APPENDIX B

8-STEP PLANNING PROCESS FOR FLOODPLAINS AND WETLANDS

Eight-Step Planning Process for Floodplains and Wetlands Construction of RFF Buxton, North Carolina	
Step 1: Determine whether the Proposed Action is located in a wetland and/or the 100-year floodplain, or whether it has the potential to affect or be affected by a floodplain or wetland.	**Project Analysis:** According to FEMA mapping, the proposed project site is located within zone X outside the 100-year floodplain but within the 500-year floodplain (FIRM for Dare County, North Carolina, panel number 3730053600J). Onsite jurisdictional waters of the United States total approximately 6.24 acres of nontidal shrub-scrub/herbaceous wetlands.
Step 2: Notify public at earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision-making process.	**Project Analysis:** A notice will be published by the applicant in a newspaper of general circulation when the EA is made available for public review.
Step 3: Identify and evaluate practicable alternatives to locating the Proposed Action in a floodplain or wetland.	**Project Analysis:** The project site is located within the 500-year floodplain and wetlands. Other than the No Action Alternative, there are no practicable alternatives for construction of Remote Fixed Facility (RFF) Buxton, because all of Cape Hatteras is in the floodplain. The Coast Guard conducted a diligent search for alternative tower sites and has determined that they cannot fulfill their purpose under the Rescue 21 program without construction of RFF Buxton on the project site. The project would replace the existing 425-foot, 18-guy wire communications tower on the project site. The following alternatives were evaluated in the EA: *Alternative 1:* No Action *Proposed Action:* Construction of RFF Buxton as a 24-guy wire tower with 3 anchor points • The anchors would consist of reinforced concrete caisson foundations that are 5.5 feet in diameter, 52 feet deep, and set within a 400-foot radius of the tower. The tower foundation would consist of a 59-foot-deep, 3.5-foot-diameter, drilled and reinforced concrete caisson. • A 30-foot by 50-foot equipment compound would be constructed with an elevated 12-foot by 25-foot steel platform, an 8-foot by 12-foot concrete equipment shelter, a backup generator, a 500-gallon propane tank used to fuel the emergency

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	generator, and associated equipment. The top of the elevated equipment platform will be 2 feet above the base flood elevation and approximately 4.5 feet above ground level. *Alternative Two*: Construction of RFF Buxton as a 39-guy wire tower with 6 anchor points • The anchors would consist of buried horizontal 3-foot by 4 foot by 24-foot long blocks for the inner anchor points and 5-foot by 3.5-foot by 36-foot long blocks for the outer anchor points set within a 261-foot and 400-foot radius of the tower, respectively. The tower foundation would consist of a 56-foot-deep, 5-foot diameter, drilled and reinforced concrete caisson. • The compound dimensions and ground support equipment would be approximately the same as for the Proposed Action. *Alternative Three*: Construction of RFF Buxton as a self-supported lattice tower • The foundation for the three-leg tower would consist of 72.5-foot-deep, 8-foot diameter, drilled and reinforced concrete caissons. The three caissons would be set 45 feet apart. • The fenced compound dimensions would be increased to 65 feet by 70 feet. The raised platform dimensions and associated ground support equipment would remain the same as described for the Proposed Action.
Step 4: Identify the full range of potential direct or indirect impacts associated with the occupancy or modification of floodplains and wetlands, and the potential direct and indirect support of floodplain and wetland development that could result from the Proposed Action.	**Project Analysis:** Although the Proposed Action and Alternatives Two and Three would result in modification of the floodplain, they would not impede movement of floodwaters within the floodplain, and thus would not increase the impacts to the floodplain above existing conditions. Construction of RFF Buxton would not support additional development of the floodplain. The Proposed Action and Alternative Two would impact wetlands but would not support additional development in wetlands.

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Step 5: Minimize the potential adverse impacts from work within floodplains and wetlands (identified under Step 4), restore and preserve the natural and beneficial values served by wetlands.	**Project Analysis:** Impacts to floodplains have been minimized as much as possible for all of the build alternatives by reducing the footprints to the smallest possible area. Impacts to wetlands under the Proposed Action would be: permanent area of impact = 0.056 acre +/-; temporary area of impact = 0.049 acre +/-; total permanent and temporary area of impact = 0.106 acre +/-. Impacts to wetlands under Alternative Two would be: permanent area of impact = 0.112 acre +/-; temporary area of impact = 0.098 acre +/-; total permanent and temporary area of impact = 0.21 acre +/-. The Coast Guard would obtain USACE Nationwide Permit 12 Utility Line Activities prior to construction of the Proposed Action or Alternative Two. Nationwide Permit 12 would require the Coast Guard to restore the disturbed wetland areas once construction is complete; restoration would include, but is not limited to, retaining the top six inches of topsoil, storing it in a location separate from other removed soil, and placing it back on the top of the filled trenches. With implementation of mitigation measures required under Nationwide Permit 12, no significant impacts to wetlands would occur. No wetlands would be impacted under Alternative Three. The Coast Guard must follow all applicable local, State, and Federal laws, regulations and requirements and obtain and comply with all required permits and approvals, prior to initiating work on this project. The Coast Guard must apply BMPs for soil erosion prevention and containment during staging of equipment and project activities. Should project activities be delayed for 1 year or more after the date of this EA, coordination and project review by the appropriate regulating agencies must be reinitiated.
Step 6: Re-evaluate the Proposed Action to determine: 1) if it is still practicable in light of its exposure to flood hazards; 2) the extent to which it will aggravate the hazards to others; 3) its potential to disrupt floodplain and wetland values.	**Project Analysis:** The proposed project remains practicable – construction of RFF Buxton would not aggravate flood hazards to others nor would it disrupt floodplain or wetland values.

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Step 7: If the agency decides to take an action in a floodplain or wetland, prepare and provide the public with a finding and explanation of any final decision that the floodplain or wetland is the only practicable alternative. The explanation should include any relevant factors considered in the decision-making process.	**Project Analysis:** The Draft EA will serve as the public notice informing the public of the Coast Guard's decision to proceed with the project. The Draft EA includes rationale for floodplain impacts; a description of all significant facts considered in making the determination; a list of the alternatives considered; a statement indicating how the action affects the floodplain and wetlands; and a statement of how mitigation will be achieved, if necessary.
Step 8: Review the implementation and post-implementation phases of the Proposed Action to ensure that the requirements of the EOs are fully implemented. Oversight responsibility shall be integrated into existing processes.	**Project Analysis:** This step is integrated into the NEPA process and Coast Guard project management and oversight functions.