2:07-cv-45-BO (E.D. N.C.)) already have had a serious adverse impact--economic and other CHAPA's members. CHAPA and its members fear that the ORV management plan envisioned under the DEIS will result in even more stringent use restrictions on vehicles and closure of beaches or access points that will further significantly affect the way of life that area residents have enjoyed since long before the establishment of the Seashore--reducing recreational access, depriving fishermen dependent upon vehicles for their daily work of their livelihoods, shrinking economic activity, and changing the very culture that has defined the Outer Banks for so many years.

### Response:

The Organic Act gives NPS broad authority and discretion to manage the sometimes conflicting goals of resource conservation and visitor enjoyment and to determine how visitor activities, including recreational activities, may be managed to avoid or minimize impacts to natural and cultural resources. The express language of the Organic Act does not mandate that NPS equally balance preservation with public use in making its management decisions. Courts have held that the Organic Act places an overarching concern on preservation of resources in the management of national parks. Since the Act speaks of but a single purpose, conservation, where the goals of resource preservation and user enjoyment conflict, preserving the resources takes precedence. Thus, NPS's interpretation of the Organic Act as

allowing the Seashore to manage appropriate recreational uses in the interest of resource protection is consistent with the Act and is a proper exercise of discretion.

Other laws and policies also support NPS's decision to manage recreational use at the Seashore. The General Authorities Act, which amended the Organic Act, requires NPS to manage all units of the park system so as to effect the primary purpose of the Organic Act, which is to conserve park resources. Unless the general provisions of the Organic Act are in express conflict with any specific provision, they are applicable to all areas within the national park system. Because all units of the park system—including seashores—are to be managed to conserve and avoid impairment of resources, a unit's designation as a park, monument, or recreation area is irrelevant with regard to NPS's duties under the Organic Act, except where Congress explicitly directs specific treatment for particular park units. The Seashore's enabling legislation does not specifically mandate or authorize ORV use, nor does it require or authorize NPS to allow unmanaged recreation that damages park resources or values in violation of the Organic Act. Even for legislatively mandated uses (which ORV use is not), the NPS has the authority and must manage and regulate the use to ensure, to the extent possible, that the impacts on park resources from that use are acceptable. (Management Policies section 1.4.3.1). The Seashore's enabling legislation and the Organic Act must be read in tandem when evaluating the appropriateness of NPS's management decisions, as the former supplements, but does not supersede, the latter.

The NPS understands the language of the enabling legislation as authorizing it to provide infrastructure and facilities for visitors in selected areas to support recreational use, as needed (e.g. parking areas, day-use facilities for beach-goers, life-guarded beaches, boat launch areas, and campgrounds, ORV ramps), even though this would not be appropriate in primitive wilderness. The enabling legislation does not expressly provide for recreational activities in a way that would affect NPS's duty to manage those activities so as to avoid impairment of resources or unacceptable impacts, to avoid or minimize resource impacts, and to strive to restore the integrity of park resources that have been damaged or compromised in the past (as provided for by the NPS Management Policies). In fact, the enabling legislation states in 16 USC § 459a-1 that “the administration, protection and development” of the Seashore shall be exercised “subject to the provisions of sections 1, 2, 3, and 4 of this title”, with section 1 being the Organic Act (NPS 1937). Accordingly, recreation must be managed to provide for resource conservation. The preferred alternative, Alternative F, is consistent with the Organic Act's mandate to conserve park resources and values because it provides for actions to preserve protected species during important lifecycle stages. NPS Management Policies 2006 explain that “The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. This mandate is independent of the separate prohibition on impairment and applies all the time with respect to all park resources and values, even when there is no risk that any park resources or values may be impaired. NPS managers must always seek ways to avoid, or to minimize to the greatest extent practicable, adverse impacts on park resources and values. However, the laws do give the Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impact does not constitute impairment of the affected resources and values” (Section 1.4.3).

Section 1.4.6 of the Management Policies describes “park resources and values” as

the park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals.

Appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them

The park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and

Any additional attributes encompassed by the specific values and purposes for which the park was established.

The Seashore has many of the resources and values described above and is responsible for conserving them.

Alternative F has also been developed to be consistent with the policy stated in section 1.4.3 of the NPS Management Policies that "The fundamental purpose of all parks also includes providing for the enjoyment of park resources and values by the people of the United States. The enjoyment that is contemplated by the statute is broad; it is the enjoyment of all the people of the United States and includes enjoyment both by people who visit parks and by those who appreciate them from afar. It also includes deriving benefit (including scientific knowledge) and inspiration from parks, as well as other forms of enjoyment and inspiration. Congress, recognizing that the enjoyment by future generations of the national parks can be ensured only if the superb quality of park resources and values is left unimpaired, has provided that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be predominant. This is how courts have consistently interpreted the Organic Act." The FEIS discloses in Chapter 4 the beneficial and adverse effects of managing the use of ORV in the Seashore under alternative F. NPS has thoroughly considered all the impacts, including those impacts from existing and potential changes in visitor use which indirectly affect the local economy. Alternative F was developed, and has been revised based on public comment, to support ORV and other access methods to mitigate the indirect economic impacts of resource management on local businesses.

NPS has considered the potential for economic and cultural effects of the Plan/EIS on commercial fishermen. The action alternatives are designed to avoid creating additional impacts on commercial fishermen. Commercial fishing access would continue to be restricted only in resource closures, lifeguarded beaches, and at Cape Point, where commercial fishing is prohibited to avoid conflict with recreational fishing. Commercial fishermen would continue to operate under Seashore special use permits and would not need an ORV permit under any of the alternatives in the ORV Plan/EIS.

NPS recognizes that culture is not static, has changed over time on the Outer Banks already, and will continue to change. In response to public comment NPS has further examined and considered whether a traditional cultural property exists in the Seashore. This is discussed in the ethnography section of Chapter 1 of the FEIS (also see response to Concern ID 24160).

In addition to meeting statutory and policy requirements related to the Organic Act, Alternative F meets the purpose of the plan "to develop regulations and procedures that carefully manage ORV use/access in the Seashore to protect and preserve natural and cultural resources and natural processes, to provide a variety of visitor use experiences while minimizing conflicts among various users, and to promote the safety of all visitors." (DEIS p. 1) It also resolves the need to bring the Seashore into compliance with Executive Orders 11644 and 11989 respecting ORV use, and with NPS laws, regulations (36 CFR 4.10) and policies to minimize impacts to Seashore resources and values. In particular Executive Order 11644 requires that the location of routes minimize damage to soil, watershed, vegetation, or other resources of the public lands; minimize harassment of wildlife or significant disruption of wildlife habitats; minimize

conflicts between ORV use and other existing or proposed recreational uses of the same or neighboring public lands, and ensure the compatibility of such uses recreational uses of the same or neighboring public lands. ORV routes may be located in areas of the national park system only if the respective agency head determines that ORV use in such locations will not adversely affect their natural, aesthetic, or scenic values.

### ***PN3000 - Purpose And Need: Scope Of The Analysis***

#### **Concern ID: 24249**

Concern Statement: Commenters stated that the DEIS is more than an ORV management plan as it addresses overall access to the Seashore and species management. Some commenters noted that these issues are outside the scope of the document, which should just address ORV use.

#### ***Representative Quotes:***

**Corr. ID:** 28                      **Organization:** *Not Specified*

**Comment ID:** 126102           **Organization Type:** Unaffiliated Individual

**Representative Quote:** Please remove all portions of the Draft ORV Management Plan that references and restricts pedestrians. This plan is not the place for it. Feel free to work up a Draft Pedestrian Management plan independently.

**Corr. ID:** 13002                   **Organization:** *Not Specified*

**Comment ID:** 140354           **Organization Type:** Unaffiliated Individual

**Representative Quote:** Also, there are many references to this "plan" that utilize the wording "pedestrian access" yet this is being offered as an ORV plan. Why are limitations to pedestrian access being discussed in a plan that is meant to designate the ability of people to utilize off road vehicles? It seems that these 800+ pages of documentation are further reaching than the title suggests or implies.

**Corr. ID:** 13030                   **Organization:** *Not Specified*

**Comment ID:** 140446           **Organization Type:** Unaffiliated Individual

**Representative Quote:** First and foremost, it is disingenuous of the NPS to call the DEIS an "Off-Road Vehicle Management Plan." In fact, the document itself encompasses nearly every activity, recreational or otherwise, that concerns access to the beaches of Cape Hatteras National Seashore Recreation Area (CHNSRA).

**Corr. ID:** 13262                   **Organization:** *Not Specified*

**Comment ID:** 140177           **Organization Type:** Unaffiliated Individual

**Representative Quote:** This plan is clearly written to add protection to non-endangered species which is not the intent of a written access plan.

**Corr. ID:** 14826                   **Organization:** *Not Specified*

**Comment ID:** 140639           **Organization Type:** Unaffiliated Individual

**Representative Quote:** We have watched with disbelief as the Off-road Management Plan has been developed and is not being presented to the public as the "best way to manage ORV usage within the park." To us, it comes across as a very complex bird management plan, with little or no regard to the public use and enjoyment of the park.

**Corr. ID:** 15048                   **Organization:** *Not Specified*

**Comment ID:** 138219           **Organization Type:** Unaffiliated Individual

**Representative Quote:** Lastly, when the final product is published, it needs to be re-titled to reflect the true nature of its content, not simply "off-road vehicle management" but more accurately "beach access management".

**Response:** During scoping for the plan and during the negotiated rulemaking process, NPS public concerns surfaced over how the Seashore would handle pedestrian access and what species management would be implemented . The NPS believes these topics are closely related to ORV management. Designation of ORV routes could best be accomplished by also considering the other two topics. For example, ORV drivers/passengers often drive to a

destination and then get out of the vehicle, becoming pedestrians. Designation of an ORV route in a remote location likely would increase the number of pedestrians brought to the area by ORV compared to the number that would walk in if the area is not designated as an ORV route, increasing the potential for human disturbance of breeding shorebirds during the breeding season, by both ORV and pedestrians.

Additionally, addressing related topics was also necessary for NPS to resolve the need for the plan as described in the DEIS p. 2, which is based on the requirements of Executive Orders 11644 and 11989 as they pertain to designation of routes in units of the National Park system. Without a management framework for protected species affected by ORV and pedestrian use related to the plan for NPS to use upon expiration of the *Interim Protected Species Management Strategy* and related consent decree, it would not be possible for NPS to meet the requirement of the Executive Orders that routes be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands; that routes be located to minimize harassment of wildlife or significant disruption of wildlife habitats; and that trails shall be located in areas of the National Park System only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.

**Concern ID: 24250**

**Concern Statement:** Commenters stated that the scope of the plan should include guaranteeing visitors an opportunity to experience NPS values to a high degree in addition to minimizing recreational conflicts.

**Representative Quotes:**

**Corr. ID:** 803                      **Organization:** *Not Specified*  
**Comment ID:** 140578           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The proposed plans do not:

1. Sufficiently identify criteria for establishing pedestrian only access beaches with high "NPS Values".
2. Identify high or moderate NPS "Value" areas.
3. Acknowledge the negative impact of scenic features and natural visibility caused by off road vehicles.

**Corr. ID:** 803                      **Organization:** *Not Specified*  
**Comment ID:** 141022           **Organization Type:** Unaffiliated Individual  
**Representative Quote:** An ORV management plan for Cape Hatteras National Seashore (CHNS) must establish areas that guarantees visitors an opportunity to experience NPS Values (as described in Management Policies 2006) to a high degree in addition to minimizing recreational conflicts.  
 In April 27, 1999 a precedent was set in CHNS where visitor use conflicts were addressed and a recreational activity regulated as a result. The NPS banned Personal Water Craft (PWC) use in CHNS because of visitor use conflicts and impairment of NPS values.

**Response:** Executive Order 11644 imposes a default of no ORV use unless ORV routes can be designated consistent with the Executive Order, which states that trails shall be located in areas of the National Park System only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values. Part of the purpose of the ORV Management Plan/EIS is to manage ORV use/access in the Seashore to protect and preserve natural and cultural resources and natural processes to meet this requirement of Executive Order 11644, and does take into account these values.

After review of public comment, alternative F has been modified to include an allocation of ORV routes and vehicle-free areas, plus seasonally managed areas/routes, that was developed to present all visitors with several options to enjoy park resources and values in different manners. This designation of routes and areas was included partly to minimize visitor and recreational conflicts, and higher resource "value" areas, including areas of higher concentrations of nesting shorebirds, were considered in designating vehicle-free routes and areas. As noted in the response to Concern ID 24247, Section 1.4.6 of the Management Policies describes "park resources and values" as

the park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night;

natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals.

Appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them

The park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and

Any additional attributes encompassed by the specific values and purposes for which the park was established.

The Seashore has many of the resources and values described above and is responsible for conserving them.

Visitor conflicts and resource impacts were considered in other past decisions including the prohibition of personal watercraft (PWC); however, that decision was not based solely on visitor conflicts or on a finding of impairment and did not set a precedent for disallowing all non-pedestrian uses of the Seashore. Further, the PWC decision did not find an impairment of NPS values but that PWC use was "considerable threat to estuarine flora and fauna, pollutes waters essential to commercial and recreational fishing in the park, poses unacceptable risk of injury to operators and bystanders, conflicts with the majority of other longstanding uses of the Seashore, and is an inappropriate use of the Seashore since PWC noise intrusion is inconsistent with the 'primitive wilderness' intent." (NPS 1999) Each decision on visitor uses is made based on numerous factors, and considers longstanding uses of the Seashore as well as derogation of park resources and values.

**Concern ID: 24251**

**Concern Statement:** One commenter requested that the NPS add the following as part of the premise of the FEIS "None of these regulations shall prohibit or interfere with public access to the waterline at any stage of tide."

**Representative Quotes:**

**Corr. ID:** 15000

**Organization:** *Not Specified*

**Comment ID:** 140265

**Organization Type:** Unaffiliated Individual

**Representative Quote:** One statement should be included at the beginning of the DEIS:

"None of these regulations shall prohibit or interfere with public access to the waterline at any stage of tide."

This principle will fulfill the promises of the CHNSRA enabling legislation. With such a foundation, the NPS can work toward a successful management of its wildlife resources.

**Response:** NPS disagrees with this comment's interpretation of the Seashore's enabling legislation. Furthermore using this premise could conflict with NPS responsibilities under other statutes such as the Organic Act. Therefore, NPS declines to adopt the commenter's premise. See response to Concern ID 24247 for a discussion of recreational access, the Organic Act and the Seashore's enabling legislation.

**Concern ID: 24252**

**Concern Statement:** One commenter suggested altering the need statement to add that NPS has a responsibility to achieve a balance between population and resource use which will permit high standards of living and a wide range of life's amenities, in accordance with NEPA.

**Representative Quotes:**

**Corr. ID:** 15004

**Organization:** *Not Specified*

**Comment ID:** 137412

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Need for Action section, page ii, 2nd paragraph, last sentence: The sentence should include additional information about the role that the NPS has in carrying out the policy set for in the National Environmental Policy Act. Namely that the NPS has the responsibility, as an agent of the federal government, for

achieving a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities. (Reference NEPA 1969) The document fails to convey details associated with the workbooks which provided for public input. The full results obtained from the workbooks should be conveyed as fact and not minimized and presented as a general statement.

**Response:** NEPA section 101(b) goals are broad national goals, without the level of specificity appropriate for the need statement in the ORV Management Plan/EIS. Similarly, NPS does not include all of its general responsibilities under the NPS Organic Act and other park statutes in the need statement. The DEIS (p. 92-93) discusses how the alternatives meet the purposes of NEPA as listed in NEPA section 101(b), including the one the commenter requests be added to the DEIS need statement (DEIS p. 1-2 and p. ii). Therefore NPS has determined not to add this NEPA goal to the plan/EIS need statement (page ii of the DEIS) as requested by commenter.

### ***PN8000 - Purpose And Need: Objectives In Taking Action***

#### **Concern ID: 24283**

**Concern Statement:** Commenters suggested additional/revised objectives for the FEIS including:

- Include an objective to ensure ORV usage to provide access to park visitors
- Make recreational access a priority
- Base conservation measures on honest science and common sense

#### ***Representative Quotes:***

**Corr. ID:** 13279

**Organization:** *Not Specified*

**Comment ID:** 140623

**Organization Type:** Unaffiliated Individual

**Representative Quote:** iv Objectives Section, Visitor use and Experience:

Comment: there should be a specific objective to ensure ORV usage to provide access to the park for visitors

**Corr. ID:** 14228

**Organization:** *Not Specified*

**Comment ID:** 137870

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I oppose the DEIS because the objectives on page iii are fatally flawed. Two additional objectives must be added:

1. Recreational Access Is A Priority
2. Conservation Measures Will Be Based On Honest Science and Common Sense

Unless these objectives are stated and met, large stretches of beach will be closed every year to protect a handful of marginal nesting sites at a cost of over \$3,000,000 per year

**Response:** NPS considers providing for ORV use in the Seashore to be covered under the objective "Manage ORV use to allow for a variety of visitor use experiences" (DEIS p. 3). Therefore a separate objective is not needed and has not been added.

NPS has determined that the objectives "Manage ORV use to allow for a variety of visitor use experiences" and "Minimize conflicts between ORV use and other uses" (DEIS p. 3) have resulted during the planning process in substantial and sufficient attention to providing ORV and other access for visitors to enjoy the Seashore. Therefore commenter's suggested additional objective "to ensure ORV usage to provide access to the park for visitors" has not been added. See the response to Concern ID 24247 for a detailed discussion of why recreational use does not take precedence over the primary purpose of units of the National Park System. NPS notes that consideration of visitor experience opportunities at the Seashore will also be part of the upcoming planning process for the Seashore's General Management Plan.

NPS has determined that Commenter's suggested additional objective "Conservation Measures Will Be Based On Honest Science and Common Sense" is not needed and, therefore, has not been added. The NPS guidance on the NEPA planning process provides that reasonable alternatives show evidence of common sense (NPS Director's Order #12 Handbook section 2.7 B). Accordingly, as is standard NEPA practice, NPS considered the common sense

feasibility of potential alternatives when developing action alternatives, including conservation measures, for the DEIS. An action alternative with conservation measures that did not consider the results of scientific research and the opinion of species experts from the scientific community would be unlikely to resolve the Plan/EIS purpose and need for action and would not meet the objective “to provide protection for threatened, endangered, and other protected species (e.g., state-listed species) and their habitats, and minimize impacts related to ORV and other uses as required by laws and policies, such as the *Endangered Species Act* (ESA), the *Migratory Bird Treaty Act* (MBTA), and NPS laws and management policies.” (p. 3 DEIS).

Using common sense and science are implicit in the NEPA planning process, which was followed for the Plan/DEIS.

See Concern ID 24669 for a response to comments about the “science” used in the plan/EIS.

**Concern ID: 24284**

**Concern Statement:** Commenters stated that having fixed buffers and year-round closures would not meet the plan objective to "Establish management practices and procedures that have the ability to adapt to the Seashore's dynamic physical and biological environment." They further stated that current turtle management policies would not allow the NPS to meet objectives related to the protection of threatened and endangered species.

**Representative Quotes:**

**Corr. ID:** 14948      **Organization:** Cape Hatteras Anglers Club

**Comment ID:** 137154      **Organization Type:** Recreational Groups

**Representative Quote:** Alternative F of the DEIS proposes year around closures for the following stretches of beach (11.9 miles):

Bodie Island (north to south) Ramp 1 to north end of Coquina Beach - (page xiii)

Ramp 27 to ramp 30 (Species Management Area) - (page xiv)

Approximately 1.7 miles south of ramp 38 (i.e., Haulover) to Buxton line (Species Management Area)(page xiv)

Ocean shoreline from 0.2 mile southwest of Bone Road (a.k.a, Fort Clark Spur) to inlet(Species Management Area) - (page XVI)

Ocracoke Island (north to south) Inlet to 0.25 mile northeast of ramp 59 (Species Management Area) (page xvi)

0.25 miles southwest of ramp 59 to new ramp 62 at 3.0 miles northeast of Pony Pen area - (page xvi)

New ramp 64 at 1.0 mile northeast of Pony Pen to 0.75 mile northeast of ramp 67- (page xvi)

All of these areas have historically either been open year around to ORV use or ORV areas closed as "safety closures" and all subject to resource closure. not permanently closed.

The year around closure of above listed 11.9 miles of ocean beach for the term of this proposed ORV plan clearly does not satisfy the DEIS stated objective of: " Establish ORV management practices and procedures that have the ability to adapt in response to changes in the Seashore's dynamic physical and biological environment."

Past year around beach closures have encouraged vegetation and small dune development which have effectively destroyed bird nesting habitat. This NPS destruction of nesting habitat was first done at the dredge ponds at Cape Point. These ponds are now home to predators and bird nesting no longer takes place. Next, the NPS closed the interior of Bodie Island Spit to year around use and this area is now covered with grass and emerging dunes which are not conducive to piping plover nesting. NPS then closed the interior of Cape Point which has resulted in emerging dunes and grass starting to take over much of the interior beach. Year around closures at the above sites, as proposed in Alternative F, which will last for the next ten to fifteen years, presume that these beaches will remain unchanged, which is impossible to ascertain.

**Corr. ID:** 14969      **Organization:** Not Specified

**Comment ID:** 137323      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Page iii of DEIS and page 129

"OBJECTIVES IN TAKING ACTION

THREATENED, ENDANGERED, AND OTHER PROTECTED SPECIES

- Provide protection for threatened, endangered, and other protected species (e.g., state-listed species) and their habitats, and minimize impacts related to ORV and other uses as required by laws and policies, such as the Endangered Species Act, the Migratory Bird Treaty Act, and NPS laws and management policies.

Draft Off-Road Vehicle Management Plan I EIS iii and 129

Regarding sea turtles (threatened Loggerhead, endangered Green and endangered Leatherback) at CHNS:

Using procedures outlined in Alternative F of the DEIS, which are the same as has been used in the past ten years, will continue to produce worse than the catastrophic results as listed on page 44 of the 2009 "Recovery Plan for the Northwest Atlantic Population of the Loggerhead Sea Turtle" under the heading of "Natural Catastrophes". Events creating losses of 24.5%, 22.7%, 19%, 16% and 54% (average losses of 27.2%) are listed as having been catastrophic. Sea turtle protection policies at Cape Hatteras National Seashore Recreational Area (CHNSRA) have produced an average percent of nests lost (zero % hatch rate) of 37.25% during the last ten years. Using NCWRC guidelines and the added restrictions on night driving of the consent decree in 2008 and 2009, the lost nests were 33.9%, or some 33% above the average of catastrophic losses listed in the Loggerhead Recovery Plan.

Losses at the rate experienced at CHNSRA clearly show that Alternative F for sea turtles does not satisfy the DEIS stated objective of "protection for threatened, endangered? species" as stated.

**Corr. ID:** 15010

**Organization:** Cape Hatteras Access Preservation Alliance

**Comment ID:** 140450

**Organization Type:** Conservation/Preservation

**Representative Quote:** During the negotiated rulemaking process, beach user groups recommended that the NPS maximize the use of "floating" resource closures in the place of fixed closures. Such closures would move along with the range of the birds and, the groups advocated, would provide both better protection for shorebirds and more access for the public. Given that the NPS envisions that the ORV management plan will be in effect for ten to fifteen years, making the plan flexible and adaptable to the Seashore's dynamic conditions only makes sense. Fixed closures do not satisfy the DEIS's stated objective to "[e]stablish ORV management practices and procedures that have the ability to adapt in response to changes in the Seashore's dynamic physical and biological environment," DEIS at iii, and should not be used in the final plan.

**Response:** In determining the amount of designated ORV routes versus vehicle-free areas, the NPS considered all aspects of visitor use and experience at the Seashore in addition to resource protection; therefore, vehicle-free areas are not just for resource protection, but also to provide pedestrian-only recreational experiences. Alternative F has been revised to include 26.4 miles of year round vehicle-free areas and 27.9 miles of designated year-round ORV routes, with 15.1 miles of seasonally designated OR routes that are vehicle free 6-7 months of the year. The increase in vehicle-free areas comes mainly from changing previously seasonal ORV routes to year-round vehicle-free areas to benefit pedestrians desiring a vehicle-free experience, to address safety and erosion considerations, and to better protect migrating/wintering shorebirds. The revised alternative F also eliminates SMAs and floating closures. Floating closures were removed from alternative F to be able to provide closures that are more predictable and based on historic breeding activity. While they would not have the flexibility of floating closures, the year-round and seasonal closures under revised alternative F would be more consistent and predictable.

While they would not adjust with the frequency of floating closures, vehicle-free areas for resource protection are not necessarily fixed for the next 10-15 years. Flexibility to adapt to changing conditions under the revised alternative F results from the NPS conducting a systematic review of data, habitat conditions, and other information every 5 years, after storms or events that Seashore management determines to be a major modification of habitat quantity or quality, or after a significant change in protected species status in order to evaluate the effectiveness of management actions in making progress toward the accomplishment of stated objectives. These periodic reviews could result in changes in the management actions in order to improve effectiveness and may allow for more flexible management of recreational use, provided wildlife populations are not adversely affected and continue to make progress toward desired conditions. Where progress is not being made toward the attainment of desired conditions, the periodic review and adaptive management may result in increased restrictions on recreational use. Floating closures and SMAs were removed from the revised alternative F to simplify resource management and increase the predictability of visitor experience opportunities associated with vehicle free or ORV use areas; however, buffers may still be adjusted as needed when unfledged chicks are mobile.

Regarding the succession of beach habitat to dunes and vegetated areas within vehicle-free areas, the NPS is not destroying habitat by allowing this process to occur. Succession is a natural process and per the NPS *Management*

*Policies 2006*, “Natural resources will be managed to preserve fundamental physical and biological processes, as well as individual species, features, and plant and animal communities.” In defining what natural processes are, the *NPS Management Policies 2006* state that “Natural resources, processes, systems, and values found in parks include:... biological processes such as photosynthesis, succession, and evolution”. Therefore, allowing these natural processes to occur within the Seashore is consistent with NPS management policies as well as the enabling legislation that states “...and no development of the project or plan for the convenience of visitors shall be undertaken which would be incompatible with the preservation of the unique flora and fauna or the physiographic conditions now prevailing in this area.” Allowing these areas to progress through the natural stages of succession is also consistent with the objectives of the plan found on pages 2 and 3 of the DEIS relating to Natural Physical Resources: minimize impacts from ORV use to soils and topographic features, for example, dunes, ocean beach, wetlands, tidal flats, and other features; Vegetation: minimize impacts to native plant species related to ORV use; and Other Wildlife and Wildlife Habitat: minimize impacts to wildlife species and their habitats related to ORV use.

Regarding NPS management of sea turtle nests with respect to weather related events see the NPS response to Concern IDs 24018 and 24143.

#### **Concern ID: 24285**

**Concern Statement:** One commenter requested that the NPS further explain how the preferred alternative can "largely meet" rather than "fully meet" objectives related to threatened and endangered species.

#### ***Representative Quotes:***

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137727

**Organization Type:** Conservation/Preservation

**Representative Quote:** The DEIS accurately notes that the Seashore provides habitat to several endangered, threatened and protected species and states "NPS is required to conserve and protect all of these species, as well as other resources and values of the Seashore. The use of ORV's must therefore be regulated in a manner that is consistent with applicable law, and appropriately addresses resource protection (including protected, threatened and endangered species). DEIS at ii. The DEIS further states that Preferred Alternative F meets the objective to "[p]rovide protection for threatened, endangered, and other protected species (e.g., state listed species) and their habitats, and to minimize impacts related to ORVs and other uses as required by laws and policies" only "to a large degree." DEIS at xxxiii. If Alternative F remains the preferred alternative, NPS must explain in the final EIS how it can authorize a plan that "largely meets" but does not fully meet the legal requirements for species protection.

**Response:** Alternative F complies with the legal requirements of statutes such as the Endangered Species Act, while meeting the plan objective to “provide protection for threatened, endangered, and other protected species (e.g. state-listed species) and their habitats, and minimize impacts related to ORV and other uses as required by laws and policies, such as the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), and NPS laws and management policies.” Alternative F meets the first part of the objective (Provide protection for threatened, endangered, and other protected species (e.g. state-listed species) and their habitats), though not as well as alternative D. For example, NPS has determined that alternative F may affect/is likely to adversely affect species listed under the Endangered Species Act and has requested consultation with the U.S. Fish and Wildlife Service as required. Alternative F meets the second part of the objective (minimize impacts related to ORV and other uses as required by laws and policies, such as the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), and NPS laws and management policies). Therefore, NPS considers that this objective is met by Alternative F.

The consideration and disclosure of the degree to which each alternative meets the purpose, need and objectives of the plan is a NEPA practice, recommended in the NPS Director’s Order #12 Handbook section 4.5 E 10 (a). It is not a finding of whether an alternative complies with the ESA.

#### **Concern ID: 24286**

**Concern Statement:** One commenter stated that NPS may have difficulty meeting education and outreach objectives related to a turtle watch program due to the way current management is structured.

**Representative Quotes:**

**Corr. ID:** 14946

**Organization:** Cape Hatteras Anglers Club.

**Comment ID:** 137070

**Organization Type:** Recreational Groups

**Representative Quote:** Alternative F of the DEIS on page xxxii states the following:

Meets objective to a large degree as the Seashore would implement more educational programs in local schools, expand the Junior Ranger program, and enlist volunteers for a Sea Turtle Nest Watch Program.

The above statement concerning "enlist volunteers for a Sea Turtle Watch Program " sets a goal that will be very difficult to achieve. I say this because the current procedures of not using relocation zones would require literally hundreds of volunteers every night of a hatch window for multiple nests spread along the 68 miles of the Seashore until 72 hours after each nest hatches . Many members of the general public are so upset with the access restrictions of Alternative F and the poor results of the sea turtle program , that attracting volunteers to watch a nest fail will be very hard to do. Civic involvement would be greatly enhanced if access the beaches was increased rather than decreased. Running a Recreational Seashore must allow reasonable access which Alternative F does not do. A much more reasonable approach to a nest watch program is detailed in the "Sea Turtle Management - A Common Sense Approach for Cape Hatteras Seashore Recreational Area" proposal filed by Outer Banks Preservation Association, North Carolina Beach Buggy Association and Cape Hatteras Anglers Club.

**Response:** NPS believes that a nest watch program could be successful and should be implemented. Other areas have had experience with successful nest watch programs. Nests are laid and therefore hatch over a period of months and would not require a large number of volunteers on the same days. Depending on their distance from sources of light pollution, some nests may not need watcher presence. See the response to Concern ID 24143 for a discussion of the Outer Banks Preservation Association, North Carolina Beach Buggy Association and Cape Hatteras Anglers Club document describing proposals for sea turtle management.

**PO4000 - Park Operations: Impact Of Proposal And Alternatives**

**Concern ID: 24253**

Concern Statement: Commenters expressed concern that the NPS would not be able to fund the preferred alternative and noted that if visitation decreases, park funding could also decrease and adversely impact the Seashore's ability to carry out management actions. Other commenters asked how many new staff members would be needed to carry out the preferred alternative.

**Representative Quotes:**

**Corr. ID:** 7126

**Organization:** *Not Specified*

**Comment ID:** 133410

**Organization Type:** Unaffiliated Individual

**Representative Quote:** There aren't enough park rangers under the current consent decree. I'd like to know how many additional rangers, trappers, and middle managers will need to be hired to administer the new plan.

**Corr. ID:** 10625

**Organization:** *Not Specified*

**Comment ID:** 136506

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Section 3.3: Funding for proposed ramp, access, and corridor improvements  
In this time of a weak economy and reduced tax revenues, I am concerned that the NPS does not have the funding necessary to provide the proposed ramp, access, and corridor improvements described in Option F.

**Corr. ID:** 14974

**Organization:** *Not Specified*

**Comment ID:** 139490

**Organization Type:** Unaffiliated Individual

**Representative Quote:** If this downward trend continues, it not only will have a huge negative impact on the people of Hatteras Island, but at some point also on the National Seashore itself. With fewer and fewer visitors, it will be harder for the Seashore to justify its funding levels. If funding would be cut, visitor services would be cut, maintenance projects would be cut, employees would be cut, and resource protection also would have to be cut.

**Response:** Once the planning is completed, and a decision is made, a request for additional funds would occur. A description of additional funding needs and potential sources is provided below. Expected staff needs for the

implementation of the preferred alternative are detailed on pages 625 to 630 of the DEIS. As noted in this analysis, the increase in staffing that would be required would not be fully covered by existing and expected funding and would be partially offset by permit fees and by reprioritizing staff from other efforts. Based on further experience implementing the Consent Decree in 2009 and 2010, additional staff beyond those noted in the DEIS would be required for plan implementation, regardless of the alternative selected, to meet needs for increased attention to public information, resource education, science and adaptive management, and program management, all of which would be funded in part through the ORV permit fee revenues. As these positions would be common to all action alternatives, the relative cost of revised alternative F would not change compared to the other action alternatives.

In addition to the staffing needs detailed in the FEIS, implementation of the plan would also require funding for construction, such as new ramps and parking areas. As revised, alternative F would include fewer construction projects than stated in the DEIS, therefore reducing the amount of funding needed. Like most federal agencies, the NPS relies on Federal appropriations to fund its core activities, although there is increasing use of alternative revenue sources, such as fees, to supplement operations. Parks generally obtain project funding either from annual appropriations or recreational fees; however, Federal and non-Federal grants can be a potential fund source as well.

Annual appropriations are obtained directly from Congress. As an agency, the NPS develops an annual budget request that is submitted to Congress for review, modification, and approval. Base funding approved in the Operation of the National Park System appropriation covers basic operations (operating visitor centers, patrolling park grounds, and maintaining facilities). Other appropriations cover special programs (e.g. funding research, land acquisition, and construction) of the NPS.

The NPS also collects Recreation Fees as authorized by the Federal Lands Recreation Enhancement Act (FLREA). This fee revenue is generated at over 190 sites through park admission fees and user fees (such as for guided tours, parking, and campgrounds). All revenue collected at these sites is retained by the NPS with 80% being retained by the collecting park. Fee funds are immediately available without being subject to Congressional appropriation, but must be spent only on approved projects that meet FLREA eligibility criteria and emphasis factors.

The NPS anticipates that funding for construction of any access ramps, parking lots, roads or other infrastructure needs outlined in the alternatives will come from appropriated NPS programs such as Line Item Construction (major or costly construction activities) or Repair and Rehabilitation (improvements to existing infrastructure at moderate costs), or from the Park's Recreation Fees. Construction projects are required to compete for NPS approval prior to funds being provided. This competition process occurs annually and requires parks to enter project proposals into the NPS's Project Management Information System (PMIS), which is a system used to track requests, document review comments, and track project status. Approved projects generally receive funding two years after the year the project was submitted.

Major construction and reconstruction projects generally require a three-year schedule for completion. The first year funding is for obtaining surveys and preparing preliminary design plans. The second year is for completion of project planning (construction drawings). Actual construction is generally scheduled in the third year. Projects under this program are usually accomplished by the NPS's Denver Service Center.

### ***RN1000 - Regulatory Negotiation Process***

#### **Concern ID: 24254**

**Concern Statement:** Commenters stated that the preferred alternative did not represent the work of the negotiated rulemaking committee and asked that this alternative be modified to reflect their work. Some commenters stated that this process failed because NPS failed to enforce the rules.

#### ***Representative Quotes:***

**Corr. ID:** 10999

**Organization:** *Not Specified*

**Comment ID:** 136069

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In order to restore balance to the DEIS, I highly recommend that the NPS revisit the proposal put forth to the Negotiated Rulemaking Committee in December of 2009. It provides the necessary protections for wildlife resources while having the support of a majority of the local community.

**Corr. ID:** 14099

**Organization:** Avon Property Owners Assoc.

**Comment ID:** 141073

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Negotiated Rulemaking Committee (NRC) Recommendations: In the interview stage to select members of the Negotiated Rulemaking Committee (NRC), the public was assured that the National Park Service (NPS) would give us a level playing field. The public and the interviewees were assured that the members would be able to think out of the box, to make adjustments to the interim plan, possibly finding solutions that would make the final ORV plan even less stringent than the interim plan.

As an Avon Property owner and interested audience of the Negotiated Rulemaking Committee that addressed this problem, I am astounded and disappointed in the direction the NPS took the alternatives shown in the DEIS. I am particularly disturbed by statements and comments that many of the parts of the NPS preferred Alternative F came from the Negotiated Rulemaking Committee. When three committee members who agreed in advance not to litigate, they brought suit against the NPS that resulted in the highly restrictive Consent Decree. Many of the members of this Committee on the access side wanted to terminate our good faith participation at that time, but were advised and encouraged by their support groups to not be quitters and stay the course, which they did. Some of the members of the panel were given legal advice during the law suit and signed on to the consent decree to avoid the judge shutting the entire beach until the new plan was in place which has been several years in the making counting the Interim Plan that was in effect at the time of the formation of the Reg-Neg committee.

Some members of the access group on the NRC went well beyond reasonable negotiation in a last ditch alternative that was an attempt to test if the environmental side was trying to come close to negotiating. However, even with NPS, USFW, and all state agencies on board with the last ditch, test proposal, the environmental groups would come to no consensus--they refused to negotiate, as they did from the very beginning of the 15 month process. I would never have agreed to several items in that plan including the buffer distances of up to 1000 meters and the closing of Ramp 27-30 year round.

**Response:** Many of the concepts included in alternative F originated in, or were discussed by, the Advisory Committee or its subcommittees and work groups during the negotiated rulemaking process. Different members put forth a number of proposals and counter proposals, both during and at the end of the committee process. NPS participated in those discussions and considered all the ideas presented before developing alternative F. As stated in the DEIS (p. 80), in the case of conflicting advice from Committee members about any particular issue, the NPS made management judgments as to which approaches would make an effective overall ORV management alternative. Comments received on the DEIS have reiterated recommendations from different members for various management actions contained in these proposals and these recommendations have been responded to by topic in this Concern Response Report.

NPS notes that different members of the Advisory Committee, as well as members of the public, have differing views as to what other members did or didn't do, and why the process did not reach a consensus agreement on an alternative for ORV management at the Seashore. NPS appreciates the commitment of time and effort members made to participate and believes the process was helpful in generating new ideas and better defining the differing perspectives.

### ***SE1000 - Socioeconomics: Guiding Policies, Regs And Laws***

**Concern ID:** 24255

**Concern Statement:** Commenters noted laws and regulations they felt should be considered in the economic analysis including the Magnuson-Stevens Act, as well as the "right to earn a livelihood by fishing" statement in the Enabling Legislation, stating this goes beyond commercial fishing.

#### ***Representative Quotes:***

**Corr. ID:** 15000

**Organization:** Not Specified

**Comment ID:** 140239

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In 459 a-1 the words "commercial fishing" are not used as a provision applied to the Organic Act. The exact words are "shall have the right to earn a livelihood by fishing". This phrase encompasses

more than just "commercial fishing". This right includes: recreational head boats, charter fishing boats, captains and crew, boat building and repairs, fuel and provisions, professional guides, repairs, bait and tackle shops, food and lodging for recreational anglers. Thus when a tackle shop owner complains of lost business due to beach closings and is told by NPS that he needs to adjust and retrain - that response is a violation of the law.

**Corr. ID:** 15157

**Organization:** *Not Specified*

**Comment ID:** 138887

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Do ya'll know what the Magnuson-Stevens Act is? I -- if you don't, I suggest you read through it, because one of the things that's mentioned in there, is -- is a socio-economic impact study on how regulations affect the fishing industry. Our industry is constantly dealing with endangered species. But yet, there is slowly becoming a balance between the threatened species and what the general fisherman needs. I suggest that ya'll do this study and not just take the word off of these people that these businesses are gonna be affected. This is mandated by Congress. It's in there. You should look at the guidelines put in that document, and apply those document -- those guidelines where it comes to the economic study to the regulations and stuff that you're trying to throw down on this island.

**Response:** The NPS does not agree with the commenter's interpretation of the phrase "shall have the right to earn a livelihood by fishing" in the Seashore's enabling legislation. Even if, for the sake of argument, one assumed it was correct, case law upholds the authority of the Department of the Interior to regulate the use of Seashore beaches for "commercial fishing" under the enabling legislation. Similarly, the NPS has authority to regulate fishing-related use of Seashore beaches.

The section of the Magnuson-Stevens Act (Act), 16 U.S.C. 1864 §315 (c), Regional Impact Evaluation, referred to by commenter applies to specific situations, which do not pertain to this ORV Management Plan. The Plan does not regulate a fishery in the meaning of the Magnuson-Stevens Act, nor would any of the actions under alternative F constitute a catastrophic regional fishery disaster as defined in section 315(d) of the Act.

### ***SE2000 - Socioeconomics: Methodology And Assumptions***

#### **Concern ID: 24256**

**Concern Statement:** Commenters stated that the DEIS incorrectly identified the Region of Influence (ROI) for this project. They stated that analysis at the county-wide level masks the impacts that would occur in the Seashore villages, and that northern communities such as Kill Devil Hills and Southern Shores should not be included in the ROI.

#### ***Representative Quotes:***

**Corr. ID:** 3490

**Organization:** *Not Specified*

**Comment ID:** 141215

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The analysis of economic impact to the Seashore Villages appears to be significantly down played. Emphasis in DEIS is on the ROI-wide or county-wide level impacts.

Nowhere is it clearly addressed that the overwhelming majority of negative impacts will be felt by small businesses in the Seashore Villages rather than by overall economic interests within the greater ROI.

**Corr. ID:** 13427

**Organization:** *Not Specified*

**Comment ID:** 140823

**Organization Type:** Unaffiliated Individual

**Representative Quote:** To include the economic statistics of northern beach communities as part of the southern beach communities is similar to including the time of the pacer horse at the Kentucky Derby as part of the overall race statistics. Our adjoining northern beach community neighbors, Southern Shores, Kitty Hawk, Kill Devil Hills, and Nags Head are completely different economies. In fact, tourists (our main industry) must bypass these northern beach communities in order to get to the southern beaches. The extra half hour to hour and a half drive south makes these northern beaches more of a competitor than a companion to the southern village communities.

Full time population differences alone clearly reflect the dichotomy between the southern villages and northern towns. These northern beach towns include Southern Shores (population 2,587 (2008 Dare Co.)), Kitty Hawk (population 3,260 (2008 Dare Co.)), Kill Devil Hills (population 6,642 (2005 Dare Co.)) and Nags Head (population 3,016 (2008 Dare Co.)).

The population of these northern beach communities totals 15,500 people spread across approximately 18 miles.

In comparison, the southern beach villages include Rodanthe (population 203), Waves (population 49 or 50), Salvo (population 339), Avon (population 735), Buxton (population 1,848), Hatteras Village (population 743), and Hyde County's Ocracoke Island (population 769).

The population of these southern beach communities totals 5,456 spread across approximately 65 miles (all population statistics from most recent data and most reputable sources between 2000 census and 2008 Dare County records. Mileage does not include Pea Island Wildlife Refuge nor does it include any water area across Hatteras Inlet).

When one compares revenues from the restaurant, hotel, rental cottage, and retail establishments, the economic dichotomy of these different communities becomes ever more clear.

**Corr. ID:** 13646

**Organization:** *Not Specified*

**Comment ID:** 139605

**Organization Type:** Unaffiliated Individual

Additionally, I understand that there were no surveys done with the local businesses on Ocracoke and Hatteras Islands. Given the "test run" that was provided because the area has been operating under the Consent Decree for two complete seasons, I think businesses have a perfect idea what the DEIS will do to their income considering how much more restrictive Alternative F is over the Consent Decree.

**Corr. ID:** 14408

**Organization:** *Not Specified*

**Comment ID:** 140898

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The ROI used for the analysis utilizes all the villages in the Park. The impact will primarily impact Ocracoke, Avon, Frisco, Buxton and Hatteras. There is existing data that the consent decree has had a major impact on business in the area. The increase in pedestrian only areas will have a minimal impact on the economies of the areas. Survey the parking lots with pedestrian access versus the number of vehicles on the beach. ORV users are the vast majority of users and most pedestrians will only walk a limited distance in heavy sand.

**Corr. ID:** 14714

**Organization:** Outer Banks Preservation Association

**Comment ID:** 133685

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The socioeconomic analysis on pages 270-281 and pages 561-598 are misleading and erroneous. There are critical weaknesses in the analyses of the statistical definition of the Region of Influence, incomplete visitation/business survey data (p. 566), erroneous recreational user data, inflated overall seashore visitor counts pertaining to beach use, and flawed key assumption concerning the maintenance of access under Alternative F. These flaws are directly manifested in both the Effected Environmental and Socioeconomic Impact sections of the DEIS. Areas that are not even associated with CHNSRA or ORV use are included in the ROI and the economic impact statistics. This allows NPS to downplay the excessiveness of the restrictions to access as well as the horrendous economic impact that the restrictions are causing in CHNSRA.

**Response:** To gather data for the socioeconomic analysis, NPS conducted a survey of businesses in the Seashore villages and in Kill Devil Hills, Nags Head, and Kitty Hawk (see page 566 of the DEIS for a description of the survey). In the business survey, some of the businesses in the three villages north of the Seashore reported that beach closures to ORVs would affect their revenue and forecast revenue losses in the future, so it is not inaccurate to include these communities in the ROI. However, it is true that other businesses in the three northern communities reported that ORV restrictions would have no impact on their business. In the economic impact analysis, we apply a range of losses around the mean reported by businesses in the three northern communities to the entire Outer Banks area of Dare County north of the Seashore. The resulting impacts most likely overstate the economic impacts on the northern part of Dare County.

We fully agree that the impacts will fall mainly on the Seashore villages. For this reason we report the range of revenue impacts used to calculate the impacts for each alternative separately for the Seashore villages and the rest of the ROI (see tables 67, 69, 72, 74, 77 and 79). Although the results from running the IMPLAN model are presented at the county-level, in the discussion of each alternative, we state that the Seashore villages would experience the majority of the direct impacts. In the discussion of the impacts on small businesses for each alternative, we state that the impacts will be larger for businesses that depend on visitors who use particular beach access ramps or visit particular beaches that will be closed or restricted under the alternative. In the conclusion for each alternative, we reiterate that the Seashore villages will experience the majority of the impacts and that small businesses may be disproportionately impacted. We forecast higher adverse impacts on the small businesses than for the ROI as a whole.

In Hyde County, Ocracoke is relatively wealthier than the rest of the county and accounts for a large portion of the county's income. The IMPLAN analysis estimates the ripple effect of revenue changes in Ocracoke on Hyde County as a whole.

As discussed in the DEIS and FEIS, we used a variety of data sources to create the low, moderate and high impact scenarios for each alternative because each source of data has pros and cons. We do not directly use the absolute number of recreational users to calculate impacts. Instead, we compared visitation trends over a number of years to see how visitation in 2007 and 2008 compared relative to previous visitation levels.

In initial meetings shortly before the Negotiated Rulemaking committee was officially formed and in early meetings with the committee, we were told that the economic impacts would be widespread. We were urged by members of the local community to consider the impacts on Dare County, the State of North Carolina, and potentially neighboring states. We chose to narrow the ROI to just the island portions of Dare and Hyde counties, and assessed the resulting indirect and induced impacts on Dare and Hyde County as a whole and for the Seashore villages where possible.

**Concern ID: 24257**

**Concern Statement:** Commenters stated that the DEIS did not include a complete economic study and failed to address full costs--direct costs, indirect costs, lost opportunity costs, costs of future liability, and hidden costs and therefore the document was flawed. They requested a complete study be done that includes a survey of businesses and incorporates the first year of economic data from the consent decree (2009). Commenters also expressed concern over the use of 2004 data when newer data should have been available.

***Representative Quotes:***

**Corr. ID:** 889

**Organization:** OBPA

**Comment ID:** 137220

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Economic analyses in the DEIS do not use data from the first full year of the Consent Decree (2009).

**Corr. ID:** 3874

**Organization:** Outer Banks Chamber of Commerce

**Comment ID:** 139314

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 566 in the DEIS states "To provide information for the economic analysis, a survey was conducted by RTI, International of selected categories of potentially affected businesses. The results of this survey are currently being analyzed and will be addressed in the final plan/EIS." Page 571 also notes that data is still being analyzed and will allow future analysis of the economic impact. How is it possible to comment on something that does not yet exist?

2. Page 566, table 63 uses what it purports to be revenues from 2004 when current data was available. And the revenues in the table are incorrect even for 2004 and don't appear to include Ocracoke village.

**Corr. ID:** 12214      **Organization:** *Not Specified*  
**Comment ID:** 137450      **Organization Type:** Unaffiliated Individual

**Representative Quote:** My first comment concerns the fact that the Economic Impact analysis component of the planning process is not completed. This is the single most important component to the planning process and was supposed to be completed for public comment in conjunction with the DEIS. As a local businessman, and park user, without this most important piece of the document, the rest of the DEIS is useless.

**Corr. ID:** 13030      **Organization:** *Not Specified*  
**Comment ID:** 140492      **Organization Type:** Unaffiliated Individual

**Representative Quote:** I would propose that study of all the individual businesses on the Island be conducted in order to collect data pre-Consent Decree and post-Consent Decree. This would likely paint a much dire picture of the future of the Island economy if Alternative F (similar closures to Consent Decree) indeed becomes the final plan.

**Corr. ID:** 13996      **Organization:** MIDGETT BROS INC, HATTERAS MARLIN MOTEL  
**Comment ID:** 140053      **Organization Type:** Unaffiliated Individual

**Representative Quote:** The Economic Impact Analysis found the DEIS by its own admission is incomplete. How can we comment on an incomplete document? The Economic analysis is structured in such a manner that it fails to address full costs--direct costs, indirect costs, lost opportunity costs, costs of future liability, and hidden costs.

**Corr. ID:** 14099      **Organization:** Avon Property Owners Assoc.  
**Comment ID:** 141077      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Socioeconomic Impact is Incomplete: NPS is using incomplete data and analysis to reach economic impact conclusions in the DEIS. Due to a hasty, underfunded, and limited (if any) data collection and analysis process, there is no completed and peer reviewed economic analysis. This makes the DEIS seriously flawed and an illegal, if not missing, component of the DEIS. The Cost / Benefit ratio needs to be determined and balanced against the intent and survival of the residents and visitors to the CHNSRA and its designated purposes (by the Federal Government in the 1930s and again in the 1950s).

**Corr. ID:** 14242      **Organization:** ENVISCI3330 Land Use Management  
**Comment ID:** 140409      **Organization Type:** Unaffiliated Individual

**Representative Quote:** One last thought, as I have conducted my research behind this issue, it has been apparent to me that one concern of the public and surrounding communities is the effects of restrictions to the local economy. I may have missed it, but could not find a complete economic impact study. My question would be what percentage of people currently utilize ORVs to gain access to the many sites and facilities of the seashore?

**Corr. ID:** 15115      **Organization:** *Not Specified*  
**Comment ID:** 139507      **Organization Type:** Unaffiliated Individual

**Representative Quote:** The Economic Impact Analysis is, to be quite honest, tentative and incomplete. I urge you to push RTI to get hard-edged, and to push into greater depth in analyzing the impact on these communities. I urge you to watch for professional -- Professor Dan Stein's 2009 report on the National Park visitor spending, coming out in July or in August of this year, and look at it very carefully in comparison to 2008 data on the economic life and viability of these communities.

**Response:** Available economic data was sufficient for the purposes of NEPA analysis of the impact of the alternatives before any of the studies were undertaken. During the negotiated rulemaking process some members of the committee asked for other data to be collected. NPS responded by funding the following studies referenced in the DEIS:

- (1) A survey of local village businesses.
- (2) A non-contact count of ORV at selected ramps.
- (3) A visitor intercept study of visitors on the beach.

The results of these studies have now been released and the relevant sections of the FEIS updated to reflect them. It is an acceptable NEPA planning practice for newly available results of studies that were not available at the time a DEIS is written to be incorporated in the FEIS. Agencies would prepare a supplemental DEIS for review if there is significant new information relevant to environmental concerns and bearing on the proposed action and its impacts

(CEQ regulations Sec. 1502.9(c)1.(ii)) In this case the study findings are consistent with the analysis already provided in the DEIS and a supplemental DEIS is not required.

The economic analysis estimates the regional economic impacts for three scenarios (high, moderate and low) from each action alternative relative to the no-action alternatives. The baselines (no action alternatives) are the Consent Decree and the Interim Protected Species Management Strategy, not historic conditions. Information on ORV use at the Seashore from the non-contact count of ORVs and the visitor intercept survey has been added to Chapter 3 and Chapter 4 of the FEIS.

As described in the Socioeconomic Impacts section of Chapter 4, the IMPLAN model generates direct, indirect and induced impacts on the regional economy from a change in visitor spending. We are not sure what “lost opportunity costs, costs of future liability, and hidden costs” refer to in the comment. The estimates of impact on revenue were derived based in part on interviews with local businesses.

Data from 2004 was available when the first analysis for the DEIS was started. The thresholds for the different impact levels (negligible, minor, moderate and major) are based on percent changes, rather than absolute changes. We do not believe that the multipliers programmed into the IMPLAN model have changed significantly between 2004 and 2006 or 2007, which would have been the most recent data during preparation of the analysis for the DEIS, so the relative impacts in percentage terms would not be significantly different.

Dr. Daniel Styne uses a model called the Money Generation Model (MGM) to estimate the economic impacts of park visitors on local economies. The MGM is an IMPLAN model that has been modified for use estimating the benefits of national parks. We also use IMPLAN for our analysis. The reports published by Dr. Styne on individual park impacts are based on official NPS visitation statistics and assumptions about per person spending (for reports and details on the model see <http://web4.msue.msu.edu/mgm2/>). The economic impacts are relative to a situation where the park did not exist and, because of that, no visitors came to the area. Based on the reports from 2007 and 2008, Dr. Styne estimates that visitor spending increased in 2008, which seems to be driven by the assumption that individual visitors spent more in 2008 than in 2007, since official visitation was lower in 2008. The impacts are based on generic assumptions applied to a variety of parks about the percent of visitors who are local, the average number of days in a trip and spending in different categories. For the DEIS, we did not try to estimate how the alternatives would change the number of visitors in comparison to the no-action alternatives and multiply the change in visitation by per visitor spending to generate the inputs for the IMPLAN analysis. Instead we used various sources of data to create assumptions about the percent reduction in overall spending as the input into the IMPLAN model.

#### Concern ID: 24258

Concern Statement: Commenters stated that the assumption that access corridors would remain open for an appreciable portion of the visitor use season was flawed since there is a lack of predictability in the resource closures. They further stated that the DEIS economic impact analysis did not fully consider these closures.

#### Representative Quotes:

**Corr. ID:** 13279

**Organization:** *Not Specified*

**Comment ID:** 140637

**Organization Type:** Unaffiliated Individual

**Representative Quote:** All socioeconomic analyses related to Alternative F are predicated on the assumption that access corridors will remain open for at least an appreciable portion of the visitor high season.

Under Alternative F, the access corridors will be subject to Resource Closures based on buffers similar or identical to the Consent Decree. Unless some predictability of access to Cape Point and South Point Ocracoke can be assured, economic analyses predicated on assumption of access are fundamentally flawed.

**Corr. ID:** 14214

**Organization:** *Not Specified*

**Comment ID:** 137973

**Organization Type:** Unaffiliated Individual

**Representative Quote:** To Be Closed Year Round: Hatteras Inlet, North End Ocracoke Island, Ramp 27-Ramp 30 (Salvo). The DEIS never fully addressed the economic impacts on the local economies of the effected villages by creating and enforcing these restrictions. These should be studied in more detail.

**Corr. ID:** 14246

**Organization:** *Not Specified*

**Comment ID:** 140342

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Maintenance of Future Access to Cape Point and South Point Ocracoke: All socioeconomic analyses related to Alternative F are predicated on the assumption that access corridors will remain open for at least an appreciable portion of the visitor high season. Under Alternative F, the access corridors will be subject to Resource Closures based on buffers similar or identical to the Consent Decree. Unless some predictability of access to Cape Point and South Point Ocracoke can be assured, economic analyses predicated on assumption of access are fundamentally flawed.

**Response:** Beach closures that occurred between 2007 and 2010 have been included in the FEIS in table 37-2. Although the addition of previous closures at the Seashore provide a historical perspective of beach access, the exact location, size, and timing of closures are dependent on variables such as species activity and weather that cannot be accurately predicted. Page 561 of the DEIS states that the resource closures are unpredictable and will vary year to year. This is one reason the DEIS includes a range of potential impacts (high, medium and low) for each alternative. Thus the estimated impacts of alternative F are not predicated on a single, specific assumption about the length of closures. Alternative F has been adjusted to be more similar to alternative B in regards to the size of buffers for piping plover, American oystercatchers, and colonial waterbirds, although the buffer zones for piping plover breeding behavior/nesting are 25 meters larger in F than in B. Alternative F has also been revised to allow for increased pedestrian access seaward of prenesting closures.

**Concern ID: 24259**

**Concern Statement:** Commenters noted where they felt data used in the socioeconomic analysis was incorrect or needed further explanation. Issues included:

- recognizing that almost all businesses in the Seashore villages qualify as "small businesses"
- There is no basis for stating 54% of the direct impacts would occur in Seashore villages, it is expected to be higher
- Visitation based on vehicle counts can skew the data the analysis is based on
- Not separating out Ocracoke as it has a different economic situation than the other Seashore villages
- Using data on new houses rather than housing growth

**Representative Quotes:**

**Corr. ID:** 3874

**Organization:** Outer Banks Chamber of Commerce

**Comment ID:** 139325

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 568 uses "visitation" statistics reported annually by the National Park Service. These statistics are based on traffic counts, the amount of which is then multiplied by a formula. There is no way to know if vehicles have five passengers or just a driver or whether they are even a visitor. The formula utilized doesn't take into account events such as high numbers of construction vehicles in the area due to storm damage or other extraordinary events. Attempts often are made to use the gross occupancy tax collected as a method to determine the number of visitors, however, there are numerous confounders that negate this from being a reasonable barometer for visitation. There is no valid way to count visitors on the seashore and the only gauge of impacts available is current data such as unemployment, increases/decreases in government aid, etc. in a given locality.

**Corr. ID:** 3874

**Organization:** Outer Banks Chamber of Commerce

**Comment ID:** 139345

**Organization Type:** Unaffiliated Individual

**Representative Quote:** . Page 595, table 80. There is no logical basis for this table and it seems to attempt to dilute impact by including all portions of Hyde and Dare counties. And there appears to be no basis for the footnote that states that 54 percent of the direct impact is expected occur in the Seashore villages. Obviously direct impact is going to be felt most by those in the seashore and it will be substantially more than 54 percent.

**Corr. ID:** 3874

**Organization:** Outer Banks Chamber of Commerce

**Comment ID:** 139351

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 595. "This uncertainty may impact small businesses disproportionately." By Small Business Administration's definition almost all of the businesses in the seashore are small businesses.

**Corr. ID:** 14722

**Organization:** OBPA

**Comment ID:** 133635

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The chart of housing growth Table 45 at page 284. A better piece of data would be new houses on the Island 2000-2009 available at <http://islandfreepress.org/2010Archives/03.02.2010-HatterasIslandRealEstateWhatIsHappeningInTheMarketForUnimprovedLot.html>. See the chart on single housing permits. You'll see the Island results are not the County results, and so the ROI definition is flawed. Request the NPS response address the Hatteras and Ocracoke micro housing markets vulnerability to beach closure effects by comparison with larger area data, ie. Dare and Hyde Counties minus villages in NPS.

**Corr. ID:** 15160

**Organization:** Outer Banks Chamber of Commerce

**Comment ID:** 138854

**Organization Type:** Town or City Government

**Representative Quote:** The Village of Ocracoke is little more than a passing thought to those who wrote the Economic Impact Section of the Draft Environmental Impact Statement. Although it has its own economic character and challenges, apparently addressed under the heading of "Seashore Villages," a little investigation would have shown that each of the villages in the Seashore is unique, and economic impact can't be addressed in the blanket forum, or a one- size-fits all approach. Although Ocracoke Village is home to only 10 to 15 percent of Hyde County's population, it provides approximately 50 percent of the tax base for the entire county. That's a huge burden and responsibility for a village that has only about 600 acres of buildable land. Any negative impact that's experienced in the village has a ripple effect that makes what is one of the poorest counties in the state, into an even more economically depressed area. Any decrease in revenues is felt in the schoolrooms, the health department, and all other county agencies that provide services. According to U.S. Census data, the average wage earner in Hyde County can expect to make \$22,356.00 a year. For a family of four, that's just about \$100 more than the federal poverty level. The Economic Impact Data in the DEIS does not attempt to address the impact of Alternative F on Ocracoke's small businesses, nor the pain that will be felt by the community. The conclusion to the section on economic impacts of Alternative F states, "This uncertainty may impact small businesses disproportionately." If the company that was paid to do the Economic Impact Study had taken any time to learn the geography and character of the area, they would realize that Ocracoke is a collection of small businesses. There are no major industrial plants or employers, which isn't surprising, when considering the fact that we can only be reached by ferry or plane. Our infrastructure will not sustain other industries. The economic engine of the village has long been commercial fishing and tourism. However, many commercial fishers have had to adapt to federal rules for that industry, which has forced them into other occupations. Most all are related to tourism. The Economic Analysis suggests that small businesses that are negatively impacted can adapt over time.

**Response:** Page 570 of the DEIS states that "In 2008, the ROI contained 768 establishments in affected industries, with 222 located in Hatteras villages (InfoUSA 2008). Assuming each location is an independent company, 95% of these could be small entities of the ROI, and 98% could be small entities in the Seashore villages (U.S. SBA 2008)"

The estimate that 54% of the direct impacts would occur in the Seashore villages results from the estimated impacts on the Seashore villages and the area north of the Seashore. As shown in Tables 67, 69, 72, 74, 77, and 79, the percentage forecast revenue decreases on the areas north of the Seashore are much smaller; however these percentages are applied to a much larger revenue base.

Recreational visitors to the Seashore as reported by NPS do rely on vehicle counts, however these are only one source of data to inform the analysis. We rely primarily upon projected impacts as estimated by area businesses. Impacts to Ocracoke businesses were in line with impacts reported by other Seashore villages.

One commenter referred to data on new housing from an article in the Island Free Press. The article cited shows a peak in prices in 2005, and a decline in construction beginning in 2004, neither of which are useful in teasing out the additional impact of the beach closures relative to the nationwide decline in housing market. The housing data used in Chapter 3 was purely descriptive of the area, and was not used to generate impacts.

## ***SE4000 - Socioeconomics: Impact Of Proposal And Alternatives***

### **Concern ID: 24277**

**Concern Statement:** Commenters disagreed with statements in the DEIS that said businesses will "adapt" to new rules and claimed that the DEIS underestimated the socioeconomic impacts of the preferred alternative.

#### ***Representative Quotes:***

**Corr. ID:** 2988

**Organization:** *Not Specified*

**Comment ID:** 141173

**Organization Type:** Unaffiliated Individual

**Representative Quote:** 2) The socio-economic data and analyses are incomplete and erroneous and result in an understatement of the effect the restrictions will have upon the Island, the region and the state of NC.(p. 270-286, 561-598). The US Park Services answer: Businesses will have to "adapt" to the new rules. (p. 383) The negative economic impacts of the decree ARE KNOWN, so to say that the added restrictions would have negligible to moderate impact is indefensible.

**Corr. ID:** 11106

**Organization:** *Not Specified*

**Comment ID:** 136007

**Organization Type:** Unaffiliated Individual

**Representative Quote:** With an estimated population of 4,000 and taking an employment to population ratio of 70% (see OECD employment outlook-or perhaps you know the number of employed Hatteras Islanders), the number of people employed on Hatteras Island would be 2800. If the higher impact finding were true (and I find it to be modest as a high end estimation), that would mean an INCREASE in unemployment of 400/2800 or 14.3% . Having looked up the unemployment rate for Dare County (annual average for 2009) at 9.6% adding the 14.3% more than doubles that figure to a whopping 23.9%!! Almost 1 in 4 Hatteras Islanders will be out of work. Despite this, a conclusion was drawn by the authors of Alternative F stating, "under Alternative F, it is expected that small businesses would experience long term negligible to moderate adverse impact." Illogical conclusion.

**Corr. ID:** 12512

**Organization:** *Not Specified*

**Comment ID:** 138945

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Particularly distressing are the dismissive and unevaluated assumptions of the economic impact of the proposed alternatives on the individuals and businesses in the affected area, specifically Ocracoke Island and Hatteras Island.

May I ask how the writers of this DEIS proposal recommend or suggest that business on Ocracoke Island, reached only by boat or air, and acclaimed nationally and internationally for its beaches (in 2007 named the best beach in the entire country and the 5th best beach in the world by "Dr Beach"), "provide alternate products and services"?

**Corr. ID:** 13661

**Organization:** *Not Specified*

**Comment ID:** 139578

**Organization Type:** Unaffiliated Individual

**Representative Quote:** In referring to your own studies under Plan "A" (p 574) at the extreme worse, only 135 jobs would be lost causing long term minimal effect. Under Plan "F", 400 jobs (p. 594) will be lost. Neither mentions how this will have the "ripple effect" to the local economy for those that live from paycheck to pay check. All of the studies are put into a model that predicts out comes, but not real life. Just as an example, with the statistics being drawn from the 2000 census ([http://mcadc2.missouri.edu/websas/dp\\_products\\_overview.shtml](http://mcadc2.missouri.edu/websas/dp_products_overview.shtml)) there was a working population of 2241 working and a total of 3371 capable of working; this gives 66% of this population working. Now if we go under Plan "A", 62% would remain working or 94% of the original population, under Plan "F", 55% would remain working or 83% of the original population. The difference in the un-employed is 6% under Plan "A" and 17% under Plan "F". This is a difference of 11% would have a big ripple effect to the both the local and regional economy.

**Corr. ID:** 14398

**Organization:** Ocracoke Civic and Business

**Comment ID:** 140611

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Pg. 100 ".5 mile SW of ramp 68 to 1.2 miles NE of ramp 70" has dates for ORV route Nov. 1st to Mar. 14th. These dates do not allow for any spring and fall fishing. Closing the beach from Mar. 15 to Oct. 31 would cause an economic hardship on the Ocracoke community as a whole. Most businesses open around

the middle of March and close the 1st of November, fishermen sustain these businesses until there is enough other traffic from school being out for family vacations. This area is also a long way from the road and parking making it extremely difficult for fishermen, elderly people and families to be able to use this area without the benefit of an ORV. The dates of May 15th to Sept 14 non-ORV area would allow more use of this area while people are visiting here specifically to fish without affecting the wildlife.

Pg. 101 "1.2 miles NE of Ramp 70 to .5 mile NE of ramp 70" the dates for ORV area are Nov. 1st to Mar. 30, these dates also have the same affect on the island economics as the paragraph above. The dates should also be changed to non-ORV area May 15th to Sept 14th. These shoulder months are crucial to the economic survival of our island and without them we will not be able to survive.

**Corr. ID:** 14971

**Organization:** *Not Specified*

**Comment ID:** 138966

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The NPS downplays the potential for economic harm by asserting that the long term benefits that would accrue to non ORV users are expected to outweigh the long term moderate to major adverse impacts to ORV users (Footnote 13) resulting in a new mix of visitors and new business opportunities. Under this scenario, the NPS projects business revenue losses of 0%. (Footnote 14) This is utter nonsense. As per the above discussion, during the Spring and Summer seasons non ORV users will be subjected to the same limitations that NPS states will have a long term moderate to major adverse impact on ORV users. Since the seashore has little to offer outside of the beaches and since Spring and Summer visitors account for approximately 70% of all visits, (Footnote 15) I submit that the projected business revenue decline of 35% to 70% is the most accurate of the three projections offered in the DEIS. In point of fact, as the quote presented below clearly demonstrates, the DEIS recognizes that beach related tourism is the primary driver for the economy.

**Response:** In the economy at large, businesses are always adapting their products and services in response to changes in customer preferences, technology, income, and government policy. The DEIS qualifies that statement about adaptation, saying that "to the extent that" businesses adapt, impacts could be partially mitigated. The statement in the DEIS reflected the pattern that has been observed in some other communities where the economy of the region adapts over time to changes in visitation patterns (Industrial Economics Incorporated 1998). The statement does not imply that all communities will adapt. Individual businesses may or may not be able or choose to adapt. We do not suggest that adaptation will always completely counterbalance the losses associated with change in visitation, only that it can blunt the effects over time. With regard to Ocracoke having the nation's #1 rated beach in 2007, it is noted that the Ocracoke Day Use beach, which is seasonally closed to ORV use, was selected based on Dr. Stephen P. Leatherman's 50 beach rating criteria, which gives 1 point to beaches where ORVs are common and 5 points to beaches where there is no ORV use.

NPS use of the threshold terms (impact definitions) "negligible," "minor," "moderate", and "major" in the DEIS and FEIS to describe impacts is defined in Chapter 4 as they are used for each impact topic. For example, in the socioeconomic impact analysis, a negligible impact means that the impact is difficult to detect at the level of the combined economies of the Seashore villages or at the county level. It does not mean that within the Seashore villages or Dare and Hyde counties effects are not occurring to a specific individual business. These impact definitions are not intended to define the level of impact on an individual or to downplay effects on an individual. The impact definitions are not meant to imply a subjective judgment by NPS on the impacts, but rather are used to denote whether the estimated impacts fall within a given definition.

As discussed in the DEIS, the FEIS, and in response to other comments, the IMPLAN model estimates the ripple effects in the wider economy of the change in spending. The impacts estimated in the DEIS/FEIS are meant to capture the incremental impact of the ORV management alternatives separate from national economic conditions or the high price of gasoline in 2008. Given the timing of the economic downturn and the imposition of the Consent Decree, it is impossible to fully separate these two. That is one reason we have three impact scenarios for each alternative and why we used a variety of data sources to create the scenarios. The comments that calculate unemployment rates mix numbers from different reports and for different geographic areas.

**Concern ID: 24278**

Concern Statement: Commenters stated that pet restrictions should specifically be examined in the socioeconomic analysis. They noted the large number of pet friendly lodging in the area, and that the preferred alternative may discourage visitors with pets to come to the Seashore.

**Representative Quotes:**

**Corr. ID:** 15046

**Organization:** Cape Hatteras Business Alliance

**Comment ID:** 139796

**Organization Type:** Business

**Representative Quote:** One such component is the economic effect that the ban on dogs would cause, be it short or long term in some areas. There are numerous websites and publications including books devoted solely to "Pet friendly travel destinations" Recognizing the demand, due to the large number of travelers who bring their pets along and the income potential, several national hotel chains are now 100% pet friendly.

There are three boarding facilities located within the Seashore Villages, every private campground allows pets, there are well over 100 pet friendly motel rooms available and about one third of the weekly rental properties are pet friendly. The NPS campgrounds have historically been pet friendly also. What RTI (Research Triangle Institute) failed to do was to recognize the obvious socioeconomic impact and diminished visitor experience that the proposed bans on dogs would create, but even more egregious is the failure of RTI to recognize the very real and direct effect to the local economy.

In reality, a certain segment of visitors will no longer visit the Seashore simply because of the dog ban; in turn there will be a loss of revenue to at least one of the aforementioned pet friendly places. Another segment of visitors may still visit without their dog but will be spending less money. That money will now be put into their local economy via a pet sitter or boarding facility. Money that would have been spent here within the seashore, in the form of pet fees, averaging anywhere from \$5 to \$10 nightly to \$75 to \$100 per week per pet, and subject to local occupancy, county and state taxes!

Other visitors chose to spend that money at one of our unique boarding facilities, because they could take their dog with them during the day and back to the kennel at night! (This is a great option for those sharing rental houses with other family members, creating situations not conducive to their dog/dogs for whatever reason.) Furthermore RTI also overlooked the ripple effect to other businesses that would be result.

**Response:** Changes have been made to alternative F so that the management of pets at the Seashore would be similar to current management, with the exception of prohibiting pets in pedestrian shoreline access seaward of pre-nesting areas during the breeding season. The impact of the pet restriction on socioeconomics was not evaluated in the FEIS because quantitative data on the subject is lacking and it was felt that any such analysis would be speculative; however, the NPS does believe that the range of pet restriction in the action alternatives are similar (current management with additional restrictions for resource protection during breeding season), and an analysis of these impacts would likely not show a difference between the action alternatives.

**Concern ID: 24279**

Concern Statement: Commenters cited a study that examined the impacts of beach management activities on local economies and requested that the DEIS include these findings. They further asked that the FEIS differentiate the expenditures between different user groups, make additional allowances for the compensatory increases in visitation by those desiring less ORV traffic, to accurately address the positive and negative impacts of ORV regulations, and to define what constitutes the "community" in the impact analysis.

**Representative Quotes:**

**Corr. ID:** 3883

**Organization:** Not Specified

**Comment ID:** 133200

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 284 of the DEIS states "Recreational fishing is a significant part of N.C's economy, attracting spending from both local and out-of-state anglers." With the restrictions for ORV in the DEIS how will recreational fishing continue to help the NC economy?

**Corr. ID:** 15043      **Organization:** Southern Environmental Law Center

**Comment ID:** 137473 and 137475      **Organization Type:** Conservation/Preservation

**Representative Quote:**

One of the most notable gaps in the DEIS economic analysis is the failure to reference the experiences of other beaches along the Atlantic that have faced similar tensions between off-road vehicle uses and natural resource protections. While each situation is unique from multiple perspectives, the historical results from similar areas that implemented ORV restrictions is highly instructive when attempting to predict future economic impacts from increased vehicle restrictions on Cape Hatteras beaches.

A good starting point for that analysis would be a study done in 1998 by Industrial Economics, Inc., for the Division of Economics of the U.S. Fish and Wildlife Service. U.S. Fish and Wildlife Service, Division of Economics, An Economic Analysis of Piping Plover Recover Activities on the Atlantic Coast (1998) ("PIPL Econ. Analysis"). "An Economic Analysis of Piping Plover Recovery Activities on the Atlantic Coast" employs the IMPLAN model in relation to "five case studies of local areas where beach managers have initiated closures and other management actions to protect piping plovers. . . . The beach areas studied range from Assateague Island in Maryland/Virginia to Parker River National Wildlife Refuge (NWR) in Massachusetts and include areas in four states." PIPL Econ. Analysis at ES-I.

The study acknowledges the impacts of increased closures, indicating they were primarily on ORV users. The impacts on the local economies ranged from "negligible to economically significant," depending on a number of factors: the extent of restrictions due to management (from minimal to full beach closures); the availability of alternatives for ORV users within the same economic region, along with the continued access to beaches for pedestrians and other users; the popularity of the beach area and magnitude of expenditures per visitor-day; the size and growth of the local economy; and the mitigating effects of adaptability to the beach-driving restrictions within the local economy.

We would encourage the researchers for the DEIS to reference this study and perhaps update its findings, including additional sites that have been through similar management challenges related to ORVs. We believe these historic cases may temper all the predictions of the DEIS as to economic impacts of alternatives. As you refine projections of potential economic impacts, we ask that you differentiate the expenditures of surf fishing participants from those saltwater anglers who use boats (either personal or charter) (Table 46 and related text). We also ask that you make additional allowances for the compensatory increases of visitation by those attracted by more limited ORV traffic or alternative marketing of the Seashore. The case histories provide ample evidence of mitigating changes in demographics of visitors after increased restrictions on ORVs.

**Corr. ID:** 15043      **Organization:** Southern Environmental Law Center

**Comment ID:** 137468      **Organization Type:** Conservation/Preservation

**Representative Quote:** The DEIS claims that "The Communities are concerned that if a permit system or other ORV restrictions are implemented that make it harder for ORV users to use the area, fewer tourists may come to the villages, resulting in impacts to the local economy." DEIS at 31. Certainly, some members of the communities are concerned about adverse economic impacts of restricting ORV use. However, to suggest that those people represent "the community" inaccurately oversimplifies the complex and varying views on this issue. Clearly, there are other community members, such as those who own houses near the beaches in the villages of Frisco and Hatteras, who are concerned that opening up village beaches to ORV use could adversely impact their rental income and endanger public safety. In addition, there are visitors who favor non-motorized recreation, who may visit more often if ORVs were restricted. Thus, adverse impacts from certain ORV users could be offset by positive impacts from other visitor segments, as has occurred at other beaches implementing ORV regulations. The NPS should more carefully use language that accurately addresses the positive and negative impacts of ORV regulation, rather than using overbroad language.

**Response:** Recreational fishing data comes from a report on the entire state of North Carolina. ORV restrictions affect the anglers who come to the Seashore and use ORVs to reach the parts of the beach where they would like to fish, but the regulations in the Seashore do not affect other recreational anglers in the Seashore and in the rest of North Carolina.

The DEIS was revised to include a reference to the 1998 study by Industrial Economics that includes some examples of local businesses that adapted to ORV restrictions. However, given the differences between the study sites and the Seashore, we do not think that the results can be directly transferred from the study to the Seashore. We did not use data on per visitor spending to derive the economic impacts because of a lack of reliable data on the percent of visitors who fall into different groups (ORV users, anglers, and others), data on per visitor spending by group and estimates of the potential change in visitation by different groups at the time of the DEIS analysis. Instead, we used a variety of data sources to create a range of possible impacts that incorporate both pessimistic and optimistic forecasts of future visitation.

The data in the DEIS on visitation and economic activity has been updated with figures from 2009 in the FEIS. Data on gross tax receipts provided by the Outer Banks Visitor Bureau were not included because over the years there have been changes in what was taxed and the figures are not adjusted for inflation. In the FEIS, a figure was added showing the percent of total Dare County revenue generated in the Seashore villages across a number of years. As long as all businesses in Dare County are treated similarly under the tax code, the percent of revenue generated by the Seashore villages provides one way to assess whether there has been a disproportionate impact on the Seashore villages relative to the rest of Dare County during the times when the beaches are closed under the Consent Decree.

In the FEIS, use of the word “community” has been clarified by replacing it with “members of the community” or with “some businesses in the community”, depending on the context.

**Concern ID: 24280**

**Concern Statement:** One commenter requested that the FEIS consider the economic impacts on self-employed residents in Dare and Hyde counties.

**Representative Quotes:**

**Corr. ID:** 15046      **Organization:** Cape Hatteras Business Alliance

**Comment ID:** 139825      **Organization Type:** Business

**Representative Quote:** In spite of the fact that RTI acknowledged that almost half (49%) of Dare and Hyde County residents were self employed I was unable to find any references acknowledging that many business owners either work out of their homes or reside in/on their business properties and will also be homeless when they lose their businesses. These same people will also be devoid of unemployment benefits from the government, another fact that was overlooked. Most of them do not have health insurance, they don't receive holiday pay or paid vacation days or paid sick leave, they don't get overtime pay for their 100 hour work week- they are lucky if they get paid at all.

**Response:** On page 278, the DEIS contains the following statement: “The construction, real estate, rental and leasing, and agriculture, forestry, fishing and hunting (of which 61% are commercial fishermen) industries comprise 49% of all nonemployers in the two counties (table 41).” The statement says that 49% of self-employed individuals come from a particular set of industries. Using the Census estimate of nonemployers and the Bureau of Labor Statistics data on employed individuals, approximately 23% of employed individuals in Dare and Hyde county are self-employed.

The socioeconomic analysis looks at aggregate changes in the economy and employment in the affected areas. Therefore, the discussion of economic impacts of the alternatives includes impacts on self-employed citizens.

Footnote 4: From <http://www.census.gov/econ/nonemployer/intro.htm> : “Nonemployers are typically self-employed individuals operating very small businesses, which may or may not be the owner's principal source of income...Data are primarily comprised of sole proprietorship businesses filing IRS Form 1040, Schedule C, although some of the data is derived from filers of partnership and corporation tax returns that report no paid employees.”

### ***SL5000 - State-Listed and Special Status Species: Cumulative Impacts***

#### **Concern ID: 24261**

Concern Statement: Commenters stated that the cumulative impacts to breeding shorebirds were not properly characterized. They stated that the analysis should also include impacts from development and stabilization activities.

#### ***Representative Quotes:***

#### **Response:**

The criteria set forth to justify a conclusion of major adverse for cumulative impacts was not met for either state or federally listed species. Major adverse impacts would have meant that impacts on listed/special status species, their habitats, or the natural processes sustaining them would be detectable, would be expected to be outside the natural range of variability, and would be permanent. Frequent responses by some individuals to disturbance would be expected, with negative impacts to feeding, reproduction, or other factors resulting in a decrease in Seashore population levels or a failure to restore levels that are needed to maintain a sustainable population in the Seashore. Impacts would occur during critical periods of reproduction or in key habitats in the Seashore and result in direct mortality or loss of habitat. Local population numbers, population structure, and other demographic factors might experience large declines.

Rather, cumulative impacts were deemed to be minor to moderate adverse because large declines in population numbers would not result and ample functional habitat would remain to maintain a sustainable population in the Seashore. To be sure, some negative impacts to feeding, reproduction, resting or other factors affecting population levels would occur and may result in harassment, injury, or mortality to one or more individuals. However, sufficient population numbers and functional habitat would remain to maintain a sustainable population in the Seashore. So, minor to moderate adverse was believed to better characterize impacts as opposed to major adverse. This also holds true for the finding of impairment as the impacts from cumulative actions would not prevent sustainable populations at the Seashore. The FEIS includes additional information on the role of development in cumulative impacts, but this additional information does not change the finding of the analysis (see the response to Concern ID 24174 for more information.)

### ***SS2000 - Soundscapes: Methodology and Assumptions***

#### **Concern ID: 24262**

Concern Statement: Commenters stated that the soundscape analysis was incomplete as it did not consider all noise sources in the Seashore or how sound is dissipated by sand dunes, grass, and trees. Commenters also offered literature they felt should be reviewed and incorporated into the FEIS regarding the impact of noise pollution on wildlife.

#### ***Representative Quotes:***

**Corr. ID:** 8495

**Organization:** *Not Specified*

**Comment ID:** 131364

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Please find and read the following papers for more insight on the effects of noise pollution on wildlife - they're quite strong.

FRANCIS, C. D., ORTEGA, C. P. & CRUZ, A. (2009). Noise Pollution Changes Avian Communities and Species Interactions. *Current Biology* 19, 1415-1419.

HABIB, L., BAYNE, E. M. & BOUTIN, S. (2007). Chronic industrial noise affects pairing success and age structure of ovenbirds *Seiurus aurocapilla*. *Journal of Applied Ecology* 44, 176-184.

LIMA, S. L. (2009). Predators and the breeding bird: behavioral and reproductive flexibility under the risk of predation. *Biological Reviews* 84, 485-513.

RHEINDT, F. E. (2003). The impact of roads on birds: Does song frequency play a role in determining susceptibility to noise pollution? *Journal Fur Ornithologie* 144, 295-306.

SWADDLE, J. P. & PAGE, L. C. (2007). High levels of environmental noise erode pair preferences in zebra finches: implications for noise pollution. *Animal Behaviour* 74, 363-368.

**Corr. ID:** 13773

**Organization:** *Not Specified*

**Comment ID:** 140132

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Analysis of the soundscape was incomplete. It did not consider that the likelihood of noise pollution in the form of dueling radios, tailgate parties etc. increase with the presence of ORVs. This needs to be re-evaluated with consideration of park values based on the above mentioned park policies, executive orders as well as the Organic Act and enabling legislation.

**Corr. ID:** 14572

**Organization:** Jersey Devil's Fishing Club

**Comment ID:** 135705

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Concerning the monitoring of noise within the park, the low range of 20dBA during low activity for the locations shown does not sound feasible for an extended period of time. By definition 20dBA has been compared to whispering or rustling leaves. 30dBA is associated with a quiet nighttime in the desert. 60dBA is normal conversation and a car moving slowly (Ref: <http://www.makeitlouder.com/Decibel%20Level%20Chart.txt>) Using the rank that is quoted in the DEIS without a reference table to me is misleading to what people expect for noise levels. It also should be noted that as one moves away from the noise source the measurement drops. In this park there are two types of sound scapes. One being the natural and the other man made (i.e. Walking along the beach and talking, driving on the beach close to the ocean). As one moves away from the manmade "sound" the "natural" surrounds it and will gradually drown it out. So if one takes into account that as a "sound source" moves away by a distance of 10 meters the sound drops by approximately two fold, there is a point of a very short distance the background "Nature" sounds drown out the intruding noise. This piece should have been included in the Off Road Vehicle Management Plan. This also should include how much sound is killed by sand dunes, grass, and trees. The problem is this is all taken for granted because it relates to common sense; Alternative "A" again allows for the greatest lee way in management for adjustments.

**Response:** CEQ requires that NPS consider the impacts of reasonably expected connected actions (e.g. if we allow vehicles on the beach there will be increased noise from radios and tailgate parties), and the DEIS disclosed these potential effects. However, non-ORV users can also be a source of noise pollution at the Seashore. . Listening to radios and partying can occur anytime by anyone regardless of whether they accessed the area by motor vehicle or on foot. NPS regulation 36 CFR 2.12 (Audio disturbances) prohibits excessive noise from vehicles and radios (including portable radios) and would continue to apply at the Seashore regardless of whether the noise initiated from a motor vehicle or other non-motorized source

As a part of the DEIS analysis, NPS conducted a literature search for published surf noise levels and found there to be little published data on noise levels from surf action. The document referenced for surf noise (*Disposition of Offshore Cooling Water Conduits SONGS Unit 1 EIR*) indicated a large range of noise levels (20-55dBA) depending on surf conditions. Calculations using data collected at the Seashore by NPS and observations of park staff, suggested that the sound of surf at CAHA was close to 55dBA the high end of the published range. Based on this information NPS used 55dBA in the analysis as the sound levels from surf action at the Seashore. This is stated in the EIS as follows:

"As noise from the surf is a predominant natural sound source at the Seashore, the Natural Sounds Program also calculated estimates of surf noise levels at several distances from an ORV track. These calculations assume a surf noise level estimate of 55 dBA as measured 15 meters (49 feet) from the surf line, which is representative of the maximum value of surf noise in a range (20-55 dBA) identified in *Disposition of Offshore Cooling Water Conduits SONGS Unit 1 EIR*, as discussed in Chapter 3: Affected Environment."

Tables 33 and 34 in Chapter 3 are included in the DEIS to provide readers with a better understanding of common noise levels as expressed in dBA.

It also should be noted that as one moves away from the noise source the measurement drops. There are two types of soundscapes at the Seashore. One being the natural and the other man made (i.e. Walking along the beach and talking, driving on the beach close to the ocean). As one moves away from the manmade "sound" the "natural" sounds (surf, wind or other background noise) surrounds it and will gradually drown it out. So if one takes into account that as one moves away from the source of the sound by a distance of 10 meters the sound drops by approximately two fold, there is a point of a very short distance the background sounds drown out the intruding noise. This is further explained on page 506 of the DEIS.

NPS determined that absorption of sound energy from topography and vegetation would have minimal effects on sound propagation due to the small distances involved in the analysis. This comment is addressed in the EIS as follows: "The Seashore contains a mixture of surfaces, therefore the extrapolated vehicular sound levels assume no significant ground or vegetation absorption. If the ground surface between the source and receiver is soft and/or vegetated, there could be a slight attenuation of noise; however, it would be insignificant due to the short distances involved."

The impacts of noise on wildlife were considered in the DEIS and are described on page 254. The following text will be added to the FEIS, Chapter 3, Soundscapes, Human and Wildlife Response to Changes in Noise Levels to elaborate on this discussion:

"Wildlife is very sensitive to sound, as animals often depend on auditory cues for hunting, predator awareness, sexual communication, defense of territory, and habitat quality assessment (Barber et al. 2010). Negative population-level, behavioral, and habitat use consequences of higher ambient sound levels from human voices, along with sound events associated with human activities (motorists, snowmobiles, hikers), have been observed in many species (Frid and Dill 2002; Landon et al 2003; Habib et al. 2007).

Birds are especially susceptible to human-associated environmental sounds as they rely heavily on auditory cues for identifying and attracting suitable mates, pair bonding, communication among and between species, and detection of predator alerts or warning signals (Francis et al. 2009). Similar to physical degradation of the habitat caused by development or other human activities, the low frequency, high-amplitude, nearly omnipresent sound produced by roads, vehicles, airports, and mechanical equipment has been found to result in a decline in species diversity, abundance, and breeding success (Rheindt 2003).

Researchers found that the presence of low-frequency mechanical noise limits communication between members of the same species, often reducing nesting success (Habib et al. 2007). For example, female zebra finches, exposed to high-amplitude, low-frequency sounds such as those produced by traffic or other motor vehicles, showed less preference for their pair-bonded male. As the amplitude of ambient, low-frequency sounds increased, the strength of pair bonds decreased. This type of behavior may reduce pairing success, disrupt the strength of sexual selection, and affect the overall genetic structure of a population of birds nesting and seeking mates in the vicinity of roadways or in other areas exposed to high-amplitude mechanical noise (Swaddle and Page 2007). Thus, nesting shorebirds on Cape Hatteras using areas exposed to low-frequency sounds from ORVs or wheeled vehicles, may exhibit all or some of these behaviors, which may change the genetic structure of a population, or limit parental care of young, resulting in decreased nesting success. Louder sounds (higher amplitude) have the greatest potential to adversely affect pair bonds of shorebirds, thus shorebirds using areas of heavier use, or with more exposure to high amplitude sounds would be most likely to be affected.

The diversity and population of man bird species decrease in locations closer to a road or other sources of mechanized sound, which is described as the 'road effect' (Francis 2009). This effect is often attributed to mechanical noise levels rather than to decreased habitat quality or direct mortality caused by vehicle collisions (Reijnen et al. 1995; Rheindt 2003). On Cape Hatteras, road effects are likely to occur both near roads used by motorized vehicles, and along shorelines open to OSVs. Certain species suffer more negative effects than others. Researchers have found this is due, in part, to a greater difference between a bird's song frequency and the low-frequency sound produced by motorized vehicles. That is, birds with higher-frequency songs may have greater density and reproductive success than those with songs in lower frequencies. This is because these high-frequency songs are not as strongly masked and are perceived more clearly by birds, thus increasing communication between bonded pairs. Some birds adapt to the presence of motorized sounds by increasing the amplitude of their song, singing earlier in the morning when motorized sound are generally lower, or using mainly higher-pitched calls (Rheindt 2003). Shorebirds generally use less complex sounds to communicate than songbirds accompanied by a decreased range of song selection and frequency. Therefore, it may be more difficult for these birds to adjust their

sound frequency by using mainly lower pitched calls, as their song repertoire may not include such calls. Therefore, shorebirds or other birds on Cape Hatteras with lower frequency, and/or lower amplitude calls may suffer more negative 'road' effects than those with higher frequency and/or louder calls. Effects may be limited by adjustments to song amplitude, timing and frequency by individual birds, depending on the flexibility, and innate song type of the species.

Predation risk for adult and nestling birds increases in areas with high-amplitude, low-frequency mechanical sounds (Lima 2009). Direct predator risk may increase because nesting birds are unable to detect auditory cues made by the predators (such as a redtail hawk scream or the cawing of a crow), and/or because they are unable to detect the warning calls of members of their own species or other birds in the area (e.g., the warning calls of a tern due to a circling hawk). These impacts are due to masking or distortion of the natural sounds in the environments by mechanical or human-associated sounds. Additionally, ORV and human sounds may themselves be considered a predation risk, and birds have been found to respond in areas of high-amplitude human-associated sounds in similar ways that they might respond in areas with high numbers of predators such as rodents or raptors (Lima 2009). Birds on Cape Hatteras may avoid such habitat, thus reducing the availability of prime nesting habitat containing the best cover and food sources. Birds may also respond by foregoing breeding altogether or reducing personal risk of predation by providing poorer quality care to fledglings (Lima 2009). These behavioral responses reduce the recruitment of young, limiting growth and sustainability of the population. Other behavioral changes include active flight, decreased foraging and increased vigilance, and a reduction in overall fitness levels. Exposure to frequent sound events, including ORV use and radios, would also likely increase the intensity of their responses to all perceived predation threats (Rabin et al. 2006). These responses by shorebirds, including both direct and perceived or indirect predator risk may decrease overall reproductive success for shorebirds using areas exposed to human associated and motorized sounds.

Researchers also found that, when all other factors (habitat quality) were equal, mechanical noise alone reduced the species diversity of nesting birds, resulting in changes to the natural bird communities in these areas. A controlled experiment provided strong evidence that noise alone, regardless of the presence of humans or moving motorized vehicles, negatively influences bird population levels and species diversity in much the same way as the physical destruction of or altering of a natural habitat (Francis 2009). This effect is likely due to the masking of natural sounds by mechanical noise, which prevents many species of birds from successfully nesting in such areas. Increased mechanical sound levels altered species interactions, along with predator-prey interactions. This observation may explain why certain bird species (pigeons, sparrows, starlings), thrive in heavily human-influenced environments, and why species diversity in heavily mechanized sound-disturbed environments is low (Francis 2009). Such effects may limit shorebird species diversity on Cape Hatteras, possibly increasing populations of human-tolerant species, while decreasing populations of species more sensitive to human-associated sounds. These effects may occur even in areas exposed to human-associated sounds, but removed from any visuals associated with such sounds, such as areas behind dunes, or where ORV travel is restricted. Effects depend on the audibility of motorized sounds in these areas, and will vary with the level of natural predation.

Nesting shorebirds at Cape Hatteras are exposed to a variety of natural and human caused sounds. Human caused sounds included motorized noise from ORVs and on-road vehicles, human voices, Such effects may be species specific, as certain factors, including a higher song frequency (Rheindt 2003) and ability to nest near mechanized sound sources without increased stress or predation risk (Francis 2009), may actually increase reproductive success of certain species. Birds have also shown ability to adapt certain behaviors, or ecological traits, when exposed to predation risk, decreasing the negative impacts of mechanized noise perceived as predator risk (Lima 2009)."

### ***TE2000 - Threatened And Endangered Species: Methodology And Assumptions***

#### **Concern ID: 24264**

Concern Statement: Commenters stated that there is not a correlation between increasing ORV use at the Seashore and decreasing bird populations and that excessive management is not warranted. Commenters asked the NPS to provide the data that indicates that ORV use is related to bird mortality. They further stated that the Seashore does not contain critical habitat for piping plover.

**Representative Quotes:****Corr. ID:** 93 **Organization:** *Not Specified***Comment ID:** 129734 **Organization Type:** Unaffiliated Individual**Representative Quote:** I would like a count on how much wildlife is killed directly related to driving on the beach.**Corr. ID:** 175 **Organization:** *Not Specified***Comment ID:** 130035 **Organization Type:** Unaffiliated Individual**Representative Quote:** There has been no true scientific study connecting ORV use with bird mortality; if I am mistaken, please provide me with an article in a legitimate scientific journal. Additionally, the NPS must continue to expand any studies related to connecting the reduction of ORV access to improvements in species survival prior to implementing sweeping additions to the restriction of access, such as this.**Corr. ID:** 735 **Organization:** NJBBA, UMS, OBPA, Anglers Club**Comment ID:** 130688 **Organization Type:** Unaffiliated Individual**Representative Quote:** On page 1994 there is reference to a Joanna Burger paper on feeding habits of the Piping Plover when pedestrians are present and when they are not. That data was collected during two minutes of observation and should not be relied on for any purpose. I have been on beaches with Burger's interns when after 3 months of observation they still did not know where the un- hatched nest were located, not a clue.**Corr. ID:** 953 **Organization:** *Not Specified***Comment ID:** 132268 **Organization Type:** Unaffiliated Individual**Representative Quote:** One additional comment on you proposed restrictions: there is a growing body of evidence that anthropogenic disturbances to small birds have little impact in term of energetic costs.**Corr. ID:** 3902 **Organization:** *Not Specified***Comment ID:** 132472 **Organization Type:** Unaffiliated Individual**Representative Quote:** What's presented as scientific reporting throughout the DEIS is often scattered observations seasoned with the observers' preferences - instead of peer-replicated independent experimental studies that real science is made of. Page 208 describes weather and tides as a significant risk factor for piping plovers on the beach. "A strong thunderstorm was noted on the night before Nest 2 on South Beach was discovered lost; however, the loss is characterized as 'unknown' because it cannot be shown conclusively that weather was the cause." But on page 209, we read "The impact of predation had been postulated to be greater on beaches with high human use because of the presence of pets and trash?" The relationship between humans and predators is not characterized as "unknown because it cannot be shown conclusively." Whatever happened to burden of proof?.**Corr. ID:** 12002 **Organization:** *Not Specified***Comment ID:** 134162 **Organization Type:** Unaffiliated Individual**Representative Quote:** One of the findings of the study titled, "GIS-based analysis of human disturbance on piping plover abundance, distribution and productivity on the barrier islands of Long Island, New York" by SK Thomsen, May 2006 was that Piping Plover productivity in areas where there were no ORV restrictions was the same as those in areas closed to ORV. The paper stated "No consistent pattern of differences in mean productivity was observed among the three levels of ORV access (Table 4). The level with the highest productivity was unrestricted access in 2003, seasonal access in 2004, and restricted access in 2005. Likewise, the level with the lowest productivity also varied from year to year. Differences were significant in 2003 (ANOVA,  $f = 5.55$   $p = 0.004$ ) and 2005 ( $f = 3.17$   $p = 0.043$ ), but not 2004 ( $f = 1.07$   $p = 0.344$ ). However, when all years were pooled together mean productivity was not significantly different between levels of ORV access ( $0.95 \pm 0.05$  SE in restricted access,  $1.01 \pm 0.08$  in seasonal access and  $1.06 \pm 0.15$  in unrestricted access; ANOVA  $f = 0.37$   $p = 0.689$ )." Table 4. Mean Productivity for each category of ORV access compared to overall year

2003 2004 2005 Overall

restricted  $0.8 \pm 0.08$   $0.98 \pm 0.09$   $1.07 \pm 0.11$   $0.95 \pm 0.05$ seasonal  $1.29 \pm 0.16$   $1.19 \pm 0.14$   $0.66 \pm 0.12$   $1.01 \pm 0.08$ unrestricted  $1.5 \pm 0.35$   $0.8 \pm 0.25$   $1.0 \pm 0.22$   $1.06 \pm 0.15$ overall  $0.96 \pm 0.07$   $1.03 \pm 0.07$   $0.93 \pm 0.08$

The study is important because it extends over several years; is based on the latest technological advances using GIS; is rigorous in its statistical analysis; and examines large populations so results are statistically significant.

**Corr. ID:** 12998

**Organization:** *Not Specified*

**Comment ID:** 140583

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Finally, it appears as if accurate scientific research has not been done about the true ecological impact of humans and their impact on select species in the Cape Hatteras National Seashore and surrounding areas. How is it that, in 2009, after the Consent Decree had it's first full year in effect, that the numbers of piping plover's actually declined--and yet the National Park Service has selected Alternative F (which is even more extreme than the original Consent Decree) from the DEIS as their preferred option? Until there are concrete facts that actually prove that humans are destroying the habitat of the piping plover, sea turtles, and other creatures, why is this extreme plan being put into effect which will so negatively affect local business owners, tourists, and everybody else that visits the Outer Banks?

**Corr. ID:** 13163

**Organization:** *Not Specified*

**Comment ID:** 140887

**Organization Type:** Unaffiliated Individual

**Representative Quote:** To imply that the increase in SUV popularity in the 90's and the decline of the bird population are "correlated" is an attempt to impart cause and effect where none likely exists. Many other changes occurred on Hatteras Island during that period. There was a large building boom on the island during that time, there has been significant global warming over the past two decades, there has been a very significant decline in fish populations, bay scallops have greatly declined and predatory species such as sharks have declined in ways that affect the overall ecology (Meyers RA, et al, Science 30 March 2007: Vol. 315. pp. 1846 - 1850). Thus to imply that the decline of the bird population is due to the increase in ORV popularity is unscientific and disingenuous. Nowhere in the report is there any direct data showing significant numbers of deaths, nest destruction, or failure to fledge caused by ORVs over the 1980's or 1990's in the Cape Hatteras National Seashore to support this conclusion. The data summarized on p 210 does not indicate ANY Plover deaths due to ORV's since 2000, just intrusions into enclosures, which is an enforcement problem. Thus this so called inverse "correlation" between ORV popularity and Piping Plover population cannot and should not be used as the basis for developing public policy.

**Corr. ID:** 14404

**Organization:** *Not Specified*

**Comment ID:** 139899

**Organization Type:** Unaffiliated Individual

**Representative Quote:** A larger questions is, "Why does the park service think it will help the population instead of hurt it or grow it past capacity for the region?". One example is the overpopulation of deer in Virginia, specifically southside and southeastern Virginia. The research even supports that human solutions often yield no positive results. "...current sites used by breeding plovers are protected, and reasons for the decline in recent years are difficult to elucidate." - Abby N. Powell and Francesca J. Cuthbert (1992). Habitat and Reproductive Success of Piping Plovers Nesting on Great Lakes Islands. Wilson Ornithological Society.

**Corr. ID:** 14990

**Organization:** *Not Specified*

**Comment ID:** 140147

**Organization Type:** Unaffiliated Individual

**Representative Quote:** As for the Piping Plover, the U.S. Fish and Wildlife Service has not designated any need for critical habitats for the Piping Plover within the Cape Hatteras National Seashore Recreational Area. How can the extreme measures limiting beach access be justified?

**Response:** As discussed in the response to Concern ID 24019, species numbers at the Seashore have been trending downwards. The exact cause of this downward trend is not known (see response to Concern ID 24020), but human activity, including direct and indirect effects of ORVs are considered to be one of the factors. The NPS Management Policies 2006 provide that "In cases of uncertainty as to the impacts of activities on park natural resources, the protection of natural resources will predominate." (sec. 4.1). As discussed above under Concern ID 24020, none of the applicable laws impose a burden of proof on NPS to show direct causality of ORV impacts on a species. ORV use is to be allowed only if NPS can determine that off-road vehicle use on the routes to be designated will not adversely affect the natural, aesthetic, or scenic values of the Seashore (including listed and non-listed park wildlife). Moreover, the adverse effects of ORVs and the additional people brought into remote areas by ORV on

wildlife is amply documented in the literature cited in the DEIS. The DEIS correctly acknowledges the other factors that also adversely affect wildlife at the Seashore.

Regarding the May 2006 study by SK Thompson, the author states that the study was based upon “proxy indicators of human disturbance” and the proxy used by Thompson is pre-established levels of access, and not actual variation in the level of ORV activity in the three levels of access used to approximate ORV intensity. In other words, while it is true that the Thompson study found no significant differences in mean productivity between the 3 proxy levels of ORV access – it is also true that actual levels of ORV activity within the 3 areas pre-established as restricted, seasonal, and unrestricted were unreported and perhaps unknown to Thompson. Rather, for this geo-spatial study to have more relevance to the analysis of alternatives in the DEIS, it would need to include mean productivity correlated to actual observed ORV use rather than to the proxy of whether an area was pre-categorized as restricted, unrestricted, or seasonal with regards to ORV use designation. The lack of correlation found when the multi-year data were pooled was likely due to the fact that actual ORV use was similar within the 3 proxies and/or some other variables not considered by Thompson were influencing mean productivity. It was also a concern that the areas categorized as unrestricted only hosted 1/3 the number of plover nests compared to the restricted and seasonal categories. If the Thompson study were to have ignored the proxy levels and just correlated productivity back to actual variation in ORV intensity, we would have been able to address two important questions: 1) to what extent does variation in ORV access impact mean productivity? and, 2) To what extent does actual ORV use meet the intention of the 3 pre-determined levels of restricted, unrestricted and seasonal? But these kinds of data are difficult to find in one single study. Rather, they are addressed throughout the shorebird and human disturbance scientific literature used through the DEIS.

At this time, numbers of piping plover at the Seashore are too low on an annual basis and the magnitude and number of potential and actual human and natural risks to piping are too high to establish statistically and scientifically clear within-year cause-and-effect relationships. Typical sample sizes necessary to allow for scientifically and statistically valid studies of reproductive performance in birds are 12 nesting pairs at a minimum and more typically exceed 20-30 pairs, which is not occurring at the Seashore. Compounding this low sample size is the fact that when it comes to poor breeding performance of piping plover at the Seashore (that can include but not be limited to these: the unavailability of habitat due to recreational pressure, failure of Piping Plover to settle at the Seashore and establish territories, failure of piping plover pairs to build nests, failure of piping plover to hatch eggs and fledge young), it is very rare indeed to be able to establish conclusively and scientifically what natural and/or human variable may have been at the root cause of the failure. Rather, it is more typical that the cause of loss of adults, eggs and young is unknown, as noted in the Seashore’s annual reports. Therefore, it is almost impossible to assign a particular poor reproductive outcome to a single environmental issue with assurance.

The DEIS does not conclude that ORVs translate into few birds but rather that ORVs are one among many factors that contribute to the observed distribution, abundance, and reproductive behavior of plovers at the Seashore. Furthermore, the goal of management is not to grow the plover population so that it exceeds the carrying capacity of the Seashore, but rather to manage habitats and resources so that plovers have a chance to persist in this portion of their geographic range and for the numbers of plovers to be such that the Seashore contributes its reasonable and logical share to the population targets established in Piping Plover Recovery Plan. At this time, plovers are well below their historical highs at the Seashore and the Seashore itself and the region as a whole are well below the minimum targets specified in the Recovery Plan.

Regarding the question of shorebird energetics and the role of disturbance, shorebirds are some of the longest distance migratory birds and as such the energy demands of migration are extreme (Goss-Custard 1984, Harrington et. al. 1991). During migration shorebirds use a variety of habitats to find food, to rest, and to avoid predators, and their survival is in part a function of the calories that individual shorebirds add by way of efficient foraging and the calories that shorebirds preserve during resting (Kersten and Piersma 1987). High quality shorebird “stop-over” habitats are those in which individual shorebirds are free to find high-quality food quickly as well as those where shorebirds can effectively rest and avoid predators between foraging bouts. Low quality habitats are those where prey items are low in density and/or where human or natural disturbance keeps birds from feeding and resting and especially where these key activities are replaced by energy-demanding avoidance behaviors such as flying and running. Essentially, disturbance to migrating shorebirds results in a double indemnity because feeding and resting are preempted i.e., “replaced” by energetically high-cost short flight fleeing behaviors. The end result is that high

levels of disturbance means that shorebirds might not be in the condition required to survive their long migratory flights.

Critical Habitat for wintering piping plover has been designated by the U.S. Fish and Wildlife Service (USFWS) effective November 20, 2008 (73 FR 62816) (DEIS p. 189). Regardless of whether or not an area is designated as critical habitat, the area still needs to be protected for the birds that utilize the area since the habitat in which a bird is residing is essential for its survival. Management Policies 2006 states that the Seashore "will successfully maintain native plants and animals by ...minimizing human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them.

Finally, unfortunately, it can be the case where plovers do not always respond positively to particular management actions. Indeed, there are times that natural stressors such as storms, droughts, predators or low food abundance can undermine or overwhelm otherwise well intentioned management. Barrier islands are by nature, exposed to extreme conditions and in some cases, no management can counteract some natural events. In the final analysis, it is vital that the interface between plovers and humans be managed optimally, such that everything practicable is done to minimize negative impacts from human activities.

### ***TE4000 - Threatened And Endangered Species: Impact Of Proposal And Alternatives***

#### **Concern ID: 24270**

Concern Statement: Commenters disagreed with the DEIS findings that major adverse impacts would occur to sea turtles by allowing night driving on the beach. Commenters further stated that events associated with major impacts (e.g. nesting female being killed) have not occurred. Commenters questioned the analysis of impacts to sea turtles, noting that risk of Seashore staff missing nests would not be eliminated, as currently stated in the analysis . Commenters felt that the impact of night driving was underestimated, and that any take of a sea turtle should be considered a major impact.

#### ***Representative Quotes:***

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center  
**Comment ID:** 137745      **Organization Type:** Conservation/Preservation  
**Representative Quote:** In addition, we agree with the DEIS, which notes:

"Night driving on selected routes from September 16 through November 16, erosion and sand compaction; and other adverse effects related to ORV and other recreational use would be expected to occasionally result in aborted nesting attempts, hatchling disorientation or misorientation, running over hatchlings or nests, complete or partial nest loss due to human activities, and obscuring turtle crawl tracks that Seashore staff use to locate newly laid nests so that the undetected nests are not managed."

DEIS at 395. We disagree, however, that these impacts, combined with the impacts noted above, would be "long-term minor to moderate adverse." DEIS at 395. Instead, pursuant to the Seashore's definition, DEIS at 369, we believe the impacts would be "moderate adverse." Moreover, we question whether the NPS definition of moderate adverse" and "major adverse" inappropriately undervalue the adverse impacts to the threatened (loggerhead) and endangered (leatherback and green) and endangered species. The take of federally listed species nest, hatchling, or adult in a national park service unit would be of major, not minor, significance.

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center  
**Comment ID:** 137744      **Organization Type:** Conservation/Preservation  
**Representative Quote:** e. Impairment of sea turtle nesting and hatching

We acknowledge the measures proposed in Alternative F are, in certain ways, an improvement over the Consent Decree, and a clear improvement over the Interim Plan. Nevertheless, we do have some concerns about the impact analysis regarding sea turtles. The DEIS states that "the possibility that crawls would be obscured by ORV tracks - causing nests to be missed and therefore not protected as has occurred in the past - would be eliminated." DEIS at 393. While the risk would be reduced, we disagree that it would be "eliminated." Early season nesting by leatherback turtles, which could occur prior to turtle patrol starts on May 1, or late season nesting by loggerhead turtles, which could occur after September 15, or 2 weeks after the last turtle crawl is found, DEIS at 124, may be

missed. In addition, tidal levels, combined with wind-blown sand, could obscure crawl tracks, or there could be nests that are laid in the early morning after turtle patrol has passed an area or late in the day, before ORV traffic is prohibited at 1 hour after sunset. If turtle nests are not detected, they would not be protected by the protective measures, and there could be take of nests or hatchlings.

**Corr. ID:** 15141

**Organization:** *Not Specified*

**Comment ID:** 139033

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The statement reads, "ORV and other recreational use would have long-term major impacts on sea turtles, due to the amount of seashore available for ORV use, and by allowing nighttime driving on the beach." The historical records found in the annual MPS turtle reports for the Cape Hatteras National Seashore do not support this conclusion. None of the events defined on page 369, which are required for the impact to be declared "major adverse", have occurred. Specifically, nesting females have not been killed. Complete or partial nest loss due to human activity has not occurred frequently. Hatchling disorientation or disruption due to humans have not occurred frequently. Direct hatchling mortality from human activity has not frequently occurred. These events have not occurred historically, and no pedestrian or ORV use behaviors suggest that they are likely to occur in the future.

**Response:** Individual takes under ESA do not necessarily equate to a specific intensity of impacts as defined under NEPA. Impact thresholds were defined in this EIS for sea turtles relative to effects that would be outside the natural range of variability. Under ESA, individual takes, for example harassment of an adult turtle causing a false crawl, running over a nest and destroying some eggs, or running over a hatchling etc., are things that result in a finding of may affect/are likely to adversely affect sea turtles and are analyzed as such in the Determination of Effect section under each alternative analysis. However, as noted in the DEIS (page 374), even though human activities at the Seashore cause false crawls, the average false crawl to nest ratio at the Seashore falls within the scope of that typically found under "normal undisturbed conditions" which is 1:1. Numbers of eggs and hatchlings are depredated by predators and whole nests are lost to environmental factors such as storms. Given the magnitude of impacts from natural events, the impacts of the above described types of individual takes fall within the natural range of variability and therefore do not warrant a major adverse impact determination .

The death of an individual adult nesting turtle was determined to be a major adverse impact because adult nesting turtles do not normally die from natural causes when coming ashore, nesting, or returning to the ocean during the nesting process, therefore the death of even one individual would be outside the range of natural variability. As demonstrated by the recent death of a sea turtle on Ocracoke Island as a result of being run over by an ORV illegally driving at night, determining this to be a major adverse impact is warranted and the determination that night driving could result in a major adverse impact is accurate.

As described in the response to Concern ID 24087, the NPS revised alternative F to further protect sea turtles including adjusting the hours night driving is restricted (now 9:00 pm to 7:00 am) from May 1 until November 15 and reopening ORV routes to night driving from September 16 to November 15 only in areas where there are no nests. In certain areas of the Seashore, gates would be added to the ramps to help enforce this closures. This affords greater protection from night driving impacts while also minimizing impacts to emerging hatchlings from September 16 to November 15. With the protections to nesting turtles and hatchlings afforded under the alternative F, the NPS still considers the overall impact on sea turtles from ORV use would be minor to moderate adverse.

#### **Concern ID: 24272**

**Concern Statement:** Commenters stated concern with the impacts that ORV use would have on piping plover populations. Commenters further stated that they did not agree that overall impacts for piping plover would be long-term beneficial and suggested the impact level be revised to major adverse and suggested that NPS and FWS establish a limit for "taking" of threatened or endangered species by ORV.

**Representative Quotes:**

**Corr. ID:** 12002

**Organization:** *Not Specified*

**Comment ID:** 134195

**Organization Type:** Unaffiliated Individual

**Representative Quote:** NPS and FWS should take a hard look at establishing a take limit.

Take limits are allowed under the Endangered Species Act due to economic hardship. A "Take-limit" would set a predetermined limit for taking of Plover (and other species) by ORV. The idea would be to lower buffer zones to allow more public access, but increase buffer zones if there was a Take.

The beach going public would then have an incentive to protect shorebirds rather than harm them. To protect their own interests those who want to continue driving on the beach would become enforcers protecting shorebird interests rather than the current us vs. them mentality. Some education of the public would be required under this idea so a permit system for all beach driving would be probably be required.

**Corr. ID:** 13033

**Organization:** *Not Specified*

**Comment ID:** 140529

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The piping plover in particular would be extremely vulnerable to ORV recreation. According to the IUCN: "This species has a small population which has declined significantly since the 1950s. However, there have been overall population increases since 1991 as a result of intensive conservation management, so the species is listed as Near Threatened. It is still dependent on intensive conservation efforts, so if these cease, or if trends reverse, then it would warrant immediate uplisting again."

Opening the beaches to this kind of destruction is exactly the kind of thing that will warrant the uplisting of this bird.

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137743

**Organization Type:** Conservation/Preservation

**Representative Quote:** Thus, the remaining question is whether the management measures under alternative F adequately mitigate for known adverse impacts from ORV use. We conclude they do not, as under Alternative F, intensive levels of ORV use could continue at high quality habitat areas used by non-breeding piping plovers at Bodie Island Spit, Cape Point/South Beach, part of the east end of Ocracoke, and South Point. We acknowledge that alternative F proposes shoreline closures for 1 mile at South Point and 1.5 miles at South Beach, but there is no guarantee, from the vague and discretionary language in the DEIS, the closures actually will be located in what is high quality habitat in those locations, as opposed to lower value habitat. With the corridors that are proposed, there could be repeated disruption of feeding and resting behaviors of nonbreeding piping plovers. Moreover, as discussed above, the prior location of non-breeding closures on the ground - including an ORV corridor through high quality feeding habitat on Bodie Island Spit in the 2009-2010 winter - raises serious concerns whether the NPS, in making non-breeding closure decisions, will favor the concerns of ORV users over the biological needs of piping plovers.

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 137742

**Organization Type:** Conservation/Preservation

**Representative Quote:** Impairment of piping plover populations

The DEIS states that overall impacts "would be long-term moderate and beneficial for piping plovers." DEIS at 359. We disagree with this conclusion for the following reasons. First, we are concerned that the analysis of the various alternatives is hindered by the failure of the DEIS to include a true no-action alternative that does not allow ORV use on the Seashore beaches. While a proposed alternative F may, in the analysis, be considered to have benefits that are "greater" when compared to Alternative A, it is only because there are so many problems with the permissive management approach toward ORVs, which in turn created numerous adverse, significant impacts. Almost any alternative would be considered "beneficial" when compared to such a low standard.

Second, we disagree with the accuracy of the conclusion that the benefits under alternative F would be "long term moderate and beneficial for piping plovers." DEIS at 359. But for the implementation of adequate protection measures for non-breeding piping plovers, there clearly would be major adverse impacts to non-breeding piping plovers, based on the NPS definitions. DEIS at 321-322. Adverse impacts from ORV based disturbance would be

"detectable" and would be "outside of the natural range of viability," given existing high levels of ORV use at Bodie Island Spit, Cape Point/South Beach, Hatteras Inlet, and Ocracoke Inlet Spit. Also, "frequent responses by some individuals to disturbance to feeding ... or other factors [resting] resulting in a decrease in Seashore population levels ... " would be observable. Impacts would occur "in key habitats in the Seashore," may result in direct mortality, and would result in "loss of habitat."

**Response :** The conclusion of "long term moderate and beneficial for piping plovers" under alternative F refers to species management activities and it is not felt that species management would result in major adverse impacts. The threshold for major adverse impacts from species management was not reached for either state or federally listed species. Major adverse impacts would have meant that impacts from species management of listed/special status species, their habitats, or the natural processes sustaining them would be detectable, would be expected to be outside the natural range of variability, and would be permanent none of which was felt to be the case for species management. Furthermore, a designation of major adverse impact was not warranted because there is still ample habitat for listed species and while their populations are low, they still persist at the Seashore and periodically perform well there. More specifically, major adverse impacts would mean that impacts on listed/special status species, their habitats, or the natural processes sustaining them would be detectable, would be expected to be outside the natural range of variability, and would be permanent. It would also mean that impacts would occur during critical periods of reproduction or in key habitats in the Seashore and result in direct mortality or loss of habitat and local populations might experience large declines.

Regarding the management of wintering/nonbreeding populations of piping plover under alternative F, numerous year-round and seasonal vehicle-free areas would provide for additional areas for non-breeding species to use. These revisions to alternative F have made many of the areas of known habitat vehicle-free year-round, or during the breeding season, removing any corridors from these areas. Where corridors are permitted, Cape Point and South Point, the size of the corridor would be reduced to further increase the distance between piping plovers and ORV, and these corridors would be subject to resource closures. Also, an annual habitat assessment would be conducted at the points and spits after all birds have fledged from these areas. Prior to removing the pre-nesting closures, resource closures would be established in the most sensitive portions of nonbreeding shorebird habitat in these areas, based on habitat used by winter piping plovers in two or more of the past five years. People and pets would be prohibited within these closures.

Under alternative F, approximately 28 miles of shoreline would be designated for ORV use year-round, approximately 13 miles would be seasonally designated for ORV use from November 1 to March 31 (with two areas from September 15 to March 14), and approximately 26 miles would be designated as non-ORV year-round. Establishment of various vehicle-free areas, both year-round and seasonally, as well as the standardized monitoring and buffers in areas where ORV are permitted would reduce pressure from recreational activities on piping plover. It is believed that these measures under alternative F would provide significant mitigation for the known adverse impacts and it is believed that they would result in long-term moderate beneficial impacts to nonbreeding piping plover that would be greater than those under the other action alternatives as more area would be protected for non-breeding piping plovers.

Regarding any need or justification for an uplisting of the Atlantic population piping plover from its current status of threatened to that of an endangered species, this is a determination that is outside of the scope of the DEIS and another process entirely. If this is done, to be sure, the status and performance of plovers at the Seashore would be one of many factors to be considered. However, such a change in status would first and foremost take into account the status of the species inclusively over its entire geographic range of distribution. The Seashore represents only a very small percent of this larger area that extends north and east and into maritime Canada. Therefore, the status and management of plovers at the Seashore in and of itself is not sufficient to drive this change in determination.

The U.S. Fish and Wildlife Service Biological Opinion for the preferred alternative includes an "incidental take statement" for "take" of listed species which is incidental to activities allowed under the preferred alternative. The incidental take statement provides for reinitiation of consultation if exceeded. The hardship exception under ESA Section 10(b) for the taking of federally listed species applies to those individuals or organizations that entered into a contract with respect to a species prior to the species being considered for listing or subsequently listed, and who, because of the listing of the species, would be caused undue economic hardship. While ORV use on the Seashore predates the listing of the piping plover and sea turtles that inhabit the Seashore, the NPS is not engaged in any such

contracts with respect to these species and the hardship exemption does not apply to the use of ORVs at the Seashore.

**Concern ID: 24273**

**Concern Statement:** One commenter suggested that commercial fish harvesting would be beneficial to piping plovers because it would result in increased prey availability and that commercial fishermen should be allowed in corridors through resource closures.

**Corr. ID:** 15132

**Organization:** *Not Specified*

**Comment ID:** 138120

**Organization Type:** Unaffiliated Individual

**Representative Quote:** “Commercial fish harvesting would have negligible Impact on piping plovers because plovers do not feed on any commercially important fish. However, plovers do feed all some of the same prey Items of fish species that may be harvested and, as such, harvest of fish may mean greater prey encounters for plovers. In this case, the Impact of commercial fishing could result in long-term minor to moderate Increases in prey availability that would have a beneficial impact all piping plover foraging.” This is inconsistent with commercial fishermen not being allowed corridors through resource closures.

**Response:** The impact of commercial fishing harvest would potentially have beneficial impacts. However, this impact is associated with the fishing specifically and does not include the physical impacts of commercial fishing vehicles within resource closures. The potential for harm and disturbance would outweigh the potential benefits of allowing them inside the resource closures. Allowing corridors through resource closures for commercial fishermen would have adverse impacts to breeding shorebirds . For a more detailed discussion on why corridors are not included as part of revised alternative F, please see the response to Concern ID 24192.

**Concern ID: 24653**

**Concern Statement:** Commenters suggest that locations where seabeach amaranth will occur each year cannot be reliably predicted because it is a fugitive annual. Therefore, protection areas that restrict public use of the beach should not be pre-designated before plants are found.

**Representative Quotes:**

**Corr. ID:** 14572

**Organization:** Jersey Devil's Fishing Club

**Comment ID:** 135704

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Continuing along this line, concerning Sea Beach Amaranth, from reading all of the articles that I could find, along with my own experiences, is a plant that cannot be reliably predicted as to where it will grow from one season to the next. The life history of this plant, combined with the dynamic coastal habitat within which it evolved, give this species the ability to move within the coastal landscape as a fugitive species, colonizing habitat as it becomes available in both space and time. (Endangered Plants of New Jersey Fact Sheet). An example of this is section of beach which is continually fenced off for the Piping Plovers only had one good year where this plant appeared in close to ten years. The speculated reason for their sudden appearance is there was a series of energetic storms that could have caused seeds to be either to have washed up from the storms or exposed by the storms. Again all of the right conditions existed for that year. For the next two years there have been no plants in this area. For this reason no area should be predesignated nor can the area be predicted for the sea beach amaranth. Only under Plan "A" could preservation be properly applied without the public being subjected to un-needed restrictions that cannot be acted upon within any of the other Alternatives.

**Response:** While seabeach amaranth is a fugitive annual, its habitat requirements are known; it is found on sandy ocean beaches, where its primary habitat consists of overwash flats at accreting ends of islands and the sparsely vegetated zone between the high-tide line and the toe of the primary dune on non-eroding beaches. This narrow habitat niche for seabeach amaranth is bounded by its relative intolerance of flooding in lower beach settings and competition with other plants in upper beach and dune settings. The seeds of seabeach amaranth are viable for long periods of time and can be dispersed long distances by wind and water, allowing it to occupy newly created habitat. Seeds may also just accumulate around the base of a plant when it dies, allowing it to continue to occupy currently available habitat. Therefore, as indicated in the New Jersey Department of Environmental Protection agency's Endangered Plants of New Jersey Fact Sheet: Sea-Beach Amaranth *Amaranthus pumilus* Rafinesque (NJDEP no

date) and Jolls et al. 2004, to protect and maintain this species, it is necessary to protect the plants and habitat where they have occurred and potential suitable habitat where plants might occur. To balance the need to protect this federally listed species and provide for the recreational access/enjoyment of the Seashore, under the preferred alternative, the NPS would designate protection areas for the plant prior to June 1 in areas of suitable habitat on the points and spits only where the plant has occurred during the previous 5 years (i.e. those areas where the plant may be most likely to reemerge). At the Seashore plants are often not found until the annual survey conducted in early August when the plants are large enough to be readily visible. If the NPS did not pre-designate protection areas for the plant where it has previously occurred, seeds would likely be buried deeper than they can germinate and any germinating plants would likely be run over and killed, preventing them from maturing to the point where they could set seeds and contribute to the population of seabeach amaranth both at the Seashore and potentially to surrounding areas. In addition, under the preferred alternative approximately 26 miles of beach is designated as vehicle-free year-round to balance the amount of beach that is open to pedestrian use only and that which is open to ORV use. Approximately 28 miles of beach would be open to ORV use year-round, with approximately 13 miles open to ORV use seasonally. Some of the areas designated as year-round vehicle-free areas overlap with areas that are historically important to seabeach amaranth, such as the area on Cape Point 0.3 miles west of the point to approximately 1.7 miles west of the existing ramp 45. If plants are found in this area in the future, there would not be any additional impacts to ORVs since this area is already closed to ORVs.

### ***TE5000 - Threatened And Endangered Species: Cumulative Impacts***

#### **Concern ID: 24269**

**Concern Statement:** One commenter stated that the cumulative impacts of alternative F would likely prevent the re-establishment of seabeach amaranth.

#### ***Representative Quotes:***

**Corr. ID:** 15073      **Organization:** Southern Environmental Law Center

**Comment ID:** 137739      **Organization Type:** Conservation/Preservation

**Representative Quote:** Seabeach Amaranth

The cumulative impacts of Alternative F will likely prevent the re-establishment of this species on the Seashore where it was once abundant. If the species is re-discovered on the Seashore, it will not be able to persist or recover under Alternative F due to off-road vehicle use. While the species may be afforded some protection during germination if it occurs within shorebird-waterbird nesting areas, it is not afforded adequate protection under Alternative F during other critical stages of its life cycle. The species is not allowed to senesce naturally under this Alternative and any seeds produced from plants within shorebird-waterbird nesting areas will be subjected to extensive off-road vehicle use thereby threatening their ability to survive and germinate in the following season. In addition, providing protection for this species where it has occurred in the past 5 years will ensure that the species will likely never be allowed to recover on the Seashore.

**Response:** While the Seashore has no control over projects outside of the Seashore that contribute cumulative impacts to seabeach amaranth, management activities under revisions to alternative F will provide more protection to seabeach amaranth habitat and the species if it reappears or is reintroduced to the Seashore. Under new revisions to alternative F the amount of beach area closed to ORV use year round has increased to approximately 26 miles from 16 miles under the original alternative F. These new year-round vehicle-free areas include the area on Cape Point from approximately 0.3 mile west of the point to approximately 1.7 miles west of ramp 45 and the southern portion of the ocean beach on Hatteras Inlet Spit. Both of these areas are historically where a large percentage of seabeach amaranth was found within the Seashore, though much of the habitat on Hatteras Inlet Spit where seabeach amaranth was found no longer exists due to erosion. The increased amount and location of beach area closed to ORV use year round in conjunction with bird closures will afford greater protection of seabeach amaranth habitat and the species itself if it reappears or is reintroduced to the Seashore.

## ***VE2200 - Visitor Use and Experience: Methodology And Assumptions***

### **Concern ID: 24182**

**Concern Statement:** Commenters stated that overall visitor counts are inaccurate because they include Wright Brothers National Memorial and Fort Raleigh National Historic Site and may not account for all visitors. They further stated that inclusion of these sites skews the visitation statistics as many visitors at these sites do not come to the Seashore.

***Representative Quotes:***

**Corr. ID:** 13461

**Organization:** Park user

**Comment ID:** 138669

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Overall Visitor Counts - Overall visitor counts appear to include visitors to Fort Raleigh National Historic Site and the Wright Brothers National Memorial. A large percentage of these visitors vacation in the Northern Beaches communities and recreate on the non-federal beaches outside of the Seashore. Visitors who patronize the Fort Raleigh National Historic Site and the Wright Brothers National Memorial but do not visit the actual seashore areas need to be factored out.

**Corr. ID:** 13891

**Organization:** Ocracoke Civic & Business Association

**Comment ID:** 135470

**Organization Type:** Civic Groups

**Representative Quote:** The National Park Service DEIS plan recently released for public comment has used visitor demographics for Fort Raleigh and Wright Brothers Memorial in the interest of time since the economic study for Cape Hatteras Seashore is still under way. This does not take into account the true visitor demographics within the Cape Hatteras area. For example, those that vacation at Oregon Inlet are very different from those that vacation at Ocracoke. The economic study of Cape Hatteras National Seashore must be reviewed and used before the final ORV plan is released. Otherwise, this plan has the ability to cause severe adverse impacts to our local commercial and/or recreational tourist fishing industry.

**Response:** The visitor use statistics provided on pages 258 and 259 were obtained through the NPS Public Use Statistics Office, which can be found online at: <http://www.nature.nps.gov/stats/index.cfm>.

The recreational visitor counts in the DEIS were for visitors to the Seashore only and did not include Wright Brothers or Fort Raleigh. Further, visitation studies used, such as the 2003 University of Idaho study, also just looked at visitors to the Seashore and did not include visitors to Wright Brothers or Fort Raleigh.

### **Concern ID: 24183**

**Concern Statement:** Commenters stated that the NPS does not have adequate data on the number of ORVs at the Seashore and how ORVs are being used by visitors. They also requested that data provided to the Negotiated Rulemaking Committee regarding visitor use be included in the FEIS.

***Representative Quotes:***

**Corr. ID:** 12998

**Organization:** Not Specified

**Comment ID:** 140580

**Organization Type:** Unaffiliated Individual

**Representative Quote:** For example, on page 568 the "visitation" statistics are grossly inaccurate. There is no way to know how many people are riding in a vehicle (at least not the way the study was done) or whether the driver and/or passengers are indeed visitors at all. The study also doesn't take into account the high numbers of construction vehicles in the area as well as shipping or mail service vehicles. Attempts throughout the document are often made assuming that gross occupancy tax collected can be used as a method to determine the number of visitors. That being said, this has been proven as an inaccurate way to determine the number of visitors.

**Corr. ID:** 15043

**Organization:** Southern Environmental Law Center

**Comment ID:** 137471

**Organization Type:** Conservation/Preservation

**Representative Quote:** We are frustrated that off-road vehicle use has not been fully and consistently documented. Given the years of controversy surrounding the issue, one could reasonably assume methods would have been devised and implemented to provide accurate counts of vehicles on Seashore beaches on daily, monthly, and annual

bases. These counts are particularly important not just for determining the economic impacts of various visitor sectors but also for designing long-range management of the Seashore for natural resources and visitors of all kinds. We look forward to learning the results of the new survey estimate alluded to in the DEIS. DEIS at 265. We find it odd that the aerial ORV counts depicted in graphs at the same page, Figure 25, show no actual count numbers, only relative percentages by sections of the Seashore.

**Corr. ID:** 15047      **Organization:** Cape Hatteras Business Alliance

**Comment ID:** 141098      **Organization Type:** Business

**Representative Quote:** The DEIS identifies visitor experience as either ORV users or non-ORV users. By not using any of the information/data presented by CHBA in the analysis, the recreational uses of the Park were not accounted for in ANY of the Alternatives presented. NPS fails to take into account that ORV use in CAHA is not an activity within itself, but a means of access to areas within the Park (particularly the ocean waterline) to engage in the desired recreational activity. By lumping activities and areas into "ORV" and "non-ORV" does not take into account the multiplicity of uses available in the Park.

**Corr. ID:** 15047      **Organization:** Cape Hatteras Business Alliance

**Comment ID:** 141060      **Organization Type:** Business

**Representative Quote:** The data and information submitted by CHBA identifies the areas used for recreation, the recreational activity(s) engaged, as well as the criteria and essential elements for recreational use. Also included was information as to why these areas are most popular for recreation, the need for ORV access to the majority of these areas and exactly what the recreational uses are. No reference or consideration of recreational use of the Park was found anywhere in the DEIS.

**Response:** As noted in the DEIS on page 561, the NPS recognized that existing data on ORV use of the Seashore could be supplemented and conducted further study of the level of ORV use at the Seashore. These new studies, and how their results are being incorporated into the FEIS, are discussed under Concern ID 24257.

Pages 258 to 269 of the DEIS recognize that a wide variety of visitor uses occur at the Seashore, including activities noted by the negotiated rule making committee (page 259, DEIS). The DEIS does not go into the same level of detail regarding these activities, as the materials provided, because the affected environment and environmental impacts (as well as the range of alternatives) are within the scope of ORV management, rather than overall recreation management. Although there are many activities at the Seashore that visitors use an ORV to access, the scope of this planning effort is to manage that means of access (ORV use) for a variety of individual recreational activities and focus the data presented and the analysis on that means of access. For this reason, the materials provided by the negotiated rulemaking committee were considered and included, at a lower level of detail.

How visitation was counted is detailed under Concern ID 24182. This estimate of visitation has an accuracy level to allow for policy decisions to be made. The table below displays the specific counts for each ramp area which were used for the 4<sup>th</sup> of July pie chart in Figure 25.

**Ramp Counts Memorial Day and 4<sup>th</sup> of July, 2008**

Memorial Day, 2008		Fourth of July, 2008	
Ramp	Count	Ramp	Count
Ramp 4	641	Ramp 4	661
Ramp 23-27	336	Ramp 23-27	353
Ramp 27-38	191	Ramp 27-38	277
Ramp 43-49	471	Ramp 43-49	758
Ramp 55	137	Ramp 55	230
Ocracoke	293	Ocracoke	300
2008 Total Count	2069	2008 Total Count	2579

**Concern ID: 24186**

**Concern Statement:** Commenters stated that considerations of visitor use should place a greater emphasis on pedestrian users of the Seashore and that the percentage of visitors that use ORVs at the Seashore is overstated.

***Representative Quotes:*****Corr. ID:** 1339**Organization:** Teton Kiting LLC**Comment ID:** 132151**Organization Type:** Unaffiliated Individual

**Representative Quote:** More attention needs to be paid to other non-motorized activities that draw tourists - bird watching, kayaking, surfing, and especially kitesurfing. There has been a lot of local investment in these other activities in the past decade (kitty hawk kites, Real Kites, many local surf shops,.....).

**Corr. ID:** 3916**Organization:** Cary**Comment ID:** 131103**Organization Type:** Unaffiliated Individual

**Representative Quote:** I value beaches and do not want to spend my precious beach time in the presence of ORV's, their noise, their fumes, and the tracks they leave on the beach. I think I speak for hundreds of thousands of beach goers whose voice has been silenced by intimidation. On Hatteras Island it is difficult to express this anti-driving point of view because of a small, very vocal minority of people who feel economically threatened by closing the beach to driving. When the draft plans go to the next stages, I ask you to include this aesthetic view about beach driving more explicitly.

**Corr. ID:** 15043**Organization:** Southern Environmental Law Center**Comment ID:** 137472**Organization Type:** Conservation/Preservation

**Representative Quote:** In lieu of such data from the Park Service, we must rely on best available estimates. A 2003 visitor survey at Cape Hatteras estimated that between 2.7% and 4.0% of all visits to the park included beach driving (Hans Vogelsong, "Cape Hatteras National Visitor Use Study," August 2003, as quoted in "Economic Analysis of Critical Habitat Designation for the Wintering Piping Plover," Industrial Economics, Inc., for USFWS, September 23, 2008). Even positing significant error in the survey data, and that the number is double the maximum reported, then we are still left with the estimate that under 10% of all visitors to the Seashore choose to drive on the beach during their visits.

**Response:** The DEIS recognizes that a variety of recreational uses occur at the Seashore, as described starting on page 259. The purpose of this plan is to manage ORV use at the Seashore. The NPS recognizes that many of the activities at the Seashore are accessed by ORV. Outside of the description of visitor uses found on pages 258 to 268 of the DEIS, the DEIS recognizes the importance of non-motorized activities, discussing their economic contributions on page 285 to 287 of the DEIS. The NPS recognizes that a variety of visitors come to the Seashore each year, and therefore the preferred alternative includes a range of options for users during their visit. Revised alternative F increases access for multiple recreational uses by increasing the number of vehicle-free areas in the Seashore and removing the more stringent ML1 species management procedures. The DEIS further recognizes the

impacts of ORV use on pedestrians seeking a non-ORV experience in the impact analysis section of Visitor Use and Experience, beginning on page 527 of the DEIS. The analysis did consider data provided in the Hans Vogelsong study based on a peer review of the data gathered.

The NPS provides a variety of uses for all visitors and does not necessarily provide for a greater experience depending on the size or type of the user group. As detailed on page 527 of the DEIS, the enabling legislation of the Seashore does not explicitly authorize or prohibit ORV use. NPS believes that it, as well as past planning documents, allow for ORV use, managed within the enabling legislation's context of preserving the unique flora and fauna and physiographic conditions, providing for appropriate recreational use and public access to the ocean and sound shorelines in a manner that will minimize visitor conflict, enhance visitor safety, and preserve Seashore resources. As stated above, the NPS believes that the revised range of alternatives accounts for the variety of visitor uses at the Seashore, without emphasizing one use over another.

**Concern ID: 24187**

**Concern Statement:** One commenter requested that commercial fishing vehicles not be classified as "non-essential" as they provide food for the community.

**Representative Quotes:**

**Corr. ID:** 15161      **Organization:** Hyde County Commissioner

**Comment ID:** 138839      **Organization Type:** County Government

**Representative Quote:** I take exception to commercial fishermen and commercial fishing vehicles being called "non-essential." We provide food for people and it even says in the plan that the harvest of fish may mean greater prey encounters for plovers and be beneficial to them. So, I think we should be given, in addition to the permit that we have, we should be able to stay on our tradition of being able to provide food for people here, as we've done for hundreds of years and not be closed out from the resource closures.

**Response:** According to page 647 of the DEIS, essential vehicles are defined as "vehicles used by the National Park Service, or its agents, to conduct authorized administrative activities, such as resources management, law enforcement or other park operations, related to implementation of this plan or other applicable management plan(s) or permit(s), or as needed to respond to emergency operations involving threats to life, property, or park resources, within areas that are otherwise closed to recreational ORV or visitor use." The term "non-essential" is used solely as a method to clearly indicate that the vehicles being described in the applicable sections of text are not the property of the NPS or its agents. For a discussion of why commercial fishing vehicles are not allowed in resource closures, please refer to the response to Concern ID 24273.

**Concern ID: 24188**

**Concern Statement:** Commenters requested that the FEIS include additional information about visitor use such as the importance of non-motorized water sports, updated visitation tables, correcting the status of Frisco Pier, not including areas only accessible by water in the mileage count, and better representing Cape Point.

**Representative Quotes:**

**Corr. ID:** 3904      **Organization:** Not Specified

**Comment ID:** 132470      **Organization Type:** Unaffiliated Individual

**Representative Quote:** Cape Point needs to be represented with more respect in regards to human activities!

The Cape Point area has been a very large part of this Nation's maritime history and this island's culture. There has been a longstanding heritage of commercial and recreational fishing at the Point that has fed families and this nation for centuries. It has been a social gathering place of people for many generations. Cape Point is a Mecca for surf fishing, birding, shelling, windsurfing, surfing, and many other recreational activities. It is a destiny for many Park visitors. I understand too that it is the southern most breeding area for a very limited number of piping plovers and only when the conditions are just right!

**Corr. ID:** 10275

**Organization:** *Not Specified*

**Comment ID:** 137227

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I also have an issue with Frisco Pier being counted as a viable fishing resource. It has been closed for over a year so including it in the DEIS which came out earlier this year is unbelievable to me. It's not like it was just closed at the same time the DEIS was published. It's just another example of lies and half truths put out by NPS et al - grasping at straws and anything and everything to mislead the American public. I heard a rumor that the front end (the shop) of the pier was recently opened to counter this argument and so it could be said that the pier was open. Last time I was there (2008), I couldn't fish (or reach) the surf from the shop so please update the status of Frisco Pier being a viable place to surf fish.

**Corr. ID:** 14761

**Organization:** *Not Specified*

**Comment ID:** 135485

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Counting miles of beach open but accessible only by water...this is misleading to the general public.

**Corr. ID:** 15043

**Organization:** Southern Environmental Law Center

**Comment ID:** 137469

**Organization Type:** Conservation/Preservation

**Representative Quote:** While additional closures are certainly affecting some visitors, they are not seemingly causing the dire losses of visitation that some have vocally predicted. Indeed, trends indicate quite the reverse. We concur with the DEIS that "the information does not support projections of decreases in visitation." DEIS at 568. A final EIS should update tables with these more recent figures.

**Response:** The DEIS acknowledges the variety of recreational activities that area available to visitors in all areas of the Seashore, including Cape Point (DEIS pp. 1, 15, 16, 17, 18, 22, 259, 260, 262). Figure 21, figure 22, and table 66 in the FEIS have all been updated to reflect the most recent visitation statistics that were available at the time of printing the final document.

The Frisco pier was closed for public safety reasons, due to deteriorating conditions. However, it is the intent of NPS that the pier will be reopened for public use and NPS is working with the owner/operator to develop a viable solution for renovating the pier so it can be reopened. An update to the status of the Frisco pier was provided on p. viii, p. 58 and p. 260 of the DEIS, or in the Executive Summary, Chapter 2 (Elements Common to All Alternatives), and Chapter 3 (Visitor Use: Recreational Opportunities and Use at Cape Hatteras National Seashore) of the FEIS.

Miles designated for a particular use (e.g., ORV or vehicle free) are different than actual miles open for a particular use at any given time in recent years under either the Interim Strategy or the Consent Decree. The mileage estimates by category (year-round ORV routes, seasonal ORV routes, and year-round vehicle free areas) reported in the DEIS (p. 101) indicate how many miles are designated for those uses in a particular alternative, not how many miles will necessarily always to be open since all areas are potentially subject to temporary resource closures. For example, for the no action alternatives A and B, there are zero (0) miles designated as year-round areas, yet historically there have been portions of the Seashore closed to ORVs for extended periods due to safety closures and resource closures. The weekly beach access summaries issued by the Seashore in recent years report the actual miles that are open or closed to use. Under the consent decree, when resource closures are in effect for bird breeding activity, access to some portions of "open beach", such as the tip of an inlet, can be blocked by a resource closure. In the weekly beach access reports, these locations are identified as "open for pedestrian shoreline access via boat" since there is no practical way to by-pass the resource closure by land. "Limited access miles" are reported separately from miles open to ORVs or miles open to pedestrians for clarity.

**Concern ID: 24189**

Concern Statement: One commenter stated that the FEIS needs to consider the experiences of similar areas of North Carolina and along the east coast.

**Representative Quotes:**

**Corr. ID:** 585

**Organization:** NCBBA

**Comment ID:** 132038

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I do not see where the NPS has aggressively considered experiences of other locations in NC, namely Carolina Beach Freeman Park or the state park at Fort Fisher not to mention other East Coast locations.

**Response:** In developing the draft plan/EIS, NPS has considered information on management and experience at a number of other areas, including Carolina Beach Freeman Park and Fort Fisher. Management at the Seashore must be responsive to federal law and policy which differs from that governing state or locally owned and managed areas. The plan/EIS also must consider the resources and habitat specific to this Seashore.

**VE4100 - Visitor Use and Experience: Impact Of Proposal And Alternatives**

**Concern ID: 24290**

Concern Statement: Commenters stated that closing areas of the Seashore to ORV use would create safety issues if visitors engage in a water-based activity in a permitted area and are swept by currents into a resource closure where they would not be permitted to come ashore.

**Representative Quotes:**

**Corr. ID:** 10527

**Organization:** Not Specified

**Comment ID:** 131766

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The proposal to close beaches to all access at times all the way to mean low tide is unsafe. The waters of the Cape Hatteras area often have high lateral currents and high winds. Swimmers, bathers, and water sportsmen may at times find they have drifted and their most direct exit from the ocean may now be a closed area. Compliance with the park rules could mean remaining in several feet of water with high surf crashing on them and their equipment as they try to return to an open beach area. Or the person may head back out to sea to try to navigate around the closure. Many drownings and tragedies develop gradually through exhaustion or hypothermia. It is rarely as simple as a decision whether or not to pay a huge fine or die. A pedestrian corridor should be maintained everywhere at all times to ensure safety of the public.

**Response:** Alternative F has been modified in Table 10-1 to allow pedestrian shoreline access in front of (i.e., seaward of) bird pre-nesting areas until breeding activity is observed, then standard buffers for breeding activity will apply. When the buffer extends past the mean low tide line (the Seashore's legal boundary), then that section of shoreline is temporarily closed to visitor access and the closure is clearly marked in the field. Visitors who comply with the posted closures are generally not at risk. Resource closures have occurred at the Seashore for years and this type of emergency situation has been extremely rare. If there were to be a life and death situation involving someone being washed ashore inside a resource closure, NPS policy is that the protection of human life takes precedence over all other management activities, and the priority would be the safety of the visitor (NPS Management Policies 2006 Section 8.2.5.1). NPS enforcement personnel would take the circumstances into consideration in the application of their discretionary law enforcement authority.

**Concern ID: 24294**

Concern Statement: Commenters requested that watersports continue to be permitted at various locations throughout the Seashore where it is currently permitted, and noted that access for surfing should have minimal conflicts with bird and turtle nesting.

**Representative Quotes:**

**Corr. ID:** 82

**Organization:** *Not Specified*

**Comment ID:** 129794

**Organization Type:** Unaffiliated Individual

**Representative Quote:** in short here are points for you to bring up at the public hearings to protect the fauna of the outer banks.

1) nesting seasons and surf seasons are not aligned.

2) since the season don't align it is not going to impact the enjoyment of the surfers and the protection of endangered species.

**Corr. ID:** 82

**Organization:** *Not Specified*

**Comment ID:** 129793

**Organization Type:** Unaffiliated Individual

**Representative Quote:** If driving is permitted in the height of the swell season (september-october) surfers should be appeased and that is an issue you should consider and raise in hearings. As long as the birds are done nesting and the sea turtles have hatched and made it to the ocean, by September with the hurricane swells, there should be minimal conflict.

**Corr. ID:** 13264

**Organization:** *Not Specified*

**Comment ID:** 140153

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Access for watersports should continue to be permitted especially at the following locations:

The Haulover (Canadian Hole) near (58) South of Avon

Kite Point near (59) North of Buxton

Frisco Day Use Area near proposed new ramp 51

Sandy Bay Soundside north of Hatteras Village

**Response:** Preferred alternative F in the FEIS continues to provide access points at soundside locations used by visitors for watersports mentioned by the commenter. It would also add new small parking areas at access points 59 and 60 on the soundside.

Most bird nesting activities have concluded by the beginning of September. However, some turtle nests hatch in September and October. Buffers for turtle nests are considerably smaller than for nesting shorebirds and usually do not result in a closure to the waterline until the hatch window has been reached. Alternative F has been revised in the FEIS to provide pedestrian shoreline access on the seaward side of the pre-nesting closure (i.e., below the mean high tide line) during daylight hours to increase opportunity for those engaging in watersports to access the beach on both sides of the nest. These areas would be subject to standard buffers once breeding activity is observed.

## ***WH2000 - Wildlife And Wildlife Habitat: Methodology And Assumptions***

**Concern ID:** 24296

**Concern Statement:** Commenters questioned the impacts of kites and kiteboards on birds and requested that these potential impacts be studied.

**Representative Quotes:**

**Corr. ID:** 1573

**Organization:** *Not Specified*

**Comment ID:** 132127

**Organization Type:** Unaffiliated Individual

**Representative Quote:** I would further ask that kiteboarding's effect on nesting species be studied. I have not seen birds scared off by kites flying in their proximity or overhead, but I have also mostly been kiteboarding around species that are fairly used to being around human activity.

**Corr. ID:** 3369

**Organization:** Ontario Kiteboarding Association

**Comment ID:** 133595

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The concern about disturbance to birds by kites is in my view way overdone. As a practitioner of the sport for many years I have seen a huge variety of species co-existing with kites with apparently no ill effect whatsoever. Is there any evidence at all of long-lasting adverse effects on bird life from kites?

**Response:** The potential for kites to disturb nesting or territorial shorebirds has been documented. The 1996 Atlantic Coast Piping Plover Recovery Plan recommends that kite flying be prohibited within 200 meters of nesting or territorial adult and unfledged juvenile piping plovers between April 1 and August 31. The kite of a kiteboarder may fly overhead inside a closure or cast a shadow on the ground that is perceived by nesting shorebirds as a predator. This can result in flushing or physiological alarm reactions that change bird behavior. Inexperienced kiteboarders may be unable to control the kite sufficiently to prevent it from landing inside closures, resulting in disturbance to nesting birds and possible damage to nests and eggs.

### ***WH4000 - Wildlife And Wildlife Habitat: Impact Of Proposal And Alternatives***

#### **Concern ID: 24297**

**Concern Statement:** Commenters stated that road construction on Ocracoke would cause greater impacts than allowing beach driving to the wildlife and wildlife habitat.

#### ***Representative Quotes:***

**Corr. ID:** 2485

**Organization:** *Not Specified*

**Comment ID:** 133058

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The new plan would eliminate all beach driving on Ocracoke island in favor of building a new road across the dunes closer to the beach to improve pedestrian access. The road construction project will create a much larger impact on the environment than the current ORV access on the beach. The road will impact the fragile dune environment and its vegetation and animal population instead of the stable and relatively barren beach zone. Birds crossing the new road are likely to be hit by vehicles traveling at a significant speed. Speed control on the new road will require constant and active enforcement, requiring the hiring of officers to enforce it. The sand provides constant passive speed control at no cost to the taxpayer - you just can't drive fast on sand even if you want to.

**Response:** Beach driving would not be completely prohibited on Ocracoke Island under alternative F, or any other alternative. To better balance the amount of ORV and vehicle-free areas and reduce the amount of proposed construction, alternative F has been revised to no longer include an interdunal road extending 0.3 miles northeast from ramp 59, eliminating any potential impacts that would have resulted from constructing and driving on that road. Alternative F has also been revised to move ramp 59 to a location just south of the existing MP 59.5 parking area so that pedestrians accessing the beach would not need to cross the ORV ramp. Revisions to alternative F also would eliminate the new ramp 62 while allowing ORV use year round from MP 59.5 to a new Ramp 63. An area of beach on either side of the Pony Pens beach access area would be vehicle-free. ORV use would be extended slightly north of MP 67 while the area in front of the Ocracoke Campground would be designated for seasonal ORV use from November 1 through March 31. Ramp 68 south to the Ocracoke Day Use Area would become a vehicle-free area, while the beach from the Day Use Area to South Point would allow ORV use. Overall, as a result of the revisions to alternative F, approximately 5.5 miles of beach on Ocracoke island would be designated as vehicle-free year-round while approximately 1 mile would be designated for seasonal ORV use for 5 to 6 months per year.

#### **Concern ID: 24650**

**Concern Statement:** One commenter stated that ORV use on the Seashore significantly jeopardizes invertebrate prey for shorebirds on all beaches where off-road vehicle use is heavy (>75 passes) and it jeopardizes those species that depend on this prey base for survival during breeding, migration, and winter.

#### ***Representative Quotes:***

**Corr. ID:** 15073

**Organization:** Southern Environmental Law Center

**Comment ID:** 142353

**Organization Type:** Conservation/Preservation

**Representative Quote:** Alternative F would result in cumulative impacts to several species, including...

#### **Invertebrates**

Invertebrates are vital to breeding and non-breeding shorebirds. Off-road vehicle use can also jeopardize the prey base for shorebirds, as well as the availability and access to foraging habitat for shorebirds. Vehicle use on beaches

reduces wrack that harbors invertebrate prey important for shorebirds, especially Piping Plovers and others. Populations of invertebrates found on ocean beaches, which are a source of food for shorebirds like Red Knot, Piping Plover, American Oystercatcher, Whimbrel, Willet, Black-bellied Plover, Ruddy Turnstone, Sanderling and others, have been documented to be significantly reduced by off-road vehicle use. ORV use on Cape Hatteras National Seashore significantly jeopardizes invertebrate prey for shorebirds on all beaches where off-road vehicle use is heavy (>75 passes). In doing so, it jeopardizes those species that depend on this prey base for survival during breeding, migration, and winter.

**Response:** Chapter 3 of the DEIS discussed the importance of invertebrates as a food source for shorebirds and the potential for ORV impacts to beach invertebrates (DEIS p. 251-252). Language describing the potential impact of reduced invertebrate populations (as a result of ORV impact to invertebrates) use has been added to the Chapter 4 of the FEIS in the "Rare, Unique, Threatened, or Endangered Species", "State-listed and Special Status Species", and "Wildlife and Wildlife Habitats" sections.

The following language was added to Environmental Consequences, Wildlife and Wildlife Habitat, Alternative A, Impacts to Invertebrates:

“As noted in Chapter 3, a 3-year study on Cape Cod and Fire Island, New York (Kluft and Ginsberg 2009), found that higher ORV traffic resulted in dispersal and desiccation of the wrack line, thereby reducing the population of invertebrates in that area. Alternative A would allow for beach driving during the day outside of resource closures, with no restrictions on night driving. This level of access would result in long-term minor to moderate impacts expected to invertebrate populations (as described below), and therefore would reduce the food source to other bird species at the Seashore, resulting in long-term moderate impacts.”

The following language was added to Environmental Consequences, Wildlife and Wildlife Habitat, Alternative B, Impacts to Invertebrates:

“As noted in Chapter 3, a 3-year study on Cape Cod and Fire Island, New York (Kluft and Ginsberg 2009), found that higher ORV traffic resulted in dispersal and desiccation of the wrack line, thereby reducing the population of invertebrates in that area. Alternative B would allow for beach driving in the wrack line during the day outside of resource closures and would maintain nighttime closures. Prohibiting driving in resources closures as well as the seasonal prohibition of night driving would reduce disturbance in these areas for a portion of the year. Overall impacts to invertebrates would be long-term and minor (as described below), and would reduce the food source available to other bird species at the Seashore, but to a lesser degree than if night driving was permitted, resulting in long-term minor impacts.”

The following language was added to Environmental Consequences, Wildlife and Wildlife Habitat, Alternative C, Impacts to Invertebrates:

“As noted in Chapter 3, a 3-year study on Cape Cod and Fire Island, New York (Kluft and Ginsberg 2009), found that higher ORV traffic resulted in dispersal and desiccation of the wrack line, thereby reducing the population of invertebrates in that area. Alternative C would allow for beach driving in the wrack line during the day outside of SMAs, but would maintain nighttime closures and limit driving during the day where SMAs are established reducing disturbance in these areas. Overall impacts to invertebrates would be long-term and negligible to minor (as discussed below), and would reduce the food source available to other bird species at the Seashore, but to a lesser degree than if night driving was permitted, resulting in long-term minor impacts.”

The following language was added to Environmental Consequences, Wildlife and Wildlife Habitat, Alternative D, Impacts to Invertebrates:

“As noted in Chapter 3, a 3-year study on Cape Cod and Fire Island, New York (Kluft and Ginsberg 2009), found that higher ORV traffic resulted in dispersal and desiccation of the wrack line, thereby reducing the population of invertebrates in that area. Alternative D would allow for beach driving in the wrack line during the day in SMAs year-round and would maintain nighttime closures reducing disturbance in this area at night for a portion of the year. Compared to other alternatives, this alternative would also limit daytime ORV use in more areas of the Seashore due to the year-round SMAs. Overall impact to invertebrates would be long-term and negligible (as described below),

and would reduce the food source available to other bird species at the Seashore, but to a lesser degree than if night driving or greater access during the day was permitted, resulting in long-term negligible impacts.”

The following language was added to Environmental Consequences, Wildlife and Wildlife Habitat, Alternative E, Impacts to Invertebrates:

“As noted in Chapter 3, a 3-year study on Cape Cod and Fire Island, New York (Kluft and Ginsberg 2009), found that higher ORV traffic resulted in dispersal and desiccation of the wrack line, thereby reducing the population of invertebrates in that area. Alternative E would allow for beach driving in the wrack line during the day outside of SMAs but would maintain nighttime closures and limit driving during the day where SMAs are established reducing disturbance in these areas. Overall impacts to invertebrates would be long-term and minor (as described below), and would reduce the food source available to other bird species at the Seashore, but to a lesser degree than if night driving was permitted, resulting in long-term minor impacts.”

The following language was added to Environmental Consequences, Wildlife and Wildlife Habitat, Alternative F, Impacts to Invertebrates:

“As noted in Chapter 3, a 3-year study on Cape Cod and Fire Island, New York (Kluft and Ginsberg 2009), found that higher ORV traffic resulted in dispersal and desiccation of the wrack line, thereby reducing the population of invertebrates in that area. Alternative F would allow for beach driving in the wrack line during the day outside of SMA and would maintain nighttime closures. Prohibiting driving within SMAs year-round and seasonally and the seasonal prohibition on night driving would reduce disturbance in these areas year-round and seasonally. Overall impacts to invertebrates would be long-term and minor (as described below), and would reduce the food source available to other bird species at the Seashore, but to a lesser degree than if night driving was permitted, resulting in long-term minor impacts.”

### ***WR4000 - Wetlands and Floodplains: Impact of Proposals and Alternatives***

#### **Concern ID: 24298**

Concern Statement: Commenters suggested that vehicle routes not be established parallel to the sound shoreline to reduce impacts to vegetation and reduce potential erosion .

#### ***Representative Quotes:***

**Corr. ID:** 13773

**Organization:** *Not Specified*

**Comment ID:** 140113

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Vehicle routes should not be established parallel to the sound shoreline as vegetation that buffer the island during storms would be killed. Also, most salt marsh shorelines in the park are retreating in the absence of ocean overwash due to artificial dune lines as well as sea level rise. ORV activity exacerbates the erosion by killing vegetation and driving on undercut shorelines.

**Response:** Alternative F does not include new soundside ORV routes parallel to the shoreline.

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