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PACIFIC WEST REGIONAL OFFICE Memorandum

L7617 (PWRO-PP)

SEP 24 2008

Memorandum

To: Superintendent, Lake Mead National Recreation Area

From: **ACTING** Regional Director, Pacific West Region

Subject: Environmental Compliance for Wireless Telecommunication
Facilities (WTF) Plan

The *Finding of No Significant Impact* for implementing the park's guidance on locating or co-locating WTFs in developed zone areas of the park is approved. To complete this particular compliance effort, the park should send its notice of the decision (and make the attached document available) to all individuals and organizations that received the supporting environmental assessment.


Jonathan B. Jarvis

Attachment

FINDING OF NO SIGNIFICANT IMPACT
WIRELESS TELECOMMUNICATION FACILITY PLAN
AND
ENVIRONMENTAL ASSESSMENT

September 2008

Lake Mead National Recreation Area
Clark County, Nevada and Mohave County, Arizona

PURPOSE AND NEED

Lake Mead National Recreation Area (NRA) has prepared a Wireless Telecommunication Facility (WTF) Plan and environmental assessment (EA). The primary purpose of this plan is to enhance communications within high-use areas of the park and to improve emergency response, visitor satisfaction, and employees' and residents' contact with outlying areas. This plan intends to serve the interests of the public, concessioners, and National Park Service (NPS) employees by accommodating applications to provide cellular service in developed areas within the park. Lake Mead NRA receives numerous requests from Federal Communications Commission (FCC) licensees to construct cell towers within the park to enhance communication and to fulfill responsibilities associated with the FCC license. In addition, Lake Mead NRA receives letters and comments from the public requesting that cellular service be made available within the park for safety and enjoyment purposes.

Lake Mead NRA is approximately 1.5 million acres in size, and receives roughly 8 million visitors annually. Much of the topography is quite rugged, and many areas are considered remote by any standard. The ability to provide park-wide cellular phone coverage, therefore, is not feasible. Since the greatest amount of visitor use is for water-based recreation, visitors, as well as employees and concessioners, tend to congregate in the developed areas. With this in mind, the greatest result for the effort is achieved by providing service in the developed areas, and this is the logic that was used in developing the plan.

SELECTED ACTION

The selected action is the environmentally preferred alternative, which was identified and analyzed Alternative B in the EA. There were no modifications incorporated as a result of public comment. Under this alternative, the park will permit WTFs up to 125 feet tall in developed areas. Facilities meeting this requirement will be permissible at Boulder Beach, Echo Bay, Temple Bar, Willow Beach, Cottonwood Cove, and Katherine's Landing. At each location, the actual height of the tower constructed will be determined in consultation with the applicants and would be based on a demonstration of increasing operational benefit with added tower height (up to the allowed maximum). Co-location of multiple carriers on a single structure will be utilized to the fullest extent possible.

The WTF located in the River Mountains will remain in operation as long as carriers continue to be interested in operating from that site. Under the selected alternative, this previously existing facility will be the only one in the park exceeding 125 feet in height. However, if replacement or redesign of the River Mountains site is needed, it will be done according to the parameters established by this plan. The Callville Bay site, which currently consists of a 60-foot tower and a temporary mobile unit, could be redesigned to accommodate a larger tower and eliminate the temporary unit, but no more than one tower will be authorized. The WTF at Overton Beach will remain in operation as long as carriers continue to be interested in operating from the site. If replacement or redesign of the Overton Beach site is needed, it will be done according to the parameters established by this plan.

Consistent with the *Wilderness Act of 1964*, *NPS Management Policies 2006*, and Lake Mead NRA resource management goals and objectives, this plan would not authorize placement of wireless telecommunication facilities (WTFs) within any designated, proposed, potential, or recommended wilderness areas.

ALTERNATIVES CONSIDERED BUT NOT SELECTED

Alternative A, No Action: Under this alternative, the park would not authorize any new WTFs within the park boundary. The existing sites at Boulder Beach, Overton Beach, and Callville Bay would remain in operation as long as carriers continue to be interested in operating from those locations. Co-location by multiple carriers on the existing towers would be encouraged and approved until the towers were at full capacity. At that point, no additional service would be available from these sites. Carriers wishing to install new facilities would be advised to seek options outside the park. Due to the large size of the park, its rugged topography, and the distance from the park's developed areas to cities and towns, the park would receive little additional coverage from facilities located outside the park boundary. Under this alternative, there would be no cellular coverage in areas not currently receiving it.

Alternative C, Facilities Up to 200 Feet: This alternative is similar to the selected action, except that the maximum height of towers was limited to 200 feet. This alternative was not selected because the additional height would increase environmental impacts with little added operational benefit.

ALTERNATIVES CONSIDERED BUT DISMISSED

The action alternatives analyzed in the EA are based on height restrictions for new communication towers and were selected to provide adequate coverage without unnecessary environmental impact. An alternative limiting towers to 100 feet was rejected because it would not allow for effective co-location among different carriers. In order to minimize the number of towers that need to be constructed, carriers are encouraged to share facilities, but each additional carrier requires additional height for signal transmission. Since the benefits of constructing shorter towers can be quickly

negated by the proliferation of new towers to serve other carriers, this alternative was dismissed from analysis.

An alternative allowing towers to exceed 200 feet in height was also dismissed from analysis. At this height, towers would have a severe impact on scenic viewsheds, as they would rise significantly higher than anything else on the landscape. In addition, towers of this size must have lighting for aviation safety purposes, and lighted towers can disrupt the orientation of migrating birds. Such towers may also require guy wires, which increase the risk of bird collisions.

In addition to the locations presented in this document, the NPS has received proposals from cellular companies for site development near Las Vegas Bay and a site adjacent to Northshore Road. Las Vegas Bay was considered but dismissed because use in the area has decreased since drought conditions forced the 2002 emergency relocation of the marina to Hemenway Harbor. Even if the water level rises, sedimentation that has occurred in the bay would make it impossible for the marina to relocate back to its original location. Additionally, Las Vegas Bay is in close proximity to the communities of Henderson and Lake Las Vegas, and cell coverage could improve as a result of tower placement outside of the park or from alternate areas proposed in this plan. The request for a site adjacent to Northshore Road was considered but dismissed. Although a cell tower at this location would provide service to visitors traveling along the northern park roadway, there would be considerable impacts to the viewshed on this scenic drive. In addition, emergency call boxes are available along Northshore Road for safety-related issues.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is the alternative that will promote NEPA, as expressed in Section 101 of NEPA. This alternative will satisfy the following requirements:

- 1) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2) Assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- 3) Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable or unintended consequences;
- 4) Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- 5) Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and,
- 6) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The Council on Environmental Quality states that the environmentally preferable alternative is "the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources (46 FR 18026 – 46 FR 18038)." According to NPS NEPA Handbook (DO-12), through identification of the environmentally preferred alternative, the NPS decision-makers and the public are clearly faced with the relative merits of choices and must clearly state through the decision-making process the values and policies used in reaching final decisions.

The selected action, alternative B, is the environmentally preferable alternative because overall it will best meet the requirements in Section 101 of NEPA. The selected action is consistent with NEPA criteria two, three, four, and five. Providing cellular service in developed areas of the park will enhance communications for more effective park and concessioner operations, visitor use and enjoyment, and emergency response to assure a safe, healthful, and esthetically pleasing surrounding. The selected action will provide an environment that supports diversity and variety of individual choice by allowing cellular technology in high-use areas, while still preserving the opportunity for escape from everyday technology in more remote areas of the park. Limiting WTF construction to previously disturbed locations and restricting the tower height to no more than 125 feet will attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, jeopardizing park resources, or other undesirable or unintended consequences. The selected action will meet the goals of the project and will achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.

Unlike the selected action, the no-action alternative does not fully meet the goals of the project or NEPA criteria two, three, four, and five, because the benefits associated with improved communications, more effective park and concession operations operations, emergency response, and visitor use and enjoyment would not be fully realized. Similar to the Preferred Alternative, Alternative C would maintain the park's ability to provide for visitor use and enjoyment and efficient park operations. However, the additional height of the towers allowed by Alternative C would create greater impacts to park resources with little additional benefit.

MITIGATION AND MONITORING

Mitigation measures are specific actions designed to minimize, reduce, or eliminate impacts of alternatives and to protect Lake Mead NRA resources and visitors. Monitoring activities are actions to be implemented during or following construction. The mitigation measures presented in Table 1 related to constructing and operating WTFs will be implemented under the action alternative.

Table 1 - Mitigation Measures

Resource Area	Mitigation Measures	Responsible Party
Safety, Visitor Use and Experience	No proposed WTF or combination of facilities may produce at any time power densities in any area that exceeds the current FCC standard for human exposure at the point of closest public access. WTFs must comply with all current and future FCC adopted standards regarding human health and safety.	Cell Provider
	All safety standards applicable to WTF construction, operation, and maintenance must be adhered to.	Contractor
	Proposed WTFs must be designed and operated to minimize noise or other undesirable impacts from cooling equipment or generators. Maximum allowable noise level at the exterior of a proposed WTF is 60 dB.	Cell Provider
Visual Resources	To minimize the visual impact of WTF sites, structures will be painted an appropriate color, possibly using non-reflective paints or anodized coatings, to help them blend with the surrounding landscape and to minimize light reflection. The design of the buildings and related structures shall, to the extent possible, use materials, colors, textures, screening, landscaping, and native vegetation that will blend them into the natural setting and surrounding buildings.	Contractor
	Security lighting, if needed, will be downshielded to keep light within the boundaries of the site. Signage will be limited to providing radio frequency safety and emergency contact information.	Contractor
	Only monopoles and lattice towers will be considered. Towers mimicking natural features will not be considered, as they do not blend in well with the sparsely vegetated desert topography.	NPS
Park Operations	Applicants must coordinate ground based telecommunications requirements with the appropriate utility company to determine whether the power needed to operate the WTF is available. Power supporting NPS facilities will not be compromised as a result of constructing and operating a WTF.	Cell Provider
	To prevent disruption of other communication operations, carriers will operate their cellular facilities within the approved FCC frequencies assigned to them, and in compliance with all applicable laws, including but not limited to applicable FCC rules, regulations, and guidelines.	Cell Provider
Wildlife and Wildlife Habitat	To minimize impacts to birds, structures will be designed, in accordance with U.S. Fish and Wildlife Service (USFWS) guidelines, so that there is no need for guy wires (which increase collisions) or lights (which cause disorientation).	Cell Provider
Threatened and Endangered Species	During construction of WTFs, a biologist will be on site to ensure that no wildlife (including the federally threatened desert tortoise) has wandered into the project area. If wildlife is present, construction will not commence until the animals have vacated the area.	NPS
Soils and Vegetation	Towers no longer in use or determined to be obsolete will be removed within 90 days of cessation of use, and the site must be restored to its original condition or the condition specified by Lake Mead NRA resource specialists.	Cell Provider
	To prevent the introduction and spread of non-native plant species, construction equipment would be pressure-washed prior to working in the recreation area.	Contractor
	New utility services for proposed WTFs shall be underground or placed in at-grade conduits along previously disturbed corridors.	Contractor
	To minimize impacts to soils and vegetation, new WTF sites would be located only in previously disturbed areas. These areas will have approved access routes, so that no new roads will need to be constructed. Utilities will be available nearby so that connections can be made to the WTF with minimal disturbance.	NPS, Cell Provider
	Dust abatement measures would be developed to minimize impacts to air quality during construction activities.	Contractor
Cultural Resources	To ensure that there are no cultural resources in the project area, all sites will be surveyed prior to construction. If any archaeological resources are found, or if the site is part of a historic viewshed, the NPS will consult with the State Historic Preservation Office (SHPO) to determine an appropriate course of action to minimize viewshed impacts. If the sites are significant and determined eligible for the National Register of Historic Places (NRHP), NPS and SHPO will determine methods for avoiding impacts prior to granting clearance for WTF construction.	NPS

WHY THE SELECTED ACTION WILL NOT HAVE A SIGNIFICANT IMPACT ON THE HUMAN ENVIRONMENT

The NPS used the NEPA criteria to evaluate whether the selected action will have a significant impact on the environment. As defined by 40 CFR 1508.27, significance is determined by examining the following criteria:

1. Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts which require analysis in an environmental impact statement: No significant adverse impacts were identified that will require further analysis in an environmental impact statement.

As described in the EA, impacts to visual resources will be moderate under this alternative, but due to the placement of WTFs in developed areas in the presence of other man-made structures, impacts will not be unacceptable.

2. The degree to which public health and safety are affected:

Since the greatest amount of visitor use is for water-based recreation, and the developed areas provide lake access, the majority of visitors tend to congregate in these areas. A large percentage of the public uses cellular phones for communication purposes. Improved communications within the coverage area will directly benefit those who utilize this technology. Safety is improved with greater communication ability, and some visitors may be more content and have peace of mind knowing that they can use a cell phone to contact help in case of emergency.

Under the selected alternative, there will be a moderate, beneficial effect to safety resulting from improved communication services. Effects to visitor experience will be minor and could be either beneficial or adverse, depending on the visitor's views on the technology and its suitability to national parks. These effects are not unacceptable.

3. Any unique characteristics of the area such as proximity to historic or cultural resources, wild and scenic rivers, ecologically critical areas, wetlands or floodplains: No wild and scenic rivers, ecologically critical areas, wetlands or floodplains are located within the project area. In the unlikely event that cultural resources are present near WTF sites, there would be no impacts that diminish their integrity, so any potential effects would be minor, and there would be no unacceptable impacts to cultural resources.

4. The degree to which impacts are likely to be highly controversial: There were no highly controversial impacts identified during preparation of the EA or the public review period.

5. The degree to which the potential impacts are highly uncertain or involve unique or unknown risks: No highly uncertain, unique, or unknown risks were identified during the preparation of the EA or the public review period.

6. Whether the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration: No significant adverse impacts were identified during preparation of the EA. Implementation of the selected action neither establishes a NPS precedent for future actions with significant effects, nor represents a decision in principle about a future consideration.

7. Whether the action is related to other actions that may have individual insignificant impacts but cumulatively significant effects: The EA analyzed impacts to public safety, visitor use and experience, park operations, visual resources, wildlife and wildlife habitat, threatened and endangered species, soils and vegetation, and cultural resources. As described in the EA, cumulative impacts were determined by combining the impacts of the selected action with identified impacts from other past, present, and reasonably foreseeable future projects and actions.

As described in the EA, there may be impacts to birds and other wildlife upon implementation of the selected action. There are currently four WTFs (including one mobile unit) within the 1.5 million acres comprising Lake Mead NRA. This alternative could result in construction of seven new towers (including a redesign of the facilities at Callville Bay). When factoring in the numerous towers being constructed on lands adjacent to the park and throughout the region, it is unlikely that construction of seven additional WTFs in the park will have appreciable cumulative impacts on birds and wildlife.

The selected action, along with past, present, and reasonably foreseeable future actions, will have moderate, beneficial effects on safety, use and experience, and park operations. Impacts to visual resources will be moderate under this alternative, but due to the placement of WTFs in developed areas in the presence of other man-made structures, impacts will not be unacceptable.

8. The degree to which the action may adversely affect historic properties in or eligible for listing in the National Register of Historic Places, or other significant scientific, archeological, or cultural resources: As described in the EA, in the unlikely event that cultural resources are present near WTF sites, there would be no impacts that diminish their integrity, so any potential effects will be minor. There will be no unacceptable impacts to cultural resources. If WTF facilities are found to be within the viewshed of historic structures, the NPS will consult with the SHPO to determine their significance. If the structures are significant and determined eligible for the National Register of Historic Places, all necessary steps will be taken to avoid impacts to the viewshed.

9. The degree to which an action may adversely affect an endangered or threatened species or its habitat: Implementation of the selected action is not likely to adversely affect the desert tortoise. Since no other federally protected species occur in the project area, there will be no unacceptable impacts to threatened or endangered species.

10. Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment: The selected action violates no federal, state, or local environmental protection laws. The EA for the Wireless Telecommunication Facility Plan was prepared using the guidelines detailed in *NPS Management Policies 2006*.

PUBLIC INVOLVEMENT AND AGENCY CONSULTATION

A press release announcing a 30-day public scoping period for the Wireless Telecommunication Facility Plan and Environmental Assessment was posted on the park website and issued to area media on March 31, 2006. Publicity occurred in the Mohave Daily News and elsewhere. Three comments were received from visitors and area residents supporting improved cellular coverage. Three additional comments were received from businesses expressing interest in providing service within the recreation area.

On July 15, 2008 a press release announcing a 30-day public review period for the EA was sent to area media, including newspapers, radio stations, and television stations in southern Nevada and northwest Arizona. The press release was also posted at the Alan Bible Visitor Center and the visitor center at Katherine's Landing. Notification was also published on the Lake Mead NRA website (<http://www.nps.gov/lame>) and on the NPS Planning, Environment, and Public Comment (PEPC) website at <http://parkplanning.nps.gov>.

Lake Mead NRA's mailing list is comprised of 171 federal and state agencies, individuals, businesses, and organizations. The EA was distributed to 76 entities likely to have an interest in this project, including wireless carriers in the local area. Entities on the park mailing list that did not receive a copy of the EA received a letter notifying them of its availability and methods of accessing the document. Individuals could request a copy of the EA in writing, by phone, or by email. Copies of the EA are available at area libraries, including: Boulder City Library, Clark County Community College (North Las Vegas), Clark County Library, Las Vegas Public Library, Mohave County Library (Kingman, AZ), Sunrise Public Library (Las Vegas), University of Arizona Library (Tucson, AZ), University of Nevada- Las Vegas James R. Dickinson Library, Meadview Community Library, Moapa Valley Library (Overton, NV), Mesquite Library, Mohave County Library (Lake Havasu City, AZ), Laughlin Library, Searchlight Library, and Washington County Library (St. George, UT).

Comments were accepted through August 16, 2008. Forty-seven comments were received. Most of the public comments were from individuals in the Cottonwood Cove area on Lake Mohave, and were supportive of the selected action for reasons of safety

and convenience. The Cottonwood Cove Trailer Owners Association also supported the selected action.

The State Land Use Planning Agency suggested that “dark sky” lighting practices be utilized, including lighting screens and shields. They also suggested using compatible colors for all structures erected in the park. These design elements are consistent with those analyzed in the EA. It was suggested that cell towers should be placed on existing structures when possible, which will be considered where practicable.

The State Historic Preservation Office (SHPO) noted that while the effect of physical disturbances to cultural resources was analyzed, the effect of a cellular tower on the viewshed of a historic property was not specifically addressed in the EA. Impacts to historic viewsheds will be evaluated once a proposed location for a WTF has been identified. If WTF facilities are proposed within the viewshed of historic structures, the NPS will first consult with the SHPO to determine their significance. If the structures are significant and determined eligible for the National Register of Historic Places, all necessary steps will be taken to avoid impacts to the viewshed, including implementation of mitigation measures described in Table 1.

The Nevada Department of Wildlife supports the selected action, but suggests adding spikes, poultry netting, or other mechanisms to deter nesting by volant species on cell towers. Such mechanisms may be more necessary in urban areas, but they will be considered on a case-by-case basis in the design of WTF structures within the park.

IMPAIRMENT OF PARK RESOURCES OR VALUES

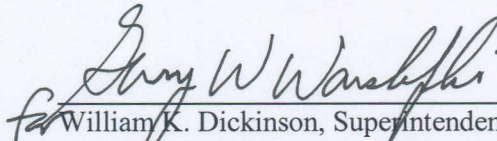
The implementation of the selected action will not constitute an impairment of Lake Mead NRA resources or values. Impacts documented in the EA and summarized above will not affect resources or values key to the natural and cultural integrity of the Lake Mead NRA, or alter opportunities for the enjoyment of the Lake Mead NRA. The selected action will not impair Lake Mead NRA resources and will not violate the National Park Service Organic Act. This conclusion is based on a thorough analysis of the impacts described in the EA, and the professional judgment of the decision maker, in accordance with *NPS Management Policies 2006*. As described in the EA, implementation of the selected action will not result in major adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Lake Mead NRA, (2) key to the natural or cultural integrity of Lake Mead NRA, or (3) identified as a goal in Lake Mead NRA’s *General Management Plan* or other relevant NPS planning documents.

CONCLUSION

Based on the analysis completed in the EA, the capability of the mitigation measures to reduce, avoid, or eliminate impacts, and with due consideration of public response, the National Park Service determined that the selected action does not constitute an action that normally requires the preparation of an environmental impact statement.

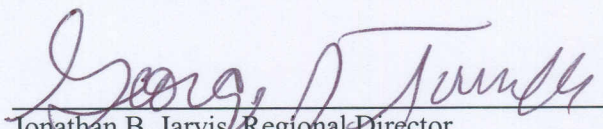
Negative environmental impacts that could occur are negligible to moderate in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, known ethnographic resources, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. The implementation of the selected action will not violate any federal, state, or local environmental protection law. There are no significant impacts to the affected environment. Implementation of the selected action will not result in unacceptable impacts or impairment of park resources. Therefore, in accordance with the National Environmental Policy Act of 1969, and regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement will not be prepared for this project, and the selected action may be implemented as soon as practicable.

Recommended:

for 
William K. Dickinson, Superintendent
Lake Mead National Recreation Area

9/11/08
Date

Approved:


Jonathan B. Jarvis, Regional Director
Pacific West Region

9/24/08
Date