



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Texas Coastal Ecological Services Field Office

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In Reply Refer To:
02ETTX00-2021-TA1412

April 1, 2021

Jayson Hudson, Policy Analysis Branch
Regulatory Division, CESWG-RDP
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229

Dear Mr. Hudson:

The U.S. Fish and Wildlife Service (Service) reviewed a March 4, 2021, Public Notice SWG-2012-00381 (PN) for the Department of the Army, U.S. Army Corps of Engineers (USACE). The Applicant, Space Exploration Technologies, Inc. (SpaceX), has requested modification of the existing permit for the continued development of the SpaceX vertical launch areas with the expansion and addition of test, orbital and landing pads, integration towers, associated infrastructure, storm water management features and vehicle parking. The project is in the wetlands adjacent to Boca Chica Bay, at the existing SpaceX Vertical Launch Facility on State Highway 4, in Boca Chica, Cameron County, Texas. This report was prepared under the authority of, and in accordance with, the Fish and Wildlife Coordination Act (48 Stat. 401), as amended; 16 U.S.C. 661 et seq.)

The Applicant requests a modified permit to expand the current SpaceX infrastructure and impact 10.94 acres of mud flats (salt flats), 5.94 acres of estuarine wetlands (high marsh), and 0.28 acres of non-tidal (depressional) wetlands, for a total of 17.16 acres of impacts to special aquatic sites and wetlands. According to the 2014 Environmental Impact Statement (EIS), the Applicant proposed compensatory mitigation to preserve wetlands at a 10:1 ratio for acreage impacted. The Service is unsure if the previous compensatory mitigation for impacts has been satisfactorily completed. This PN indicates that the Applicant would mitigate for 17.16 acres of impacts by developing a comprehensive, multifaceted mitigation strategy for the Boca Chica Launch Site. The Applicant has stated that the information will be updated as the mitigation strategy is finalized. According to Section 404(b)(1) of the Clean Water Act, Applicants must

include a mitigation plan with their permit application; however, no mitigation plan was provided for review. The Service is concerned that additional use of preservation as mitigation may not adequately offset the adverse impacts from proposed destruction of 17.16 acres of mud flats and wetlands. The Service requests no additional permit modifications be issued to SpaceX until a new mitigation plan is reviewed by the Service and other resource agencies and approved by the USACE. The Service recommends revision of the stormwater pollution prevention plan to address potential pollution and sediment discharges into wetlands resulting from SpaceX's proposed new activities. Further, there are reports of trenches on the north side of the SpaceX site to facilitate drainage of uncertain origin across the flats. The Service recommends the drainage be assessed for physical effects to the mud flats and water quality.

The Service believes cumulative impacts associated with destruction of rare and valuable aquatic habitats may warrant an EIS prior to considering this permit application. Impacts from SpaceX's explosions, fires, falling debris from test rockets, etc., should be evaluated for wetland effects. The Service recommends that more alternatives and efforts to avoid and minimize impacts be presented such as shuttling employees and materials to the work site rather than expanding parking areas. We request USACE demonstrate consideration of avoidance, minimization, restoration, and compensation, as defined in the Mitigation Rule, were clearly met in the proposed mitigation plan.

The Service is concerned that the project may have impacts to the following listed species known to occur on and near this site: piping plover (*Charadrius melodus*), red knot (*Calidris canutus*), black rail (*Laterallus jamaicensis*), northern aplomado falcon (*Falcon femoralis*), ocelot (*Leopardus pardalis*), jaguarundi (*Herpailurus yagouaroundi*), and nesting Kemp's ridley (*Lepidochelys kempii*), loggerhead (*Caretta caretta*), green (*Chelonia midas*), hawksbill (*Eretmochelys imbricata*), and leatherback (*Dermochelys coriacea*) sea turtles. We request a biological assessment be prepared to consider project effects to the species and guide Endangered Species Act compliance.

The Service recommends denial of this permit because a completed mitigation plan and a more thorough analysis of cumulative impacts to wetlands are needed. The Service appreciates the opportunity to review the proposed project. If you have questions regarding these comments, please contact Laura de la Garza at (956) 784-7545 or by email at laura_delagarza@fws.gov.

Sincerely,



Charles Ardizzone
Field Supervisor

cc: Assistant Field Supervisor, U.S. Fish and Wildlife Service, Corpus Christi, Texas