

June 17, 2021

**Chairwoman Eddie Bernice Johnson
House Science, Space & Technology Committee**

**Chairwoman Mikie Sherrill
House Science, Space & Technology Committee - Environment Subcommittee**

**Chairman Bill Foster
House Science, Space & Technology Committee - Investigations & Oversight Subcommittee**

Re: US Army Corps of Engineers 404 Permit for SpaceX Expansion in Boca Chica, Texas

Dear Chairwomen Eddie Bernice Johnson and Mikie Sherrill and Chairman Bill Foster:

We are a group of environmental stakeholders who are deeply concerned about the Clean Water Act (CWA) 404 permit # SWG-2012-00381 that SpaceX recently submitted to the US Army Corps of Engineers (COE) for consideration of expanding its Vertical Launch facilities at Boca Chica in Brownsville, Texas. We have all submitted public comments to the COE asking that this permit be denied.

We request that you, the Committees and Subcommittees with direct interest in the environment and wildlife, engage the COE on the issues outlined in this letter, and exercise your respective committees' authority to ensure that the COE does not issue a 404 permit for this project without full, appropriate consideration of the scope of the project, environmental impacts, and mitigation measures.

Both the EPA (Region 6) and the US Fish and Wildlife Service (FWS, see pp. 85-86 in supporting documentation) recommended the permit be denied. In a letter to the COE dated April 7, 2021 (see pp. 41-45 in supporting documentation), the EPA states: "The EPA finds this *project may have substantial and unacceptable adverse impacts on aquatic resources of national importance* (ARNI). Therefore, we recommend denial of the project, as currently proposed. This letter follows the field level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(a) regarding Section 404(q) of the Clean Water Act." (emphasis added)

The expansion of SpaceX's Vertical Launch facilities at Boca Chica in south Texas will result in the filling of sensitive marsh and tidal flats that migratory, breeding, and wintering birds depend on for their survival. Filling in wetlands and paving habitat for parking lots, launch and landing pads, integration towers, and other associated infrastructure and the direct, indirect, and cumulative impacts that will occur from SpaceX activities will have impacts on vegetation, migratory and nesting birds, and threatened and endangered species. Such impacts require further study to ensure that they are minimized and mitigated appropriately.

A primary issue with this permit is that no mitigation plan was presented along with the public notice. The Clean Water Act regulations regarding 404 permit review (CWA 404(b)(1) Guidelines) require that the public have an opportunity to engage in meaningful review of mitigation measures for a proposed project. 40 C.F.R. § 230.94(b). **We therefore request that you, the Committees and Subcommittees with direct interest in the environment and wildlife, engage the COE, asking them to deny the 404 permit because the agency has failed to meet this requirement.**

In the Public Notice, SpaceX states that they are drafting “...a comprehensive, multifaceted mitigation strategy for the Boca Chica Launch Site. The information will be updated as the mitigation strategy is finalized.” SpaceX also claims that strategies will be taken to avoid and/or minimize impacts to wetlands, but also state that: “It is possible that impacts to wetlands are reduced as the site design is refined.” The public cannot comment on a mitigation strategy that has not been fully developed, finalized, or shared with the public. Public lands surround this site and it is imperative to understand what kind of environmental mitigation strategies SpaceX is proposing. **Further, if the mitigation plan is released for public comment, but it doesn’t demonstrate adequate mitigation, we would still support denial of the permit.**

Among other reasons, the COE should also deny SpaceX’s permit request because the company’s proposed expansion plans violate the following CWA 404(b)(1) Guidelines:

- SpaceX has not met its burden of proving its proposal would not have an unacceptable adverse impact to wetlands and related aquatic ecosystems. 40 C.F.R. § 230.1.
- The FAA stated that the SpaceX launch facility was not “water dependent” in the 2014 EIS. For non-water dependent projects like that of SpaceX’s, the CWA 404(b)(1) Guidelines establish a presumption against filling special aquatic sites (i.e. sanctuaries, refuges, mud flats, and vegetated shallows), because practicable alternatives to these discharges are expected to be available “unless clearly demonstrated otherwise.” *Id.* §§ 230.10(a)(3), 230.40-45. SpaceX has failed to demonstrate that no practicable alternatives to filling special aquatic sites were available.
- The CWA 404(b)(1) Guidelines generally prohibit projects unless applicants take “appropriate and practicable steps” to “minimize potential adverse impacts.” *Id.* § 230.10(d). SpaceX has failed to make this demonstration.
- The proposed project would result in significant degradation of aquatic resources, in violation of 40 § C.F.R. 230.10(c).
- The COE must evaluate the effects of a project on the aquatic environment, including its secondary (i.e. indirect) and cumulative impacts/effects. *Id.* §§ 230.11, 230.11(g)-(h). During this evaluation, adverse impacts to mud flats and endangered and threatened species weigh against project approval. *Id.* §§ 230.11, 230.30, 230.42. Mud flats (i.e. Boca Chica’s wind tidal flats) will be adversely impacted by SpaceX’s proposed expansion. Moreover, the launch site directly overlaps with FWS-designated critical habitat for the threatened Piping Plover (TX-01, see enclosed map). The Piping Plover is listed as a threatened species under the Endangered Species Act (ESA). Other ESA-listed species use the Boca Chica region surrounding the SpaceX project site and include Red Knot, Northern Aplomado Falcon, Gulf Coast Jaguarundi, Ocelot, and Kemp’s Ridley, Hawksbill, Leatherback, Loggerhead, and Green Sea Turtles.

The CWA also includes Public Interest Guidelines that dictate consideration of an action’s risks and benefits, including financial costs, to the environment and the applicant. 33 C.F.R. § 320.4(a)(1). These guidelines prohibit permits for projects that cause extensive damage to wetlands that do not result in some type of greater overall benefit. 33 C.F.R. § 320.4(b)(1). The lands surrounding SpaceX’s launch site are state and federally owned park and refuge public lands and valuable public beach recreation areas. Any degradation or closure of those lands runs counter to the public interest.

The Public Notice provides background about SpaceX’s permitting related to a mitigation strategy between 2015 and 2018. Preservation, a mitigation strategy described in the mitigation requirements

under the CWA, Section 404, was granted to SpaceX by the COE. Typically, preservation is used in special, well-defined circumstances. Preservation does not provide any net gain of lost habitat or ecosystem function; therefore, the wetlands and tidal flats lost to SpaceX filling and paving, will remain lost. Preservation of a rare habitat of such hemispheric importance is unacceptable.

The unique habitat surrounding this site includes the Lower Rio Grande Valley National Wildlife Refuge (NWR), Boca Chica State Park, Brazos Island State Park, and Las Palomas Wildlife Management Area-Boca Chica Unit – all part of a complex of critical stopover for migrating birds from multiple flyways, coming from Mexico, and Central and South America, as they travel to their more northerly breeding sites.

These conservation areas are home to some of the country's most diverse communities of wind tidal flats, mid-delta thorn forest, and mid-valley riparian woodlands that support rare, endangered, and threatened species, making it critically important to ensure impacts to these natural resources are minimized and mitigated. However, *we question mitigation since this habitat is among some of the most rare and unique in the United States or worldwide (Texas GEMS, South Bay Preserve)*. This habitat has been identified by the Environmental Protection Agency as an aquatic resource of national importance (ARNI). **We ask the House and Senate Committees and Subcommittees to investigate why the COE made this unusual exception (i.e. Preservation) and to make the reason(s) for the exception public.**

Currently, there are multiple drainage culverts that empty directly from the Control Center area into the tidal flats (see enclosed photos). Discoloration of the water, proteinaceous foam, and human refuse indicate these drainages contain something beyond mere clean storm water runoff. It is unclear whether this is due to chemical contamination from industrial activity or untreated wastewater, or some other source. Impacts from this runoff and associated contaminants will have impacts on wildlife and the habitats they depend on to survive. We are concerned these drainage ditches are not properly sanctioned per the CWA. How will these drainage ditches be remedied now and in the future? It seems this would be part of a mitigation plan, which is missing from this permit application.

It is evident that SpaceX's mission and scope of operations has changed greatly since the initial Record of Decision in 2014 for this permit, and this updated permit request demonstrates only a portion of that overall change. SpaceX's history of frequently modifying their permits demonstrates that their activities have changed over time, resulting in segmented and partial environmental impact analysis and mitigation, and cumulative impacts to the habitat and wildlife. *Their activities have destroyed and continue to destroy this rare and valuable matrix of habitats and wildlife.*

We further allege that to date, current wetland modifications by SpaceX operations have occurred and continue to occur in direct violation of their existing wetlands 404 permit. Debris from multiple spacecraft explosions - especially the March 30 explosion of SN11 - has littered protected wildlife habitat well outside the boundaries of the company's own facilities. The "neighbors" on whose property this debris lands are the American public, and the subsequent debris recovery activities by the company on our public lands has resulted in substantial and irreversible impacts to sensitive habitats used by tens of thousands of migratory shorebirds. Heavy equipment utilized to excavate and remove large pieces of debris has resulted in hydrological modifications that go far beyond what would normally require a separate 404 permit. This is occurring on property that is *not owned by SpaceX*. It appears that this activity occurring in a wetland falling under jurisdiction of the COE is, as far as we can discern,

unauthorized. If SpaceX is unaware of 404 regulations to the extent that they are altering wetlands on property that they do not own, pause is warranted in authorizing any further permit request. **We request the relevant committees investigate the legality of SpaceX debris recovery activities on lands owned and managed by Texas Parks and Wildlife Department and FWS, and whether they are consistent with COE rules as they pertain to the waters of the United States.**

We appreciate your attention to this request and include letters in supporting documentation submitted with this letter that contain more detailed information that our group members submitted to the COE pertaining to SpaceX's permit application in April 2021. Other issues associated with SpaceX activities include a launch license violation (Dec 2020), public access, public safety, wildlife mortality, far reaching and adverse habitat impacts, social injustice, and more. We will be sending another letter to the appropriate House and Senate Committees and Subcommittees related to those issues. Our contact information is included in the signature block below should any of you have questions, concerns, or need additional information.

Sincerely,

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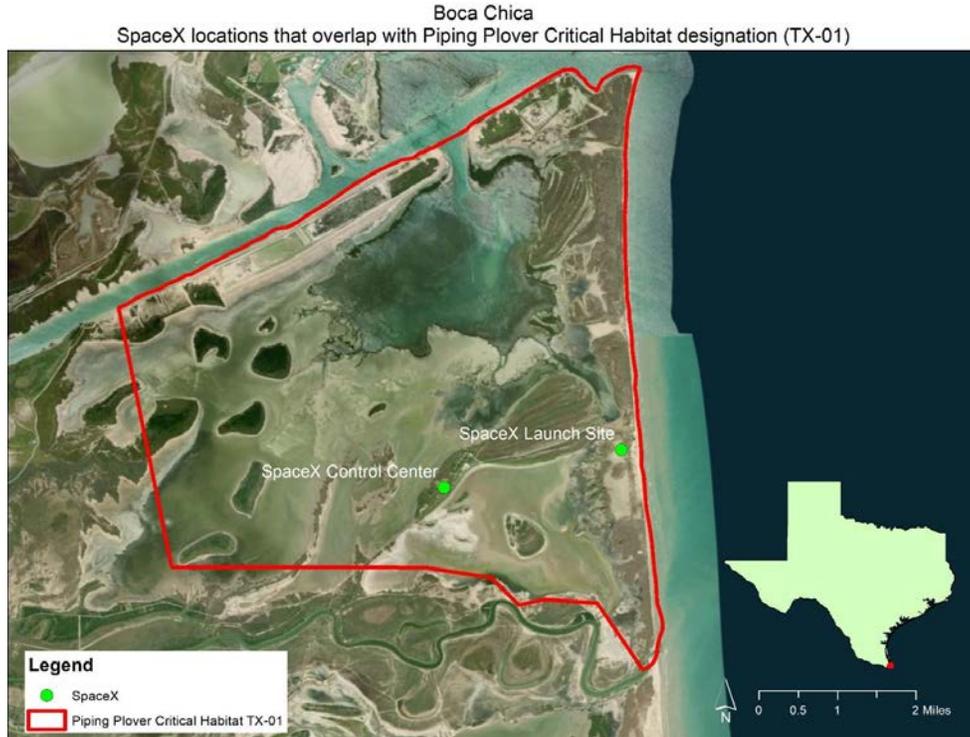
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Map of Boca Chica, Texas SpaceX site depicting Piping Plover Critical Habitat designation (TX-01) by the U.S. Fish and Wildlife Service.



One of two drainage ditches that empty directly into the sand/tidal flats at the SpaceX site in Boca Chica, Texas (March 2021).

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Stormwater runoff into the alkaline flats that are part of the Lower Laguna Madre National Wildlife Refuge and adjacent General Land Office jurisdictional South Bay Estuary (June 2021).



Discoloration of the water, proteinaceous foam, and human refuse indicate these drainages contain something beyond mere clean stormwater runoff.



Proteinaceous foam deposited at the mouth of the drainage ditch, indicating something beyond mere clean storm water runoff.