



The U.S. Shorebird Conservation Partnership

Building Collaborative Action for Shorebird Conservation

Ms. Stacey Zee
SpaceX PEA, c/o ICF
9300 Lee Highway
Fairfax, VA 22031
SpaceXBocaChica@icf.com

1 November 2021

Dear Ms. Zee,

On behalf of the U.S. Shorebird Conservation Partnership's Council, I am writing to express our deep concerns about the impacts of the SpaceX modifications proposed in the *Draft Programmatic Environmental Assessment for the SpaceX Starship/Super Heavy Launch Vehicle Program at the SpaceX Boca Chica Launch Site in Cameron County, Texas* (PEA). To address these concerns, we request completion of a full, detailed Environmental Impact Statement to evaluate immediate and cumulative effects of SpaceX activities on sensitive flora and fauna.

The U.S. Shorebird Conservation Partnership (USSCP) and its Council is a collective of individuals and organizations who are expert in the long-term conservation of Western Hemisphere shorebirds and their habitats. USSCP representatives have extensive experience in shorebird conservation and include federal agencies, state agencies and non-governmental organizations. We work collaboratively to address shorebird conservation issues and propose solutions. Accordingly, we are concerned about the loss of habitat, direct mortality (take), and contamination of wetlands vital to migratory shorebirds and other wildlife near the SpaceX launch site at Boca Chica. We have commented previously on the modifications to the wetlands permit issued to SpaceX.

At least 30 species of shorebirds have been recorded in the Boca Chica basin of the Lower Rio Grande Valley National Wildlife Refuge (Refuge) by professional biologists and volunteer observers, which represent nearly 60% of the shorebird species found in all of North America. This abundance of shorebird species present in the basin illustrates the biological diversity that the Refuge was designated to protect. Many of the species observed on the

Refuge rely on the site for winter habitat, and others depend on this unique area as a critical stopover site during migration from Central and South America to their breeding grounds in northern North America. Shorebirds from multiple flyways converge on the Boca Chica wetlands during the nonbreeding season. Adjacent to the Refuge, the Laguna Madre Western Hemisphere Reserve Network Site is recognized as being internationally important to shorebirds. Red Knots and Piping Plovers, which are listed under the U.S. Endangered Species Act, use the site during migration and winter. The saline shorelines near the current SpaceX site provide nesting habitat for Wilson's and Snowy Plovers, species of Birds of Conservation Concern in the U.S. (U.S. Fish and Wildlife Service 2021, <https://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>).

We believe strongly that the mission of the Lower Rio Grande National Wildlife Refuge and the health of shorebirds and other wildlife dependent on the Refuge is being significantly compromised by the activities of the SpaceX testing and launching site, which is embedded on a private land in-holding surrounded by Refuge lands. We are particularly alarmed about the level of contamination anticipated from fuels, gasses, and toxic debris laid out across the Refuge. This launch-base area pollution could have long-term, ecosystem-wide impacts on all life of Boca Chica and near-shore Gulf of Mexico environments. It would have been difficult to choose a more biodiverse area surrounded by public lands accessible to state and U.S. citizens than the SpaceX site to undertake environmentally impactful activities.

Since the publication of the Environmental Impact Statement (EIS) and Record of Decision in 2014, the Federal Aviation Administration has issued eight Written Re-evaluations, all which determined that SpaceX's modifications to the launch site and operations fell within the scope of the original EIS. The infrastructure expansions proposed in the current PEA, including a power plant, natural gas pretreatment system and liquefier, desalination plant and solar farm, are not described in sufficient detail and continue a fragmented approach to understanding the environmental consequences of SpaceX's ever-changing plan for their Boca Chica operations. Particularly, impacts of launch failures and other "anomalies" are not adequately evaluated. Because of the lack of detail, mitigation to impacts cannot be determined adequately. Plans referenced in the PEA are filled with phrases like "to the extent practicable", which makes them meaningless and unenforceable (e.g., lighting plan). SpaceX has a history of not complying with permit conditions. Plans on how to pay for mitigation and permit violations should be specified.

Monitoring of sensitive wildlife is reported in Appendix D, although details on results are lacking. For Piping Plovers, we have information that populations in the vicinity of the SpaceX site have declined by 54% since 2018. Because Piping Plovers are highly site faithful on the nonbreeding grounds, expansion at Boca Chica could negatively affect a substantial portion of the Northern Great Plains breeding population (>6%).

As we previously recommended, a full, detailed Environmental Impact Statement should be prepared to evaluate the entire and cumulative effects of SpaceX activities on sensitive flora and fauna. The Texas Parks and Wildlife Department and the U.S. Fish and Wildlife Service should review the EIS and all documents associated with permitting. Until a rigorous EIS is completed, the FAA should halt all expansion of SpaceX's footprint and testing activities and ensure monitoring plans are being conducted and results transmitted to appropriate agencies and other stakeholders.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in cursive script that reads "Catherine Hickey".

Catherine Hickey, Vice Chair
U.S. Shorebird Conservation Partnership Council