

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF FLORIDA  
Fort Lauderdale Division**

**Case No. 26-cv-62141**

**MIAMI WATERKEEPER, CENTER FOR  
BIOLOGICAL DIVERSITY, THE  
FLORIDA WILDLIFE FEDERATION,  
and THE DIVING EQUIPMENT AND  
MARKETING ASSOCIATION,**

*Plaintiffs,*

**v.**

**U.S. ARMY CORPS OF ENGINEERS;  
ADAM R. TELLE**, in his official capacity as  
Assistant Secretary of the U.S. Department of  
the Army; **LIEUTENANT GENERAL  
WILLIAM H. GRAHAM, JR.**, in his  
official capacity as Commanding General of  
the U.S. Department of the Army; **DR.  
LARRY D. MCCALLISTER**, in his official  
capacity as Director of Programs for the U.S.  
Army Corps of Engineers, South Atlantic  
Division; **HOWARD LUTNICK**, in his  
official capacity as the Secretary for the U.S.  
Department of Commerce; **EUGENIO  
PIÑEIRO SOLER**, Assistant Administrator  
of Fisheries for NOAA Fisheries; **ANDREW  
STRELCHECK**, in his official capacity as  
Southeast Regional Administrator for NOAA  
Fisheries; and **NATIONAL MARINE  
FISHERIES SERVICE**,

*Defendants.*

**COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF**

## INTRODUCTION

1. Plaintiff organizations Miami Waterkeeper, the Center for Biological Diversity, the Florida Wildlife Federation, and the Diving Equipment and Marketing Association (Plaintiffs) challenge the United States Army Corps of Engineers (“Corps”) and the National Marine Fisheries Service (“NMFS”) (collectively, “Federal Defendants”) for violations of the Endangered Species Act (“ESA”), 16 U.S.C. §§ 1531 *et seq.* and the Administrative Procedure Act (APA), 5 U.S.C. §§ 701 *et seq.*, relating to their authorization of the Port Everglades Inlet Sand Bypass Project (“Project”) currently under construction.

2. Specifically, Plaintiffs’ claims arise from NMFS’ arbitrary, capricious, and unlawful ESA biological opinions that fail to ensure the Project will not jeopardize federally protected species or destroy or adversely modify critical habitat; the Corps’ continued reliance on the invalid biological opinions; and the Corps’ failure to reinstate ESA consultation for the Project with NMFS after subsequent modifications to the project and new information revealed harmful impacts to federally protected species that were not previously considered. 5 U.S.C. § 706; 16 U.S.C. § 1536; 50 C.F.R. §§ 402.14, 402.16.

3. The coastal waters around Port Everglades are home to part of Florida’s Coral Reef, which is inhabited by some of the last surviving wild staghorn corals in the state. These waters are also home to one of the only two reproductively active, shallow-water queen conch herds identified in Florida.

4. Historically, Florida’s Coral Reef has been one of the United States’ most ecologically and economically vital ecosystems. It buffers storm damage, supports recreational opportunities, provides unique eco-tourism experiences, and sustains thousands of species.

5. Despite ongoing environmental stressors like ocean acidification, pollution, disease, heatwaves, and dredging-induced sedimentation, the reef continues to provide a home for thousands of species, including many that are protected under the ESA.

6. But a lethal barrage of sediment pollution from the Project puts these federally protected species at existential risk.

7. Federal Defendants authorized the Project, which involves dredging, construction, and sediment disposal within critical habitat for multiple species of threatened coral, as well as the relocation of thousands of listed animals. NMFS anticipated the Project would kill hundreds

of threatened staghorn colonies and queen conch. They also anticipated the permanent loss of up to 23.31 acres of designated critical habitat for federally protected corals.

8. The ESA requires Federal Defendants to ensure through consultation that the Project will not reduce the chance of survival or recovery of these imperiled marine creatures or destroy or adversely modify their critical habitat. The agencies are failing to meet that duty in multiple ways.

9. First, in the biological opinions for this Project, NMFS significantly underestimated impacts to listed species and their critical habitat. Its “no jeopardy” and “no adverse modification” findings ignore key information, including evidence that sediment from the Project will impede queen conch survival and reproduction, could spread deadly disease to coral, and that a so-called mitigation area intended to restore critical coral habitat will be rendered uninhabitable by repeated sedimentation. They also rely on unlawful, invalidated regulations to conclude that the Project will not result in destruction or adverse modification of critical habitat or jeopardy to listed species. As a result, the current biological opinions are arbitrary and capricious and contrary to law.

10. To make matters worse, the Permittee, Broward County, failed to adhere to a key conservation commitment in the biological opinions designed to reduce sedimentation impacts from the Project. And significant new information has emerged since NMFS issued its biological opinions that demonstrates additional ways in which the Project’s actual impacts are far more severe than Federal Defendants anticipated when they originally authorized the Project. With respect to the Project itself, recent satellite imagery and sediment monitoring show that sediment pollution from ongoing dredging is spreading much farther than predicted and is accumulating on the seafloor at levels greater than predicted.

11. At the same time, new information shows that the corals themselves are both more imperiled and more important than ever. In 2023, a marine heatwave decimated elkhorn and staghorn colonies in Florida, and now some of the only known remaining wild staghorn colonies in Florida are living and reproducing in the reefs around Port Everglades, near the Project site.

12. This new information shows that Federal Defendants grossly underestimated the Project’s true impacts. Indeed, NMFS itself subsequently concluded the Project’s unanticipated impacts may be affecting protected species and their habitats in ways NMFS did not consider in

its biological opinions—and alerted the Corps that the regulatory triggers requiring reinitiation had been met. Yet the Corps has failed to reinitiate and thus has failed to fulfill its legal obligation to ensure these unanticipated adverse effects are not jeopardizing the continued existence of federally protected species or destroying their critical habitat.

13. The Corps' continued reliance on the arbitrary and unlawful biological opinions violates the ESA and deprives these imperiled coral species and the queen conch of the lifesaving protections to which they are entitled.

14. Plaintiffs respectfully request that this Court declare Federal Defendants have violated the ESA and the APA by failing to ensure the Project is not likely to jeopardize any listed species or destroy or adversely modify their critical habitat; hold unlawful and set aside NMFS's 2020 and 2025 Biological Opinions; order the Corps to reinitiate and complete formal consultation with NMFS that complies with the ESA and APA; declare the Corps' reliance on the invalid and arbitrary 2020 and 2025 Biological Opinions is unlawful; enjoin the Corps' authorization of the Project until the agency fully complies with the requirements of the ESA and APA; and grant Plaintiffs such other relief as the Court deems just and proper. Such relief is necessary to safeguard federally threatened species and designated critical habitat at risk of harm from the Project's adverse impacts.

### **JURISDICTION AND VENUE**

15. This Court has jurisdiction over this action under Section 11 of the ESA, 16 U.S.C. § 1540(c), (g) (ESA citizen suit); 5 U.S.C. §§ 701–706 (Administrative Procedure Act); 28 U.S.C. § 2201 (Declaratory Judgment Act); 28 U.S.C. § 1361 (action in the nature of mandamus to compel an officer or employee of the United States or any agency thereof to perform a duty owed to the Plaintiffs); and 28 U.S.C. § 1331 (federal question).

16. The Court may grant the relief requested under the ESA, 16 U.S.C. § 1540(g), 5 U.S.C. § 706, and 28 U.S.C. §§ 2201–02 (declaratory relief and injunctive relief).

17. Venue is proper in this judicial district according to 28 U.S.C. § 1391(e) and 16 U.S.C. § 1540(g)(3)(A) because Federal Defendants are federal agencies and officers or employees of the United States acting in their official capacity, and a substantial part of the violations giving rise to the claim occurred in Broward County, Florida, in this judicial district. Plaintiff Miami Waterkeeper also resides and/or maintains a place of business in this district, and members of Plaintiffs' organizations reside in this district.

## PARTIES

### I. Plaintiffs

18. Plaintiff **Miami Waterkeeper** is a Florida non-profit organization that protects South Florida's waters by advocating for resilient solutions grounded in science, rooted in nature, and driven by community. Miami Waterkeeper fights for clean water, ecosystem protection, and resilience to sea level rise through science, advocacy, and education. Miami Waterkeeper uses education, community outreach, and legal advocacy to protect South Florida's marine ecosystems, marine life, and coral reefs. Miami Waterkeeper is a member of the Waterkeeper Alliance, an international organization uniting more than 300 Waterkeeper affiliates across the globe.

19. Plaintiff **Center for Biological Diversity** ("the Center") is a national, nonprofit conservation organization that works through science, law, and policy to protect imperiled species and their habitats. The Center has more than 101,611 active members across the country. It is incorporated in California and headquartered in Tucson, Arizona, with offices throughout the United States, including Arizona, California, Colorado, Florida, Hawai'i, Idaho, Minnesota, Nevada, New York, North Carolina, Oregon, Vermont, Washington, and Washington, D.C., and in Mexico. The Center has been working in the region, including on the conservation of coral species at issue in this case, for more than two decades. The Center's work includes successfully petitioning to list staghorn and elkhorn coral and litigating to ensure the corals and their habitat received timely ESA protections. The Center is also advocating for the designation of critical habitat for the queen conch. The Center brings this action on behalf of itself and its members.

20. Plaintiff **Florida Wildlife Federation, Inc.** ("Federation") is a Florida statewide non-profit conservation and education organization with its principal place of business in Tallahassee, Florida. It is a membership-based organization with over 113,000 members throughout Florida. The Federation is an affiliate of the National Wildlife Federation with a mission to safeguard Florida's water, wildlife, and wild spaces, and is committed to taking action today to prevent irreversible loss tomorrow. The Federation represents its members in state and federal litigation brought to preserve and protect Florida's rivers, lakes, estuaries, and coastal waters.

21. Plaintiff **Diving Equipment and Marketing Association** ("DEMA") is a non-profit trade association (501(c)(6)) based in California, representing the business interests of

more than 1,400 members with the mission of bringing businesses together to grow the recreational diving industry worldwide. More than 300 DEMA members are located in Florida, including manufacturers, diver training organizations, non-retail service providers such as publications and consultants, retail dive centers, and travel providers. DEMA delivers educational programs for members and constituents, lobbies on behalf of the diving industry, and performs many other functions. DEMA's goals include helping divers in Florida and elsewhere around the globe have continuing access to a clean and healthy aquatic environment. DEMA's members in southern Florida include dive tour operators, diver training organizations, and equipment retailers, all of whom depend on healthy coral reefs, including the Florida Coral Reef, to support their businesses and their recreational, aesthetic, and educational interests. DEMA also promotes Florida as a premier diving destination through production of its annual member meeting, *DEMA Show*, which is frequently held every other year in Orlando, Florida, and will take place this year from November 3rd through 6th. The show is one of the top 250 trade shows held in the United States. More than 8,000 members of the recreational diving profession attend each year bringing close to \$20,000,000 in direct revenues to Florida.

22. Plaintiffs and their members have concrete interests in the conservation of imperiled species and habitats currently being harmed by the Project, including but not limited to the threatened elkhorn and staghorn corals and threatened queen conch, and the effective implementation of the environmental laws that protect them.

23. Plaintiffs have members who have visited and plan to visit southeast Florida's coastal waters, including the area around the Project and nearby coral reefs where these species are known to occur. Plaintiffs' members observe these species and other reef-dependent organisms such as fish, shellfish, sea turtles, and marine mammals for research, nature photography, aesthetic enjoyment, recreation, education, and other activities that depend on viable coral populations to maintain a healthy, functioning ecosystem. Plaintiffs' members derive professional, aesthetic, spiritual, recreational, economic, informational, and educational benefits from these species and their habitats. These members have concrete plans to continue visiting and recreating in areas where they can observe these species and their habitat.

24. For example, one member of Miami Waterkeeper, Gray Davis Atkinson, is a social media content creator with over 1.5 million followers, who regularly dives off the coast of Fort Lauderdale, and frequently visited a dive site within the Project area prior to Project

construction. This area has been one of his favorite dive spots, where he could fish for lobster and enjoy the abundance of a healthy coral reef. The Project has inhibited him from pursuing one of his favorite recreational pastimes in one of his favorite places. Since Project construction, it has been impossible to access this area due to construction and sediment-laden water. Mr. Atkinson depends on a healthy coral reef, with abundant coral, conch, and other animals both for his own personal enjoyment as well as his professional business and online platform, as he often films his dives and has even filmed the exact dive spot that is now part of the Sand Bypass Project for his followers. Diminished numbers of listed coral and conch, or degraded coral critical habitat due to the Project would cause Mr. Atkinson to lose the ability to enjoy the spot and share it with his online followers, causing him both personal and professional harm.

25. Jordan Mannix-Lachner, a Center member, snorkels approximately twice a month from May through October each year at various locations throughout the Florida Keys, including along Florida's Coral Reef. Because of the queen conch's cultural significance to her community, Ms. Mannix-Lachner particularly enjoys observing the species while snorkeling. When selecting locations to snorkel, Ms. Mannix-Lachner seeks out areas where she can observe a variety of healthy marine species, including healthy corals along the Reef and queen conchs closer to shore, because this makes her experience more fulfilling. She looks forward to seeing healthy coral colonies and queen conchs while snorkeling, and she typically sees a conch one to three times a year. She finds snorkeling is less enjoyable in areas where marine species are less abundant or corals are dead. Diminished spawning capacity of the Port Everglades queen conch breeding aggregation, which is imperative to the species' recovery throughout Florida, will injure Ms. Mannix-Lachner's interest by depriving her of the ability to enjoy and share this cultural and ecological resource with her community and by decreasing the likelihood that she will observe queen conch while snorkeling.

26. Federation member Sarah Gledhill has worked for years to protect coral habitat and other wildlife in Florida. She is also an avid snorkeler and scuba diver who loves experiencing Florida's reef system along the southeast coast down to the Florida Keys. She looks forward to sharing her joy of these environments with her young family. Already, she has noticed a decline in the abundance of species and coral in Florida's Coral Reef, which has diminished her enjoyment of her dive and snorkeling trips. If the Sand Bypass Project further degrades the reef by reducing numbers of listed coral or conch and impeding their recovery, this

will diminish her recreational enjoyment and her ability to share something precious with her family, and will also undermine the years of work she has dedicated to protecting this ecosystem.

27. DEMA member Bill Cole is a dive boat captain who has been operating dive boats out of Port Everglades since 1980. He also owns a dive shop in the area. He has spent thousands of hours diving, teaching, and operating dive and snorkeling trips adjacent to Port Everglades and continues to do so currently. The health of the Port Everglades reef is essential to his livelihood, his customers' experiences, and the local dive community. The Sand Bypass Project is already affecting his interests in a healthy reef, with plumes extending miles north of the project site where his business conducts snorkeling trips. He has had to alter his operations and find new places to snorkel due to the plumes. If the Sand Bypass Project reduces the abundance of listed coral or conch, or degrades coral habitat, his business will be damaged because healthy corals and abundant wildlife are the primary reasons customers chose to dive and snorkel in the area.

28. Plaintiffs and their members' interests are adversely affected by the ongoing Project activities and Federal Defendants' failure to comply with the ESA. The Project, including ongoing dredging activities, is impairing water quality and is harming imperiled ecosystems and the prospects of survival and recovery for federally protected species, negatively impacting Plaintiffs' members' enjoyment of aforementioned activities.

29. Plaintiffs and their members also have a procedural interest in ensuring that the Corps complies with its legal obligation to reinitiate consultation for the Project under Section 7 of the ESA and ensure against jeopardy and destruction or adverse modification of critical habitat, and they suffer procedural injury from the agency's failure to do so.

30. The injuries described above are actual, concrete injuries presently suffered by the Plaintiffs and their members, and the injuries will continue to occur unless this Court grants the requested relief.

## **II. Defendants**

31. Defendant **United States Army Corps of Engineers** is an agency of the United States that regulates dredging activities in the navigable waters of the United States. The Corps granted Broward County a Section 404 Clean Water Act permit for the Project. The Corps also consulted with the National Marine Fisheries Service to assess the risks that the Project presents to the survival and recovery of threatened coral species and queen conch, and it failed to



reinitiate consultation after the Project was subsequently modified and new information revealed effects on species not previously considered.

32. Defendant **Adam R. Telle** is sued in his official capacity as the Assistant Secretary of the Army for Civil Works. In this capacity, he is responsible for overseeing the Department's actions relating to programs for conservation and development of the national water resources.

33. Defendant **Lieutenant General William H. Graham, Jr.** is sued in his official capacity as the Commanding General and Chief of Engineers for the Army Corps. He is the chief officer of the Department charged with regulating dredging activities.

34. Defendant **Dr. Larry D. McCallister** is sued in his official capacity as the Director of Programs for the Army Corps of Engineers South Atlantic Division, the division in which the Project is occurring, including associated dredging activities.

35. Defendant **Howard Lutnick** is sued in his official capacity as Secretary of the U.S. Department of Commerce. As Secretary, he is the chief officer with the ultimate responsibility to administer and implement the provisions of the ESA for marine species.

36. Defendant **Eugenio Piñero Soler** is sued in his official capacity as the Assistant Administrator of the National Marine Fisheries Service, the agency within the Department of Commerce charged with implementing the ESA for the marine species at issue in this suit. Defendant Piñero Soler is charged with lawfully administering and complying with the ESA.

37. Defendant **Andrew Strelcheck** is sued in his official capacity as the Southeast Regional Administrator of the National Marine Fisheries Service. As regional administrator, he is charged with conserving and managing fisheries and protected marine resources in the South Atlantic, where the Project is located.

38. Defendant **National Marine Fisheries Service** is an agency of the Department of Commerce, operating within the National Oceanic and Atmospheric Administration, responsible for administering the provisions of the ESA with regard to threatened and endangered marine species and critical habitat protections for aforementioned species.

## **STATUTORY AND REGULATORY BACKGROUND**

### **Endangered Species Act**

39. The ESA "represent[s] the most comprehensive legislation for the preservation of endangered species ever enacted by any nation." *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180

(1978). The Supreme Court’s review of the Act confirmed “beyond doubt that Congress intended endangered species to be afforded the highest of priorities.” *Id.* at 174. Put simply, “[t]he plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost.” *Id.* at 184. Its purpose is to “provide a program for the conservation of . . . endangered species and threatened species” and “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.” 16 U.S.C. § 1531(b).

40. Congress entrusts special duties to the Secretary of Commerce to administer the ESA for marine species, *id.* § 1532(15), and the Secretary has delegated his ESA duties to NMFS, 50 C.F.R. § 402.01(b).

41. Under the ESA, a species is “endangered” if it “is in danger of extinction throughout all or a significant portion of its range.” 16 U.S.C. § 1532(6). A species is “threatened” if it “is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” *Id.* § 1532(20).

42. Once a species is listed as endangered or threatened under the ESA, it receives an array of procedural and substantive protections that constitute the effective “program for the conservation of . . . endangered species and threatened species,” *Id.* § 1531(b), which is essential to the species’ overall survival and recovery, *see* 50 C.F.R. § 424.02.

43. For example, ESA Section 9 makes it unlawful to “take” an endangered species without authorization, meaning no person can harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect the species without first receiving authorization from NMFS. 16 U.S.C. § 1538.

44. ESA Section 4 empowers NMFS to extend this prohibition of unauthorized take to threatened species, requiring that NMFS “shall issue such regulations as [the agency] deems necessary and advisable to provide for the conservation of [threatened] species.” *Id.* § 1533(d). NMFS issued a Section 4(d) rule to protect threatened staghorn coral and elkhorn coral from take. 50 C.F.R. § 223.208(a).

45. ESA Section 4 also requires the Secretary to designate protected “critical habitat,” 16 U.S.C. § 1533(a)(3), which includes areas “essential to the conservation” of endangered and threatened species, *id.* § 1532(5).

46. ESA Section 7 requires all federal agencies to ensure their actions are not “likely to jeopardize the continued existence” of any endangered or threatened species or “result in the destruction or adverse modification” of critical habitat. 16 U.S.C. § 1536(a)(2).

47. To “jeopardize the continued existence” of a species means to “engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 C.F.R. § 402.02.

48. To “destroy or adversely modify” critical habitat means “a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.” 50 C.F.R. § 402.02 (2018).<sup>1</sup>

49. To meet this substantive mandate, the ESA requires an interagency consultation process between federal action agencies and expert fish and wildlife agencies—in this case, NMFS—to determine whether an agency action will jeopardize any listed species’ survival and recovery or adversely modify critical habitat, and if so, to identify ways to modify the action to avoid that result. 50 C.F.R. § 402.14 (2024).

50. The ESA requires federal agencies, including NMFS and the Corps, to use the “best scientific and commercial data available” in fulfilling the consultation requirement. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(g)(8).

51. A federal agency must initiate consultation with NMFS whenever it undertakes an “action” that “may affect” a listed species or critical habitat. 50 C.F.R. § 402.14(a).

52. Agency “action” is defined in the ESA’s implementing regulations to include “all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by [f]ederal agencies,” such as “the granting of . . . permits, or . . . actions directly or indirectly causing modifications to the land, water, or air.” *Id.* § 402.02 (definition of “action”).

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<sup>1</sup> In March 2026, a federal district court vacated the definition of “destruction or adverse modification” set forth in the current version of the Code of Federal Regulations and reinstated the version of the regulation that existed before the 2019 revisions. *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, No. 24-CV-04651-JST, 2026 WL 898264, at \*17–18, \*25 (N.D. Cal. Mar. 30, 2026).

53. If an agency determines that its action “may affect” but is “not likely to adversely affect” a listed species or its critical habitat, the ESA regulations permit a less comprehensive “informal consultation,” if NMFS concurs with that “not likely to adversely affect” finding in writing. *Id.* § 402.13.

54. If NMFS does not concur with the “not likely to adversely affect” determination or if the action agency determines that the action is “likely to adversely affect” the listed species, the agencies must engage in “formal consultation.” *Id.* §§ 402.02, 402.14(a).

55. Formal consultation “is a process between [NMFS] and the [f]ederal agency that commences with the [f]ederal agency’s written request for consultation under section 7(a)(2) of the Act and concludes with [NMFS’s] issuance of the biological opinion under section 7(b)(3) of the Act.” *Id.* §§ 402.02, 402.14(c)(1).

56. During formal consultation in this instance, NMFS was required to “[r]eview all relevant information provided by the [Corps] or otherwise available” and “evaluate the current status and environmental baseline of the listed species or critical habitat,” as well as the “effects of the action,” and “cumulative effects” to determine whether the agency action will jeopardize species or destroy or adversely modify critical habitat. *Id.* § 402.14(g)(1)–(4).

57. Effects of the action include “direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action that will be added to the environmental baseline.” *Id.* § 402.02 (2018).<sup>2</sup> “Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur.” *Id.* “The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process.” *Id.*

58. At the conclusion of the consultation process, NMFS must issue a “biological opinion” that “detail[s] how the agency action affects the species,” 16 U.S.C. § 1536(b)(3)(A),

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<sup>2</sup> A federal district court also vacated the definition of “agency action” set forth in the current version of the Code of Federal Regulations and reinstated the version of the regulation that existed before the 2019 revisions. *Ctr. for Biological Diversity*, 2026 WL 898264, at \*11–15, \*25.

and sets forth NMFS's opinion as to whether the action is "likely to jeopardize" the continued existence of listed species or "result in the destruction or adverse modification of critical habitat," 50 C.F.R. § 402.14(h)(1)–(3).

59. If NMFS determines that the agency action *is* likely to jeopardize the continued existence of a listed species or result in adverse modification of critical habitat, the biological opinion must suggest "reasonable and prudent alternatives" ("RPAs") that would reduce action-related impacts such that the agency action may avoid jeopardizing listed species. 16 U.S.C. § 1536(b)(3)(A).

60. If NMFS determines the agency action or the RPA *is not* likely to cause jeopardy to listed species or to destroy or adversely modify critical habitat, NMFS must provide a statement that specifies the impact of the incidental take on the listed species, outlines "reasonable and prudent measures" ("RPMs") that are necessary or appropriate to minimize the impact from incidental take, and sets forth terms and conditions for the federal agency to implement the RPMs. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1)(ii).

61. Compliance with a biological opinion and its incidental take statement protects the federal action agency, and others acting under or consistent with the biological opinion, from enforcement action under ESA Section 9's prohibition against take. 16 U.S.C. §§ 1536(o)(2), 1538(a). However, take that is not in compliance with a legally valid biological opinion or occurs absent a valid ESA Section 7 incidental take statement or ESA Section 10 incidental take permit violates ESA Section 9. *See id.* § 1536(b)(4), (o)(2).

62. To preserve the incidental take authorization provided in the biological opinion's ITS, the action agency—here, the Corps—must comply with the reasonable and prudent measures set forth in the biological opinion and the terms and conditions required to implement those measures. The Corps must also monitor the impacts of incidental take and report the impact of its action on the listed species to NMFS as specified in the incidental take statement. *See id.* § 1536(b)(4); 50 C.F.R. §§ 402.14(i)(1)(iv), (i)(3)–(4).

63. ESA Section 7 also requires an agency to reinstitute formal consultation when it retains discretionary federal involvement or control over the action and:

- (1) If the amount or extent of taking specified in the incidental take statement is exceeded;

(2) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;

(3) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or written concurrence; or

(4) If a new species is listed or critical habitat designated that may be affected by the identified action.

50 C.F.R. § 402.16.

64. Compliance with the procedural requirements of ESA Section 7—identifying the likely effects of the action through the consultation process before the action is taken and reinitiation of consultation when aforementioned triggers occur—is integral to meeting the agencies’ duty to “insure” that the Project is not likely to jeopardize the continued existence of a species or destroy or adversely modify critical habitat. *Def. of Wildlife v. Jackson*, 791 F. Supp. 2d 96, 100 (D.D.C. 2011) (quoting 16 U.S.C. § 1536(a)(2)).

65. In addition to procedural duties, an action agency has an independent substantive duty under ESA Sections 7(a)(2) and 7(a)(4) to ensure that its action will not cause jeopardy or adverse modification. *Fla. Key Deer v. Paulison*, 522 F.3d 1133, 1138 (11th Cir. 2008).

#### **Administrative Procedure Act**

66. The Administrative Procedure Act (“APA”) grants a right of judicial review to “[a] person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action.” 5 U.S.C. § 702.

67. Under the APA, a reviewing court “shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Id.* § 706(2)(A).

68. An agency’s action is arbitrary and capricious if the agency has “relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins.*, 463 U.S. 29, 43 (1983).

69. While the ESA provides for judicial review of federal agencies’ failure to consult, 16 U.S.C. § 1540(g), the APA governs the standard of judicial review, 5 U.S.C. §§ 701–706.

## **FACTUAL BACKGROUND**

### **Florida's Threatened Coral Species and Critical Habitat**

70. Florida's Coral Reef is a continental barrier reef system that stretches over 350 miles, extending from the Dry Tortugas Islands near the Florida Keys to the St. Lucie Inlet in Martin County. It is the only living nearshore barrier reef in the continental United States and the third largest barrier reef ecosystem in the world.

71. Florida reefs, including those near the Project area, are extremely valuable, providing storm protection, hardbottom habitat for fish and invertebrate species, and recreational use that results in billions of dollars in sales to South Florida each year. Most of Florida's sport fish species and many commercially and recreationally valuable marine animals spend significant parts of their lives in and around coral reefs.

72. Corals provide the foundation for Florida's reefs, including federally threatened staghorn coral and elkhorn coral. Most coral species live in colonies of individual "polyps" that are connected by living tissue. Corals secrete calcium carbonate skeletons that, in turn, form the structure of the coral colony. Together, coral colonies form reefs. As "ecosystem architects," corals provide habitat for all varieties of reef organisms, much like the trees in a forest.

73. Because corals are actually colonies of hundreds or thousands of individual polyps, corals can undergo "partial mortality," in which some of the colony dies off, but other parts of the colony persist.

74. Corals can reproduce sexually and asexually. Asexual reproduction occurs when a branch breaks off the original coral colony, lands on and attaches to suitable clean, hard substrate, and develops into a new colony. Coral sexual reproduction takes place by broadcast spawning or brooding. Broadcast spawning occurs during a short spawning season of only a few highly coordinated nights. The coral colonies across the reef shed gametes (sperm and eggs) into the water column at the same time. These gametes mix in the water column, fertilize, and become coral larvae. Coral larvae float as plankton before settling on exposed hardbottom, such as rock, and developing into polyps and colonies. In brooding corals, fertilization of the egg occurs internally, and the larvae are released into the water column once they are fully developed. Coral larvae cannot settle and thrive on sandy surfaces. Many corals cannot self-fertilize, meaning that colonies with different genetic material must be present for sexual reproduction to occur.



75. Sexual maturity in corals is determined when corals reach a certain size, not by their age. Therefore, if a coral breaks or undergoes partial mortality, it may no longer be large enough to undergo sexual reproduction.

76. There are currently seven listed coral species that inhabit or have critical habitat in or around the Project area: elkhorn (*Acropora palmata*), staghorn (*Acropora cervicornis*), mountainous star (*Orbicella faveolata*), boulder star (*Orbicella franksi*), rough cactus (*Mycetophyllia ferox*), pillar (*Dendrogyra cylindrus*), and lobed star coral (*Orbicella annularis*).

77. Elkhorn and staghorn corals are stony corals that were once the major reef builders in Florida. They are so named because their branchlike projections resemble the antlers of an elk or deer. The unique branching structures of these corals form complex reef habitat that provides important shelter for reef-dependent animals like fish, lobsters and other invertebrates, and sea turtles, and fosters greater diversity of life than other coral species.

78. NMFS listed elkhorn and staghorn corals as threatened species under the ESA in 2006, in response to a petition by plaintiff Center for Biological Diversity, 71 Fed. Reg. 26852 (May 9, 2006), and designated critical habitat for them in 2008, 73 Fed. Reg. 72210 (Nov. 26, 2008). After marine heatwaves decimated elkhorn and staghorn populations across Florida in 2023, some of the last remaining thickets of staghorn corals within the state are located in Broward County near Port Everglades.

79. NMFS listed five additional coral species—pillar coral, rough cactus coral, lobed star coral, mountainous star coral, and boulder star coral—as threatened in 2014, 79 Fed. Reg. 53852 (Sept. 10, 2014), and designated critical habitat for these species in 2023, 88 Fed. Reg. 54026 (Aug. 9, 2023).

80. The major threats to listed coral include ocean warming, disease, ocean acidification, trophic effects of reef fishing, nutrient enrichment, and sedimentation. Some of these stressors act synergistically, meaning that the combined effect of those stressors is greater than the sum of the individual effects.

81. In addition, because these listed corals are scarce and sparsely distributed, the chances of these corals being able to sexually reproduce are diminished as populations decline. Further decreases in coral populations and density could prevent sexual reproduction from replenishing the population, which would impede the chances for the recovery of the species. As



a result, NMFS determined that the “key conservation objective” for coral critical habitat is to facilitate successful reproduction.

82. Coral reproduction requires clean, hard, consolidated surface for their larvae to settle and grow. A key feature of critical habitat for these species is thus exposed hardbottom, or substrate, in shallow waters (less than 30 meters deep) that supports successful larval settlement, recruitment, and reattachment of broken-off branches or fragments.

83. NMFS specifically found that activities likely to harm or kill listed corals include “disrupting or preventing the reproduction, settlement, reattachment, development, or normal physiology of listed corals. Such disturbances could include . . . dredging, and disposal activities that result in direct deposition of sediment on corals, shading, or covering of substrate for fragment reattachment or larval settlement.” 77 Fed. Reg. 73220, 73256 (Mar. 7, 2013).

84. Dredging harms corals by directly crushing them and by depositing sediment that can smother them. Short of smothering, even low levels of sediment can harm corals by spreading disease, blocking light, and impeding reproduction and larval settlement. Adult corals can attempt to clean themselves of sediment, but this takes a great deal of energy which can result in exhaustion, stress, and increased susceptibility to bleaching and disease. Energy diverted to cleaning can also inhibit growth and reproduction.

### **Florida’s Threatened Queen Conch Population**

85. The queen conch is an herbivorous marine snail known for its large, spiral-shaped shell with a striking pink interior. The iconic Florida species moves by hopping and retracts its soft body into its shell to avoid predators.

86. NMFS listed the queen conch as threatened under the ESA on February 14, 2024. 89 Fed. Reg. 11208 (Feb. 14, 2024).

87. The queen conch faces multiple threats, including adverse effects from historic overfishing and overutilization, ocean warming and acidification, pollution, habitat degradation, and sedimentation.

88. One of the largest contributors to queen conch mortalities from human activity is sedimentation. Even low levels of sedimentation can harm queen conch and their habitat. It is particularly harmful to embryos and larvae. As little as 0.1 mm of sediment can cause conchs in these early life stages to die. Sediment-related effects also impede reproduction, smother the

primary food sources for juveniles and adult conchs, resuspend harmful contaminants, and compromise conchs' vision and ability to breathe through their gills.

89. Queen conch form aggregations that are vital to their reproduction and thus to the species' recovery. These aggregations typically occur in the same location year-to-year. Only two reproductively active conch shallow-water aggregations have been identified in Florida. One of these aggregations occurs in the Port Everglades area, directly south of the Project.

90. The Port Everglades aggregation is estimated to have between 8,000 and 40,000 individual queen conchs with an average density of 173 to 700 conchs per hectare. This aggregation likely plays an important role in sustaining Florida's nearshore queen conch populations and recovering the populations in the Florida Keys and the Bahamas.

91. As is the case for coral reproduction, successful queen conch reproduction is density-dependent, meaning a certain number of conchs must be present in the same place at the same time for the population to successfully reproduce. Scientists estimate that successful queen conch reproduction in Florida requires approximately 100 to 200 conchs per hectare, depending on the location.

### **The Port Everglades Inlet Sand Bypass Project**

92. In 2020, the Corps issued a Clean Water Act Section 404 permit to Broward County, Florida, for the Project, authorizing the County to construct and modify infrastructure in and near the Port Everglades Inlet to facilitate the collection, temporary storage, and transfer of sand along nearby beaches.

93. The permit also authorizes the County to perform regular maintenance dredging every two to four years for ten years after construction is complete to derive beach-compatible sand for beaches south of the Port Everglades inlet. Non-beach-compatible sediments dredged from the rubble shoal removal area and from initial construction of the sand trap will be disposed of in a waste disposal site called the Port Everglades Ocean Dredged Material Disposal Site.

94. The Project area overlaps with designated critical habitat of seven threatened coral species, including staghorn coral and elkhorn coral.

95. Initial Project construction includes the sand trap and rubble removal areas, north jetty, boulder barrier, beach placement areas both north and south, the waste disposal site, the location of the submerged pipeline trench for sand placement, and vessel transit routes.

96. The initial dredging of the sand trap began in October 2025 and paused on July 13, 2026, for coral spawning. Per the terms of the 2020 Biological Opinion, dredging can recommence eight days after staghorn spawning, which this year occurs in September.

**The 2020 Biological Opinion: Effects on staghorn, elkhorn, and lobed corals and staghorn and elkhorn critical habitat**

97. Recognizing that its authorization of the Project could adversely affect listed species and critical habitat, the Corps engaged in ESA Section 7 consultation with NMFS. The consultation concluded with a biological opinion dated March 3, 2020 (2020 Biological Opinion), which evaluates impacts to lobed star coral and staghorn coral, as well as staghorn and elkhorn critical habitat.

98. With respect to staghorn coral, the 2020 Biological Opinion concludes that the sedimentation impacts could be lethal to 125 colonies and require relocation of 660 colonies and collection of fragments from 785 colonies. NMFS concluded that 99 colonies would not survive relocation. NMFE then concluded that these impacts were not likely to jeopardize the species' continued existence.

99. With respect to lobed star coral, NMFS determines that the Project would take one lobed star colony through relocation. It concluded that this level of take was not likely to jeopardize the species' continued existence.

100. The 2020 Biological Opinion determines that the remaining listed coral species (elkhorn, mountainous star, rough cactus, boulder star, and pillar coral) are not present within the action area and therefore the Project would not adversely affect them.

101. The 2020 Biological Opinion includes an ITS allowing lethal take of 224 staghorn coral colonies (125 from sediment impacts and 99 from relocation). The ITS also authorizes the nonlethal take of an additional 561 staghorn coral and one nonlethal take of lobed star coral for relocation purposes. The Incidental Take Statement requires reasonable and prudent measures to minimize the impacts on staghorn coral and included nondiscretionary terms and conditions that require the Corps to fulfill ongoing monitoring and reporting requirements.

102. The "action area," as pictured in Figure 1 below, is located in the Atlantic Ocean off the coast of Broward County, Florida, adjacent to the north side of the Port Everglades inlet entrance channel. The area considered the "initial construction phase" encompasses the area to be used for the sand trap, rubble removal areas, north jetty, boulder barrier, submerged pipeline, the Ocean Dredged Material Disposal Site, and beach placements areas to the north and south.

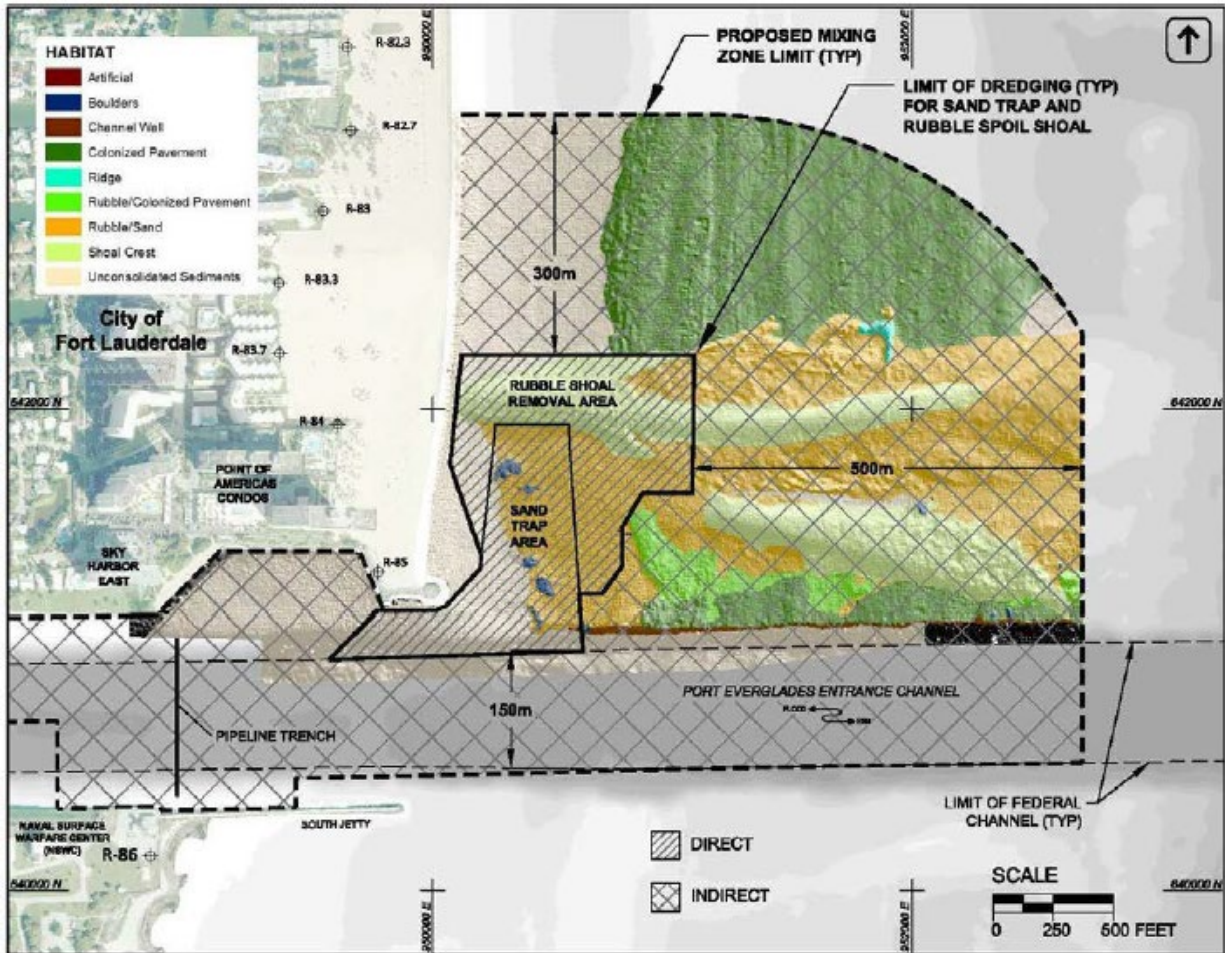


Figure 1: Image showing location of Project components, and the spatial extent of the Project's predicted effects.

103. The action area also includes additional locations for two artificial reef construction sites, two natural hardbottom coral relocation sites, and one or two receiver sites for queen conch north of Port Everglades.

104. NMFS determined that the Project would directly impact some areas and indirectly impact others. NMFS based its no-jeopardy and no adverse modification determinations in the 2020 Biological Opinion on the assumption that sediment and turbidity impacts from the Project would not reach beyond the "indirect impact area," which extends 500 m to the east, 300 m to the north, 150 m to the south, and 1,000 m to the west from the "direct impact area," where construction activities occur (collectively, "predicted area of impact").

105. The 2020 Biological Opinion concludes the Project would result in the permanent loss of up to 23.6 acres of elkhorn and staghorn critical habitat.

106. However, NMFS assumed that one aspect of the Project—removing rubble from a certain area—would mitigate for some of this loss by re-exposing 7.31 acres of hard-bottom habitat, making it suitable for coral reproduction and growth. NMFS therefore subtracted 7.31 acres from its estimate of the amount of critical habitat the Project would destroy, determining the Project would result in the net loss of up to 16.16 acres of critical habitat.

107. Contrary to NMFS’s assumption, information before NMFS at the time of its decision showed that this area of hard-bottom critical habitat would not remain re-exposed for long. Most immediately, the rubble removal area where the 7.31 acres of hard-bottom critical habitat is expected to be re-exposed is located adjacent to the sand trap and within the zone expected to experience sedimentation during Project construction.

108. This proposed mitigation area is also likely to experience sedimentation from maintenance dredging every two to four years because it is also located in the area expected to receive sediment deposition from those operations.

109. The proposed 7.31 acres of mitigatory critical habitat is also likely to be destroyed or adversely modified by the planned Port Everglades Harbor Expansion Project, which the Corps’ own modeling shows will dump up to 5 cm of sediment within the area.

110. If sediment deposition occurs within the rubble removal area, it is unlikely that the newly exposed hardbottom will achieve the key conservation objective of coral critical habitat—which is to foster coral reproduction.

111. Yet NMFS’ conclusion that the Project would not cause destruction or adverse modification of coral critical habitat in the 2020 Biological Opinion relies on the re-exposure of the rubble removal area as mitigation to offset the Project’s damage to critical habitat elsewhere in the Project area, and the assumption that maintenance dredging will cause only temporary and insignificant impacts to coral critical habitat.

112. Furthermore, in reaching its determination that the Project would not destroy or adversely modify critical habitat for elkhorn and staghorn coral, the 2020 Biological Opinion relies on regulations that have since been invalidated and set aside by a federal court for violating the ESA. *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, No. 24-CV-04651-JST, 2026 WL 898264 (N.D. Cal. Mar. 30, 2026).

113. First, NMFS relied on an invalid regulatory definition of “effects of the action” as “all consequences to listed species or critical habitat that are caused by the proposed action,



including the consequences of other activities that are caused by the proposed action” and provided that “[a] consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur.” The requirement of “reasonable certainty” set forth in this definition excludes from consideration available scientific information about effects that NMFS has deemed too “uncertain,” which is contrary to the ESA’s mandate to base consultation on the “best scientific and commercial data available” and to ensure jeopardy and adverse modification are not “likely.” *See id.* at \*15.

114. NMFS explicitly used this definition of “effects of the action” when analyzing impacts from the Project. For example, when analyzing the effects of the action on listed coral NMFS identified and evaluated only the range of sedimentation impacts that it believed “were reasonably certain to occur.” Similarly, when analyzing impacts to elkhorn and staghorn coral critical habitat, NMFS limited its analysis only to “the identified range of sedimentation that is reasonably certain to occur.”

115. NMFS also relied on an invalid regulatory definition of “destruction or adverse modification” that requires “a direct or indirect alteration that appreciably diminishes the value of critical habitat *as a whole* for the conservation of a listed species.” This definition incorrectly raised the bar for determining whether the Project would result in destruction or adverse modification of the corals’ critical habitat, contradicting the ESA’s mandate to ensure against destruction and adverse modification. *See id.* at \*17–18.

#### **2025 Biological Opinion: Effects on critical habitat for five additional coral species**

116. On August 9, 2023, NMFS designated critical habitat for five additional federally threatened corals, including boulder star coral, lobed star coral, mountainous star coral, pillar coral, and rough cactus coral. 88 Fed. Reg. 54026 (Aug. 9, 2023).

117. In 2024, the Corps requested reinitiation of consultation with NMFS to address the Project’s effects on the newly designated critical habitat, as well as queen conch and proposed critical habitat for the green sea turtle.

118. NMFS issued a new biological opinion on August 8, 2025 (“2025 Biological Opinion”), which supplemented the original 2020 Biological Opinion. In the 2025 Biological Opinion, NMFS again relied on the predicted area of impact defined above.

119. In the 2025 Biological Opinion, NMFS determined that sedimentation from the Project will permanently destroy up to 6.03 acres of critical habitat for listed corals. Specifically,

NMFS determined that receiving 5 mm or more of sediment constituted destruction of critical habitat and estimated that the Project would deposit at least 5 mm of sediment on as many as 6.03 acres of critical habitat.

120. NMFS determined that the Project would result in 1.5 mm of sediment being deposited on an additional 10.13 acres of critical habitat but asserted that this level of sedimentation constituted a temporary and insignificant impact.

121. NMFS assumed that the remaining critical habitat would not experience sediment accumulation.

122. Based on these assumptions, NMFS concluded that the Project's impacts were not likely to destroy or adversely modify the critical habitat of lobed star, mountainous star, boulder star, pillar, and rough cactus coral.

123. The 2025 Biological Opinion also relies on the same assumptions underlying the 2020 Biological Opinion. Namely, that 7.31 acres of hard-bottom critical habitat would be made available in the Project area through rubble removal to offset critical habitat losses elsewhere and that maintenance dredging of the sand trap would cause only temporary and insignificant impacts.

124. The 2025 Biological Opinion also relies on invalidated regulatory definitions of "effects of the action" and "destruction or adverse modification" of critical habitat to reach its no-jeopardy and no adverse modification findings.

#### **The 2025 Biological Opinion: Effects on Queen Conch**

125. In the 2025 Biological Opinion, NMFS concluded the Project would result in take of 1,630 queen conch (killing up to 457 of them) but concluded it was not likely to jeopardize the continued existence of queen conch.

126. In the opinion, NMFS recognized the adverse impact of sediment on developing conch embryos, hatching veliger larvae, and metamorphic post-settlement larvae, stating conch at these stages are intolerant of fine sediment and "[t]hese early life stages may experience severe mortality in sediment accumulation as little as 0.1 mm."

127. Yet NMFS did not analyze how the Project and its sediment impacts would impact conch eggs and larvae, and how the loss of these early life stages will affect the species' survival and recovery.



128. NMFS also assumed that divers would be able to successfully find and relocate every conch within the Project area, even though post-larvae conch can be as small as one millimeter and therefore easy to overlook. NMFS also failed to consider mortality of conchs that migrate into the area between maintenance dredging events, fall into the sand trap, and die. The 2025 Biological Opinion's jeopardy analysis therefore underestimates the Project's impacts on conch.

129. The 2025 Biological Opinion notes that conch density is the "single most important factor in determining conch reproductive success," and "best available data indicate the density of large adults is still too low and/or compromised (i.e. nonreproductive adults in nearshore areas) to restore healthy populations across the three distribution zones in South Florida: nearshore, back reef, and deepwater."

130. The 2025 Biological Opinion also recognizes that the Port Everglades population plays a major role in sustaining nearshore Florida populations and likely contributes significantly to the recovery of conch populations throughout Florida and beyond.

131. Despite NMFS's own scientific findings that the Port Everglades population is important to the species' survival and recovery—and that its ability to reproduce will be significantly impaired by the Project—NMFS concluded that the Project would not appreciably reduce the queen conch's survival and recovery.

#### **Subsequent Modification of the Project and New Information About Listed Corals**

132. On April 17, 2026, NMFS sent the Corps a letter recommending the Corps evaluate the need to reinitiate consultation. The letter states that two of the regulatory triggers requiring reinitiation under the ESA had been met. Specifically, the letter states:

[T]he project appears to have been subsequently modified in a manner that causes effects to listed species and critical habitat that was not considered in the previous Opinions. The 2025 Opinion is based on no overflow of loading scows during dredging operations, a construction practice affirmed by the permittee on two occasions. However, overflow is clearly occurring.

133. The letter also states, "sedimentation from the Sand Bypass project may be affecting acroporid corals in a manner or to an extent that was not previously considered by NMFS in either the 2020 Opinion or the 2025 Opinion."

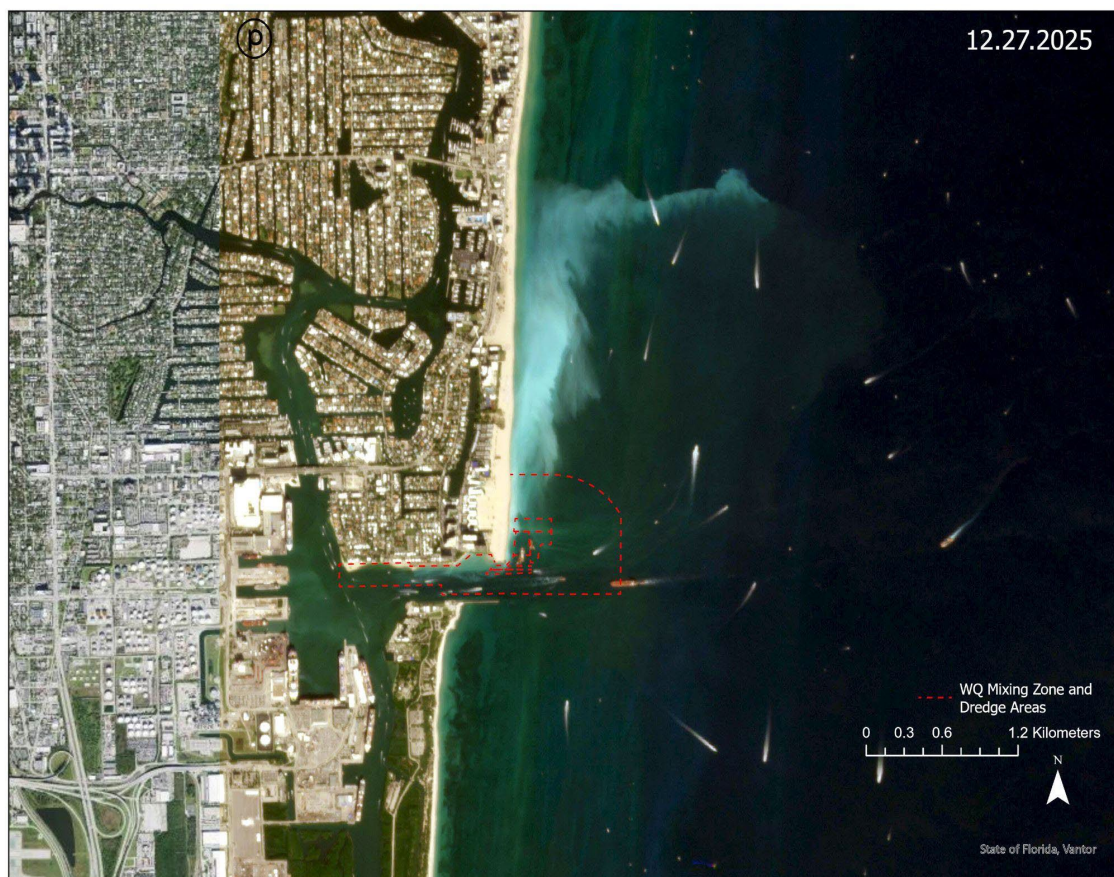
134. Available evidence supports NMFS's conclusion that these reinitiation triggers have been met. The 2025 Biological Opinion prohibits sediment overflow, stating "[n]on-beach-

compatible sediments dredged from the rubble shoal removal area and from the initial excavation of the sand trap will be loaded into scows, transported from the dredge location along the shipping channel past the reefs, and placed in the Port Everglades [disposal site] . . . The permittee confirmed . . . *that there will be no overflow of loading scows during dredging operations.*”

135. Despite this commitment, overflow occurred during Project construction.

136. In addition, new satellite imagery shows that sediment plumes from the Project far exceed the area of impact defined in the opinions. The image below (Figure 2) is one such example, where a sediment plume from the Project is traveling thousands of meters farther north than the predicted area of impact (depicted in red).

137. Based on Plaintiffs’ review of all available satellite images, sediment exceeded the area of impact defined in the biological opinions at least 17 times. This is likely an underestimate of the total exceedances because satellite images are not available for every day on which dredging occurred, and dredging also occurred on cloudy days and at night, when potential plumes are obscured.



*Figure 2. Satellite showing extent of sediment plume relative to the Sand Bypass Project initial construction mixing zone, taken on December 27, 2025 at 11:30 am ET. Imagery is derived from SuperDove true-color data. The visible northern edge of the plume extends approximately 2,000 meters from the northern edge of the mixing zone.*

138. New data from sediment monitoring also shows that the Project has caused sedimentation at higher levels and over a greater area than anticipated in the 2025 Biological Opinion. Specifically, the Florida Department of Environmental Protection (“FDEP”) investigated sediment accumulation at ten monitoring stations within the Project area on March 24–25, 2026. FDEP found “likely dredging-related sedimentation in the form of very thin to thin layers of mud” at four stations. Three of these stations were within an area the 2025 Biological Opinion assumed would receive no sedimentation. At two of these stations, FDEP observed corals exhibiting signs of sediment-related stress.

139. Apart from the new information that has come to light showing harm from the Project is extending far beyond NMFS’s anticipated area of impact, new information has also emerged about the declining status of listed corals and importance of the coral colonies inhabiting the Project area.

140. New evidence shows that the 2023 marine heatwave caused a widespread mortality event for staghorn and elkhorn corals. As a result, the distribution and abundance of these species are now much smaller than what NMFS assumed in the 2020 Biological Opinion.

141. In October 2025, scientists published a study in *Science* finding that the 2023 marine heatwaves and the resulting mortality event had rendered staghorn and elkhorn corals functionally extinct in Florida. The study determines that the 2023 heatwave has extirpated staghorn and elkhorn from most of Florida, with both species experiencing 97.8–100% mortality rates in the Florida Keys and the Dry Tortugas. The authors stopped short of calling the mortality event a regional extinction, due to possible survivors and their resilience potential.

142. A second study identifies those survivors. Cuning et al. (2025) used multiple surveys to document and estimate coral cover on the reef around Port Everglades, and found that the “[l]ocal densities of naturally-occurring ESA-listed staghorn corals (*Acropora cervicornis*) may be higher than anywhere else in Florida, representing some of the last survivors following widespread mortality during the 2023 heatwave,” and emphasizing their importance for coral recruitment, survivorship, and growth.

143. New science published since the issuance of the 2020 Biological Opinion (which is the only opinion that examines jeopardy to listed corals) also demonstrates a growing link between dredging projects, dredged sediment, and coral disease. Studiven et al. (2022), for example, found sediment can directly transmit Stony Coral Tissue Loss Disease (“SCTLD”), meaning it can act as a vector and potential reservoir for disease. The study concludes that sediment likely played a critical role in the rapid spread of SCTLD along Florida’s Coral Reef in 2014 and in its years-long persistence.

144. Another study, Dobbellaere et al. (2024), investigates various transmission scenarios for the outbreak of SCTLD in 2014 and determines that dredging operations at Port Miami “might be responsible for the onset of the epidemics.” Finally, a third study, Serrano et al. (2024), finds that the “[Port Miami] sediments had different microbiome profiles and significantly higher abundances of potentially pathogenic bacteria compared to Reef sediments,” again suggesting that dredged sediment likely played a role in the spread of disease.

### **The Corps Has Failed to Reinitiate Consultation**

145. On May 28, 2026, Plaintiffs mailed their notice of intent to sue for the claims at issue in this case to Federal Defendants, and sent hard copies of the notice to each Federal

Defendant. The 39-page letter included detailed explanations and photographs documenting the information giving rise to the need for reinitiation. The letter also detailed the reasons that the 2020 and 2025 Biological Opinions' original conclusions underestimated the Project's effects and relied on unlawful regulatory definitions.

146. On May 27, 2026, the Corps sent an email to Plaintiffs stating that the Corps "is planning to respond to your 60-day Notice of Intent to regarding the Port Everglades Sand Bypass in short order. We recently received some new information that will inform our response, and we are engaging in some additional coordination." As of the date of this filing, Plaintiffs have not heard anything further from either the Corps or NMFS.

147. As of the date of this complaint, the Corps has not reinitiated Section 7(a)(2) consultation with NMFS for the Project in response to the well-documented new information about the extent of the harm from the Project and the declining status of the affected species.

148. The Corps and NMFS continue to rely only on the 2020 and 2025 Biological Opinions, including but not limited to the opinions' analyses, conclusions, determinations, reasonable and prudent measures, and incidental take statements to authorize the Project's continued operation.

## **PLAINTIFFS' CLAIMS FOR RELIEF**

### **First Claim for Relief**

#### ***Violation of ESA Section 7 – Corps' Failure to Reinitiate Consultation Based on Subsequent Modification of the Project***

149. Plaintiffs re-allege and incorporate by reference all the allegations set forth in this Complaint as though fully set forth below.

150. ESA Section 7(a)(2) and ESA implementing regulations require the Corps to reinitiate formal consultation when it retains discretionary involvement or control over an action subject to an existing biological opinion and "the identified action is subsequently modified in a manner that causes an effect to the listed species that was not considered in the biological opinion." 50 C.F.R. § 402.16(a)(3).

151. The Corps formally consulted with NMFS regarding its decision to issue a Clean Water Act Section 404 permit for the Sand Bypass Project, which constitutes "agency action" subject to the consultation requirement in Section 7(a)(2) of the ESA. 16 U.S.C. § 1536(a)(2); 50 C.F.R. §§ 402.02, 402.03.



152. The Corps retains ongoing discretionary control and involvement over the Project, including but not limited to enforcing conditions of the permit and ensuring compliance with its obligation to conduct ongoing monitoring and reporting pursuant to the ITS terms and conditions.

153. The action has been subsequently modified in a manner that causes an effect to the listed species that was not considered in the biological opinion because the Permittee failed to adhere to a conservation commitment in the 2025 Biological Opinion, which states “there will be no overflow of loading scows during dredging operations.” However, overflow has occurred during dredging operations.

154. The overflow occurring from the Project is a subsequent modification that causes sedimentation-related effects that were not considered in the 2020 and 2025 Biological Opinions and are likely to adversely affect threatened coral and queen conch as well as designated critical habitat for multiple listed coral species.

155. As of the date of this Complaint, the Corps has not reinitiated consultation with NMFS for the Project and continues to rely on the 2020 and 2025 Biological Opinions to authorize the Project’s continued operation.

156. The Corps’ failure to reinitiate consultation with NMFS despite the Project’s subsequent modification violates ESA Section 7(a)(2) and 50 C.F.R. § 402.16(a)(3) and is arbitrary and capricious, in violation of 5 U.S.C. § 706(2)(A).

157. These actions and inactions have harmed Plaintiffs and Plaintiffs have no adequate remedy at law.

### **Second Claim for Relief**

#### ***Violation of ESA Section 7 – Corps’ Failure to Reinitiate Consultation Despite New Information Revealing Effects of the Action That May Affect Listed Species or Critical Habitat***

158. Plaintiffs re-allege and incorporate by reference all the allegations set forth in this Complaint as though fully set forth below.

159. ESA Section 7(a)(2) and ESA implementing regulations require the Corps to reinitiate formal consultation when it retains discretionary involvement or control over an action subject to an existing biological opinion and “new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered.” 50 C.F.R. § 402.16(2).

160. The Corps formally consulted with NMFS regarding its decision to issue a Clean Water Act Section 404 permit for the Sand Bypass Project, which constitutes “agency action” subject to the consultation requirement in Section 7(a)(2) of the ESA. 16 U.S.C. § 1536(a)(2); 50 C.F.R. §§ 402.02, 402.03.

161. The Corps retains ongoing discretionary control and involvement over the Project including but not limited to enforcing conditions of the permit and ensuring compliance with its obligation to conduct ongoing monitoring and reporting pursuant to the ITS terms and conditions.

162. Both the 2020 and 2025 Biological Opinions assume that sediment and turbidity impacts from the initial construction phase will stay within a defined area of impact that extended up to 500 m to the east, 300 m to the north, 150 m to the south, and 1,000 m to the west from the proposed activities.

163. The 2025 Biological Opinion’s analysis assumes that most of the critical habitat within the Project area will receive up to 1.5 mm or no sediment accumulation at all.

164. Since completion of the 2025 Biological Opinion, new information has revealed the effects of the action, particularly sediment-related impacts, may affect listed species or critical habitat in a manner or to an extent not previously considered. This new information includes, but is not limited to, the following:

- a. NMFS’s April 17, 2026, letter notifying the Corps that overflow is occurring during the initial project phase and sediment plumes are traveling outside the area of predicted impact toward staghorn coral colonies.
- b. Satellite imagery demonstrating sediment impacts have traveled beyond the predicated area of impact.
- c. A site inspection report from FDEP indicating dredged sediment is accumulating in areas the 2025 opinion assumed would receive no sediment.

165. Since completion of the 2020 Biological Opinion, new information shows that the Project may be having a greater impact on staghorn and elkhorn coral than NMFS previously considered because these species are now much less abundant and widespread than NMFS assumed in the 2020 Biological Opinion. This new information includes:



- a. New science demonstrating that the 2023 marine heatwaves caused significant damage to Florida's Coral Reef, caused the functional extinction of elkhorn and staghorn coral in large portions of Florida's Coral Reef, and the species' recovery now depends on surviving coral colonies that remain in and near the Project area.
- b. New science demonstrating that some of the only known staghorn coral survivors of the 2023 heatwaves are living and reproducing in the reefs around Port Everglades, near the Project site.

166. Finally, new science published since the issuance of the 2020 Biological Opinion demonstrates that sediment can serve as a vector or reservoir of disease, capable of transferring pathogens from one coral to another. This new science also shows that the 2014 SCTLD outbreak that decimated corals in Florida and the Caribbean may have been instigated or exacerbated by large-scale dredging at Port Miami. According to these studies, sediment-induced coral disease and dredging are likely linked, again suggesting the Project may be affecting listed coral in a manner or to an extent not previously considered.

167. The Corps' failure to reinitiate consultation with NMFS despite the information cited in paragraphs 132–144 and 164–166 constitutes a violation of ESA Section 7(a)(2) and 50 C.F.R. § 402.16(a)(2) and is arbitrary and capricious, in violation of 5 U.S.C. § 706(2)(A).

168. These actions and inactions have harmed Plaintiffs and Plaintiffs have no adequate remedy at law.

### **Third Claim for Relief**

#### ***Violations of the APA and ESA – NMFS' Biological Opinions are Arbitrary and Capricious and Contrary to the ESA***

169. Plaintiffs re-allege and incorporate by reference all the allegations set forth in this Complaint as though fully set forth below.

170. The APA prohibits agency action that is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A).

171. ESA Section 7 mandates formal consultation as a means to ensure that “any action authorized, funded, or carried out by the agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species.” 16 U.S.C. § 1536(a)(2).

172. Consultations must be based upon “the best scientific . . . data available.” *Id.*

173. Where a biological opinion incorporates mitigation measures to satisfy a no jeopardy or no adverse modification, those mitigation measures “must be reasonably specific, certain to occur and subject to deadlines or other forcible obligations.” *Fla. Key Deer v. Brown*, 364 F. Supp. 2d 1345, 1355 (S.D. Fla. 2005), *aff’d sub nom. Fla. Key Deer v. Paulison*, 522 F.3d 1133 (11th Cir. 2008); *Ctr. for Biological Diversity, v. U.S. Dep’t of Interior*, No. 24-cv-04651-JST, 2026 WL 898264, at \*16 (N.D. Cal. Mar. 30, 2026) (vacating 2019 regulations that allowed agency conclusions to rely on nonbinding mitigation measures as inconsistent with ESA’s requirement to ensure against jeopardy and adverse modification). The benefits of those mitigation measures must also be “reasonably certain to occur.” *Ctr. for Biological Diversity v. Haaland*, 87 F.4th 980, 987 (9th Cir. 2023).

174. NMFS’ conclusions in the 2020 and 2025 Biological Opinions that the Project would not jeopardize the continued existence of queen conch or destroy or adversely modify critical habitat for listed corals conflict with information before the agency, in violation of the APA, and are not based on best available science, in violation of the ESA. For example,

- a. The 2025 Biological Opinion’s no-jeopardy determination for the queen conch failed to account for all the ways the Project can kill and harm conch, especially conch in their early life histories, despite evidence that these conch are particularly sensitive to sediment exposure.
- b. The 2025 Biological Opinion’s fails to rationally explain its no jeopardy conclusion in light of the best available science and the agency’s own findings that the Port Everglades aggregation plays a major role in the species recovery and that the Project will significantly diminish the aggregation’s reproductive capacity.
- c. The adverse modification determinations for all designated coral critical habitat are premised on the assumption that the Project will restore hard substrate in 7.31 acres of critical habitat in the rubble removal area, but do not account for the fact that this area will likely experience repeated, significant sediment exposure that renders the benefits of this touted mitigation measure unlikely to occur.

175. The 2020 and 2025 Biological Opinions are therefore arbitrary, capricious, and contrary to law in that they fail to consider relevant factors, fail to draw rational connection

between the facts found and conclusions made, fail to use the best available science, and rely on mitigation measures that are unlikely to tangibly benefit listed species or habitat in violation of the APA, 5 U.S.C. § 706(2)(A) and the ESA, 16 U.S.C. § 1536(a)(2).

176. These actions and inactions have harmed Plaintiffs and Plaintiffs have no adequate remedy at law.

#### **Fourth Claim for Relief**

##### ***Violations of the APA and ESA – NMFS’ Biological Opinions are Contrary to the ESA***

177. Plaintiffs re-allege and incorporate by reference all the allegations set forth in this Complaint as though fully set forth below.

178. The 2020 and 2025 Biological Opinions are arbitrary, capricious, and contrary to ESA and APA because they rely upon regulatory definitions for “effects of the action” and “destruction or adverse modification” that are contrary to the ESA’s statutory text and have been invalidated and vacated. *Ctr. for Biological Diversity*, 2026 WL 898264.

179. Relying on the invalidated definition of “destruction or adverse modification,” NMFS based its determinations that the Project was not likely to destroy or adversely modify critical habitat for seven species of coral on the notion that the Project would not destroy or adversely modify critical habitat *as a whole*. But the 2020 and 2025 Biological Opinions determined and otherwise show that there would be substantial destruction and adverse modification to critical habitat in the Project area. Moreover, NMFS failed to consider whether the areas of critical habitat the Project will affect have unique importance such that their destruction or adverse modification could impair the species’ ability to survive or recover.

180. Relying on the invalidated definition of “effects of the action,” NMFS only examined sediment impacts that were “reasonably certain to occur” which unlawfully omits consideration of impacts that are “likely” but not reasonably certain. This resulted in NMFS underestimating the number of corals and conchs the Project is likely to injure or kills and underestimating the area of critical habitat likely to be destroyed or adversely modified. Constraining the analyses in this way undermines the basis for NMFS’s no jeopardy and no adverse modification determinations.

181. These unlawful and invalidated regulatory definitions set a higher threshold for jeopardy and destruction or adverse modification determinations than the ESA allows, leading

NMFS to improperly dismiss the best available science and serious impacts to listed species and critical habitat.

182. NMFS application of its unlawful regulations renders the 2020 and 2025 Biological Opinions arbitrary, capricious, and contrary to the ESA.

183. These actions and inactions have harmed Plaintiffs and Plaintiffs have no adequate remedy at law.

#### **Fifth Claim for Relief**

#### ***Violation of ESA Section 7 – The Corps’ Continued Reliance on the 2020 and 2025 Biological Opinions Violates its Duty to Ensure Against Jeopardy and Adverse Modification Under ESA Section 7***

184. Plaintiffs re-allege and incorporate by reference all the allegations set forth in this Complaint as though fully set forth below.

185. The Corps has an independent duty to ensure that its actions avoid the likelihood of jeopardy to ESA-listed species or destruction or adverse modification of their critical habitat. 16 U.S.C. § 1536(a)(2); *Paulison*, 522 F.3d at 1138.

186. As explained above, the 2020 and the 2025 Biological Opinions for the Project are invalid because they are arbitrary, capricious, and unlawful.

187. In addition, new information about the Project’s real-world impacts undermines both opinions’ no-jeopardy and no-adverse-modification determinations, which were explicitly predicated on predicted impacts that were far less severe than the impacts that are actually occurring. New information also undermines the jeopardy determination for staghorn coral and the adverse modification determination for staghorn and elkhorn critical habitat, which were predicated on both species being more abundant and widespread than they currently are.

188. The Corps’ continued reliance on biological opinions that are facially invalid violates the agency’s duty to ensure against jeopardy of a listed species and destruction or adverse modification of designated critical habitat. The Corps has not developed any valid analysis or rationale of its own to establish that its actions comply with the requirements of ESA § 7(a)(2), nor has it evaluated, proposed, or implemented further protective measures for ESA-listed species beyond those included in the invalid 2020 and 2025 Biological Opinions in order to avoid jeopardy and destruction and adverse modification of critical habitat.

189. As of the date of this complaint, the Corps has not reinitiated formal consultation as required by ESA implementing regulation 50 C.F.R. § 402.16(a) and, instead, continues to

rely on the 2020 and 2025 Biological Opinions to satisfy its duties under the ESA to ensure against jeopardy to threatened corals and queen conch and destruction or adverse modification of critical habitat.

190. Notwithstanding the Corps' procedural ESA violations listed in paragraphs 145–168, the Corps' continued reliance on the 2020 and the 2025 Biological Opinions violates the agency's independent duty under Section 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2) because, as explained above, the opinions fail to ensure that the Corps' actions avoid the likelihood of jeopardy to ESA-listed species or destruction or adverse modification of designated critical habitat. Because the Corps has not obtained a valid, complete consultation, or taken any other appropriate steps to ensure that its action will not harm ESA-listed species, its continued authorization of the Project violates § 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2), and its implementing regulations and are reviewable under the ESA, 16 U.S.C. § 1540(g)(1), and the APA, 5 U.S.C. §§ 701–706.

191. These actions and inactions have harmed Plaintiffs and Plaintiffs have no adequate remedy at law.

### **REQUEST FOR RELIEF**

WHEREFORE, Plaintiffs respectfully request that this Court enter Judgement for Plaintiffs and provide the following relief:

1. Adjudge and declare that the Corps is in violation of Section 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2), by failing to reinitiate consultation necessary to ensure the Sand Bypass Project is not likely to jeopardize the continued existence of listed species or destroy or adversely modify their critical habitat;
2. Order Federal Defendants to reinitiate ESA Section 7 consultation on the Sand Bypass Project and complete a new legally valid biological opinion by a date certain;
3. Adjudge and declare that the 2020 Biological Opinion's "no jeopardy" conclusion for staghorn coral is arbitrary and capricious in violation of the ESA and the APA.
4. Adjudge and declare that the 2020 Biological Opinion's "no adverse modification" determination for staghorn and elkhorn coral critical habitat is arbitrary and capricious and contrary to law in violation of the ESA and the APA.

5. Adjudge and declare that the 2025 Biological Opinion's "no jeopardy" conclusion for the queen conch is arbitrary and capricious and contrary to law in violation of the ESA and the APA.

6. Adjudge and declare that the 2025 Biological Opinion's "no adverse modification" determination for pillar, rough cactus, mountainous star, boulder star, and lobed star coral critical habitat is arbitrary and capricious and contrary to law in violation of the ESA and the APA.

7. Vacate and set aside the 2020 and 2025 Biological Opinions;

8. Adjudge and declare that the Corps' reliance on the 2020 and 2025 Biological Opinions violates the ESA and APA.

9. Adjudge and declare that the Corps has violated ESA Section 7(a)(2) and its implementing regulations by continuing to authorize the Project without a valid biological opinion and by violating its independent duty to ensure that the Project avoids jeopardy of listed species and adverse modification of critical habitat, in violation of the requirements of ESA Section 7, 16 U.S.C. § 1536, and that its actions are arbitrary, capricious, an abuse of discretion, and not in accordance with law;

10. Order Federal Defendants to comply with the ESA in connection with any further action taken regarding the dredging and operation of the Sand Bypass Project.

11. Enjoin the Project and order that the Corps comply with all requirements of the ESA and APA including completing reinitiated consultation with the NMFS before continuing with any phase of the project to dredge;

12. Award the Plaintiffs their fees, costs, expenses, and disbursements, including reasonable attorneys' fees, associated with this litigation under the Equal Access to Justice Act, 28 U.S.C. § 2412 and the Endangered Species Act, 16 U.S.C. § 1540;

13. Grant Plaintiffs such preliminary and permanent injunctive relief as they may from time-to-time request and as may be necessary to protect the environment and ESA-listed species until the Court decides the merits of this case or the agency complies with the law; and

14. Grant such further and additional relief as this Court deems just and proper.



Respectfully submitted this 4th day of August, 2026.

/s/ Tania Galloni

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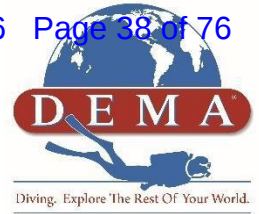
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*Via E-mail and Certified Mail*

May 28, 2026

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**Re: Notice of Intent to Sue for Violations of the Endangered Species Act Related to Port Everglades Sand Bypass Project**

Dear Sirs:

On behalf of Miami Waterkeeper, the Center for Biological Diversity, the Florida Wildlife Federation and the Diving Equipment and Marketing Association, this letter serves as a sixty-day notice of our intent to sue the United States Army Corps of Engineers (“Corps”) and the National Marine Fisheries Service (“NMFS”) for violations of the Endangered Species Act (“ESA”), 16 U.S.C. § 1531 *et seq.*, relating to the Port Everglades Inlet Sand Bypassing Project (“Project”) currently under construction. As described further below, the Corps has violated and is violating ESA Section 7 by failing to reinstate consultation after 1) the Project was subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the

biological opinion and 2) the Corps learned of new information revealing that the effects of the Project may affect listed species and critical habitat in a manner or to an extent not previously considered. Subsequent changes to the project design and new information render key assumptions in the biological opinions that NMFS used to determine no jeopardy and no adverse modification for coral and conch erroneous and invalid, and the Corps' continued reliance on these opinions, without reinitiation, violates ESA Section 7. In addition, even absent new information, the Corps' reliance on the 2020 and 2025 biological opinions violates ESA Section 7 because NMFS's analyses and conclusions in the opinions are arbitrary, irrational, and not based on the best available science. Finally, the Corps is violating ESA Section 9 because the Project is likely taking staghorn coral and the incidental take statement is invalid and cannot shield the Corps from liability.

The Project design described in the 2025 biological opinion includes a commitment to prohibit overflow—a construction practice that minimizes sediment impacts to the surrounding reef—but this commitment has been subsequently modified and overflow is clearly occurring. Because the Project was modified in a manner that causes an effect to listed species or critical habitat that was not considered in the biological opinion, reinitiation of consultation is required.

In addition, new evidence reveals that the effects of the Sand Bypass Project far exceed the predicted scope and degree of impact that was analyzed in the biological opinions for the Project.<sup>1</sup> Satellite imagery and sediment monitoring show that the Project has increased sedimentation across a larger area than predicted and that sediment accumulation is greater than predicted. This new information undermines the jeopardy and adverse modification determinations for coral and conch, which were predicated on lower levels of sedimentation.

New evidence also shows that the 2023 marine heatwaves caused a widespread mortality event for two threatened coral species, staghorn and elkhorn coral, such that the distribution and abundance of these species are now much smaller than what was assumed in the biological opinions. The same month that the Project commenced, a study was published in the journal *Science* that declared staghorn and elkhorn corals functionally extinct in Florida. Another recent study found that the Project area is home to some of the last naturally occurring populations of staghorn coral in Florida and therefore may be an important site for the recovery of the species following disease outbreaks and marine heatwaves. Together, these studies demonstrate that the conservation status of elkhorn and staghorn coral is much more dire than federal agencies considered during the ESA consultation, and the effects of the Project may therefore have greater

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<sup>1</sup> National Marine Fisheries Service, Biological Opinion for the Sand Bypass Construction and Beach Renourishment Project in Fort Lauderdale, Broward County (Aug. 28, 2025) [hereinafter 2025 Sand Bypass Project BiOp]; National Marine Fisheries Service, Biological Opinion for the Sand Bypass Construction and Beach Renourishment Project in Fort Lauderdale, Broward County (Mar. 3, 2020) [hereinafter 2020 Sand Bypass Project BiOp].

impact on the survival and recovery of these species than previously considered. Indeed, even seemingly small impacts could have outsized effects on species that are clinging to survival and have been extirpated in large parts of Florida's Coral Reef.

Recent studies also show that dredging likely played a significant role in the 2014 outbreak of Stony Coral Tissue Loss Disease (SCTLD) and that sediment is a likely vector of coral disease, but this information was not included or considered in the biological opinions.

Moreover, even setting aside this new information, the biological opinions concerning this Project are inaccurate and arbitrary, underestimating impacts to coral and conch, ignoring critical information, relying on a mitigation strategy to offset coral critical habitat loss that is unlikely to yield benefits to the listed coral species at issue, and relying on new regulations to conduct the requisite ESA analyses that have been invalidated as inconsistent with the ESA's statutory requirements.

Finally, the Corps is violating ESA Section 9 because the Project is likely taking staghorn coral colonies and the incidental take statement is invalid and cannot shield the Corps from liability.

## I. FACTUAL BACKGROUND

The National Marine Fisheries Service ("NMFS") listed *Acropora cervicornis* (staghorn coral) and *Acropora palmata* (elkhorn coral) as "threatened" under the ESA in 2006,<sup>2</sup> and designated critical habitat for these species in 2008.<sup>3</sup> NMFS also promulgated regulations prohibiting take of staghorn and elkhorn coral in 2008.<sup>4</sup> In an effort to further reverse the rapid loss of coral reefs, on September 10, 2014, NMFS added pillar coral (*Dendrogyra cylindrus*), rough cactus coral (*Mycetophyllia ferox*), lobed star coral (*Orbicella annularis*), mountainous star coral (*Orbicella faveolata*), and boulder star coral (*Orbicella franksi*) to the ESA list as "threatened."<sup>5</sup> In 2023, NMFS designated critical habitat for these remaining coral species.<sup>6</sup>

The area around Port Everglades is designated critical habitat for all of these listed corals and is home to some of the highest remaining densities of staghorn coral in Florida's Coral Reef.<sup>7</sup> In addition to listed coral, Port Everglades is also home to one of only two known breeding

<sup>2</sup> 71 Fed. Reg. 26852 (May 9, 2006).

<sup>3</sup> 73 Fed. Reg. 72210 (Nov. 26, 2008).

<sup>4</sup> 50 CFR 223.208(a).

<sup>5</sup> 79 Fed. Reg. 53852 (Sept. 10, 2014).

<sup>6</sup> 88 Fed. Reg. 54026 (Aug. 9, 2023).

<sup>7</sup> Ross Cuning et al., *Integrated Analysis of Coral Density and Community Structure Across Reef Habitats Near Port Everglades in Advance of Dredging Operations* 1, 19 (2025), [https://www.ncei.noaa.gov/data/oceans/coris/library/NOAA/CRCP/NMFS/SERO/Projects/31329/Serrano2025\\_Port\\_Everglades\\_CoralDensity\\_CommunityStructure\\_Analysis.pdf](https://www.ncei.noaa.gov/data/oceans/coris/library/NOAA/CRCP/NMFS/SERO/Projects/31329/Serrano2025_Port_Everglades_CoralDensity_CommunityStructure_Analysis.pdf).

aggregations of queen conch in the continental United States.<sup>8</sup> NMFS listed queen conch (*Aliger gigas*) as threatened under the ESA in 2024.<sup>9</sup>

Sedimentation from dredging and other underwater construction activities pose significant harm both to listed coral species and the threatened queen conch. For corals, these activities can directly destroy coral colonies during construction. In addition, dredging can indirectly harm corals and habitat by producing fine sedimentation, which can smother coral and coral habitat, shade access to light and food, interfere with reproduction, and contribute to and potentially spread disease.<sup>10</sup> Sedimentation also has severe effects on the queen conch. NMFS describes sedimentation as “one of the largest contributors to queen conch mortalities from anthropogenic activities.”<sup>11</sup> As little as 0.1 *millimeter* of sediment accumulation can negatively affect conch embryos and larvae.<sup>12</sup> Sediment can also compromise gill function and ruin foraging habitat for juveniles and adults of the species.<sup>13</sup>

On August 7, 2020, the Army Corps issued a permit to Broward County for the Sand Bypass Project, authorizing the County to “create and modify inlet infrastructure at Port Everglades to facilitate the collection, temporary storage, and transfer of sand to the beaches south of the inlet.”<sup>14</sup> The Project involves the construction of a 10.8-acre sediment impoundment basin (“sand trap”) north of the Port Everglades Inlet in Fort Lauderdale, FL. The purpose of the sand trap is to create a pit that will fill with beach-compatible sand that can be used to renourish nearby beaches. In addition to the construction of the sand trap, the Project includes the removal of a rubble spoil shoal and the excavation of boulders, periodic maintenance dredging and sand bypassing following construction, and disposal of dredged material from the construction site to a waste disposal site.<sup>15</sup> Broward County commenced the initial phase of dredging in October 2025; this initial phase of dredging is expected to continue until June 2026, with permission to occur twenty-four hours a day and seven days a week, notwithstanding inclement weather.<sup>16</sup> The

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<sup>8</sup> Letter from Andrew Strelcheck, Administrator for the Southeast Regional Office of the National Marine Fisheries Service, to Larry D. McCallister, Director of Programs for the United States Army Corps of Engineers, South Atlantic Division (May 22, 2024).

<sup>9</sup> 89 Fed. Reg. 11208 (Feb. 14, 2024).

<sup>10</sup> National Marine Fisheries Service, Biological Opinion for the Sand Bypass Construction and Beach Renourishment Project in Fort Lauderdale, Broward County (Mar. 9, 2020) at 31 [hereinafter 2020 Sand Bypass Project BiOp].

<sup>11</sup> 2025 Sand Bypass Project BiOp at 47.

<sup>12</sup> *Id.* at 47, 60, citing Doerr et al. *in prep.*

<sup>13</sup> *Id.* at 60.

<sup>14</sup> Department of the Army Permit, No. SAJ-2008-02034 (SP-SLR) (Aug. 7, 2020) at 1.

<sup>15</sup> 2025 Sand Bypass Project BiOp, Section 2.1.1 at 8-15.

<sup>16</sup> See Sand Bypass Project at Port Everglades Vimeo Presentation by Broward County (July 9, 2025), <https://vimeo.com/1101319629>; Also email communication between Miami Waterkeeper and Stephanie Roche, Beach Program Manager, on May 4, 2026, confirming dredging is expected to be complete by approximately February.

second phase of the dredging is expected to occur in October 2026 and continue until January or February 2027.<sup>17</sup>

Many of the Project components, including the construction of the sand trap, removal of the rubble shoal, maintenance dredging, and disposal of dredge material, produce sediment that can harm, kill, and otherwise take species listed under the ESA and adversely modify critical habitat. Recognizing these impacts, the Corps initiated formal consultation under the ESA on November 7, 2014, and NMFS completed a biological opinion assessing the Project's impacts in 2020.<sup>18</sup> The Corps requested reinitiation of consultation on September 4, 2024, to assess impacts on the newly listed queen conch as well as impact to newly designated critical habitat for five Caribbean coral species.<sup>19</sup> NMFS completed a biological opinion assessing impacts on this additional species and habitat in 2025.<sup>20</sup> The Project currently operates under two biological opinions: the 2020 biological opinion assessed the Project's impacts on staghorn, elkhorn, pillar, rough cactus, lobed star, mountainous star, and boulder star coral, as well as elkhorn and staghorn critical habitat (which was the only coral critical habitat designated at the time). Subsequently, NMFS designated critical habitat for the remaining listed coral species and listed the queen conch as threatened. The 2025 biological opinion assessed the Project's impacts on the newly designated critical habitat for pillar, rough cactus, lobed star, mountainous star, and boulder star coral as well as the Project's impacts on the threatened queen conch. The 2025 biological opinion did not amend or update any of the analyses or conclusions made in the 2020 biological opinion.

## II. THE ENDANGERED SPECIES ACT

Congress enacted the ESA to conserve endangered and threatened species and the ecosystems upon which they depend.<sup>21</sup> “The plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost.”<sup>22</sup> The ESA reflects “‘an explicit congressional decision to require agencies to afford first priority to the declared national policy of saving endangered species’ and ‘a conscious decision by Congress to give endangered species priority over the “primary missions” of federal agencies.’”<sup>23</sup>

For federal actions, the heart of the ESA is section 7(a)(2), which requires every agency to ensure, in consultation with the relevant federal wildlife agency—here, NMFS—that “any action authorized, funded, or carried out” by the agency is not likely to “jeopardize” a species that has

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<sup>17</sup> *Id.*

<sup>18</sup> 2020 Sand Bypass Project BiOp at 7.

<sup>19</sup> 2025 Sand Bypass Project BiOp at 8.

<sup>20</sup> *Id.*

<sup>21</sup> 16 U.S.C. § 1531(b).

<sup>22</sup> *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978).

<sup>23</sup> *Fla. Key Deer v. Stickney*, 864 F. Supp. 1222, 1226 (S.D. Fla. 1994) (quoting *Hill*).

been listed as threatened or endangered under the ESA.<sup>24</sup> Consultation requires the action agency (here the Corps) to prepare a biological assessment, which “evaluate[s] the potential effects of the action on listed and proposed species and designated and proposed critical habitat and determine[s] whether any such species or habitat are likely to be adversely affected by the action.”<sup>25</sup>

If the biological assessment indicates that the action is likely to adversely affect listed species or critical habitat,<sup>26</sup> NMFS must draft a biological opinion that determines whether the action is likely to jeopardize the continued existence of listed species or destroy or adversely modify critical habitat.<sup>27</sup>

In determining whether an action jeopardizes a species or adversely modifies critical habitat, the ESA requires NMFS to consider impacts to the species in the context of the species’ current status and the existing environmental baseline. Specifically, ESA regulations require NMFS to “[e]valuate the current status and environmental baseline of the listed species or critical habitat,” as well as “the effects of the action and cumulative effects on the listed species or critical habitat.”<sup>28</sup> “Effects of the action” includes “direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline.”<sup>29</sup> The environmental baseline includes “past and present impacts of all Federal, State, or private actions and other human activities in the action area” as well as “the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early Section 7 consultation.”<sup>30</sup> NMFS must then “[a]dd the effects of the action and cumulative effects to the environmental baseline and in light of the status of the species and critical habitat, formulate the Service’s opinion as to whether the action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.”<sup>31</sup> “Jeopardize the continued existence” means “to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.”<sup>32</sup> “Destruction or adverse modification” means “a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations

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<sup>24</sup> 16 U.S.C. § 1536(a)(2).

<sup>25</sup> 50 C.F.R. § 402.12(a).

<sup>26</sup> *Id.* § 402.14(a), (b)(1).

<sup>27</sup> 16 U.S.C. § 1536(a)(2), (c), (g); 50 C.F.R. § 402.14(h).

<sup>28</sup> 50 C.F.R. § 402.14(g)(2)–(3).

<sup>29</sup> *Id.* § 402.02 (2018). In March 2026, a federal district court vacated the definition of “agency action” set forth by the Trump administration in 2019 and reinstated the version of the regulation that existed before the 2019 revisions. *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, No. 24-cv-04651-JST, 2026 U.S. Dist. LEXIS 68386, at \*72 (N.D. Cal. Mar. 30, 2026).

<sup>30</sup> 50 C.F.R. § 402.02 (2025).

<sup>31</sup> *Id.* § 402.14(g)(4).

<sup>32</sup> *Id.* § 402.02.



may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.”<sup>33</sup>

If NMFS concludes that the proposed action is likely to jeopardize a listed species, it must propose reasonable and prudent alternatives (RPAs), if available, that will sufficiently mitigate the action to avoid jeopardy.<sup>34</sup> If NMFS relies on mitigation measures to find no jeopardy, those mitigation measures “must be reasonably specific, certain to occur and subject to deadlines or other forcible obligations.”<sup>35</sup> Moreover, the benefits of those mitigation measures to the species and habitat at issue must also be “‘reasonably certain’ to occur.”<sup>36</sup>

Section 9 of the ESA prohibits the “take” of any listed species,<sup>37</sup> which is defined in relevant part to mean “harass, harm, . . . wound, [or] kill.”<sup>38</sup> NMFS’s regulations further define “harm” as “significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering.”<sup>39</sup> Section 7 requires NMFS to determine whether the action will incidentally take listed species, and include an incidental take statement (“ITS”) if incidental take will occur.<sup>40</sup> “Incidental take refers to takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant.”<sup>41</sup> The ITS must specify the amount of incidental take and measures required to limit take.<sup>42</sup>

Throughout the process described above, NMFS and the Corps must “use the best scientific and commercial data available.”<sup>43</sup> And even after consultation is completed, both agencies’ duty to ensure no jeopardy continues where, as here, the action agency has retained discretionary involvement or control. In particular, the Corps “is required” to reinstate consultation in certain circumstances, including “[i]f new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered” or if the “action

<sup>33</sup> 50 C.F.R. § 402.02 (2018); see *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, 2026 U.S. Dist. LEXIS 68386 at \*72 (vacating the definition of “destruction or adverse modification” and reinstating the version in effect “before the problematic revisions were made in 2019”).

<sup>34</sup> 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. §§ 402.02, 402.14(h)(2).

<sup>35</sup> *Fla. Key Deer v. Brown*, 364 F. Supp. 2d 1345, 1355 (S.D. Fla. 2005), *aff’d sub nom. Fla. Key Deer v. Paulison*, 522 F.3d 1133 (11th Cir. 2008).

<sup>36</sup> *Ctr. for Biological Diversity v. Haaland*, 87 F.4th 980, 987 (9th Cir. 2023); see also *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, 2026 U.S. Dist. LEXIS 68386 at \*72 (invalidating a portion of the 2019 ESA regulations where they “d[id] not satisfy [the Services’] obligation to insure against harm to species or habitat by resting [their] conclusions on ‘plans’ that are merely proposed and non-binding.”).

<sup>37</sup> 16 U.S.C. § 1538(a)(1)(B).

<sup>38</sup> *Id.* § 1532(19).

<sup>39</sup> 50 C.F.R. § 222.102.

<sup>40</sup> 16 U.S.C. § 1536(b)(4).

<sup>41</sup> 50 C.F.R. § 402.02.

<sup>42</sup> *Id.* § 402.14(i)(1).

<sup>43</sup> 16 U.S.C. § 1536(a)(2).

is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion.”<sup>44</sup>

### III. ESA VIOLATIONS

The Corps is violating the ESA by failing to reinitiate consultation after the Project was subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the biological opinion. The Corps is also violating the ESA by failing to reinitiate consultation after learning of new information that reveals that the effects of the dredging may affect listed species and critical habitat in a manner or to an extent not previously considered. The subsequent change to the project design and the new information render key assumptions in the biological opinions that NMFS used to determine no jeopardy and no adverse modification for coral and conch erroneous and invalid, and the Corps continued reliance on these opinions, without reinitiation, violates ESA Section 7. In addition, even absent new information, the Corps’ reliance on the biological opinions violates ESA Section 7 because NMFS’s analyses and conclusions in the opinions are arbitrary, irrational, and not based on the best available science. The Corps is also violating ESA Section 9 because the Project is likely causing take of staghorn coral colonies and the incidental take statement is no longer valid nor shields the Corps from liability.

#### **A. The Corps is violating ESA Section 7 by failing to reinitiate consultation after the Project was subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the biological opinion.**

The 2025 biological opinion includes a commitment to prohibit overflow during Project construction as part of the Project design. Specifically, paragraph 9 of the Project details section states, “[n]on-beach-compatible sediments dredged from the rubble shoal removal area and from the initial excavation of the sand trap will be loaded into scows, transported from the dredge location along the shipping channel past the reefs, and placed in the Port Everglades [disposal site] ... [t]he permittee confirmed ... that there will be no overflow of loading scows during dredging operations.”<sup>45</sup> Overflow occurs when dredged material is loaded into the top of the disposal scow, and excess water containing fine sediments is simultaneously drained through valves into the surrounding environment. Overflow has contributed to significant sedimentation impacts during previous dredging projects, including during the PortMiami Deep Dredge Project, which killed more than 560,000 corals.<sup>46</sup> Despite the prohibition of overflow in the Project description, however, overflow has occurred during construction of the sand trap. In a letter from NMFS to the Corps, NMFS stated that “the project appears to have been subsequently modified in a manner that causes effects to listed species and critical habitat that was not considered in the

<sup>44</sup> 50 C.F.R. § 402.16(a)(2).

<sup>45</sup> 2025 Sand Bypass Project BiOp at 15.

<sup>46</sup> Ross Cunning et al., *Extensive coral mortality and critical habitat loss following dredging and their association with remotely-sensed sediment plumes*, 145 MARINE POLLUTION BULLETIN 185 (2019).

previous Opinions. The 2025 Opinion is based on no overflow of loading scows during dredging operations, a construction practice affirmed by the permittee on two occasions. However, overflow is clearly occurring.”<sup>47</sup> The letter includes a photo showing overflow occurring.<sup>48</sup> Because the Project was subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the biological opinion, the Corps is required to reinitiate consultation. The Corps’ failure to do so violates Section 7 of the ESA.

**B. The Corps is violating ESA Section 7 by failing to reinitiate consultation in light of new information showing effects of the action may affect listed species and critical habitat in a manner or to an extent not previously considered.**

The Corps is required to reinitiate consultation with NMFS if “new information reveals effects of the action that *may affect* listed species or critical habitat in a manner or to an extent not previously considered.”<sup>49</sup> As an initial matter, NMFS has already notified the Corps that “new information reveals effects of the [Sand Bypass Project] that may affect listed species or critical habitat in a manner or to an extent not previously considered in” the biological opinions for the Project.<sup>50</sup> The law therefore requires the Corps to reinitiate consultation.<sup>51</sup>

As explained further below, three new sources of information reveal that the Project’s impacts are likely affecting species to an extent not previously considered. First, new sediment monitoring and satellite imagery demonstrate that effects from the Sand Bypass Project exceed what was analyzed in the biological opinions, which demonstrates the effects of the Project may affect listed species and critical habitat in a manner or to an extent not previously considered. Second, new information demonstrates that the conservation status of elkhorn and staghorn coral is much more dire than what NMFS evaluated in the biological opinions for the Project, which indicates the Project may affect the species to an extent not previously considered. Third, new evidence shows that dredging likely played a role in the worst outbreak of coral disease in Florida’s history and that sediment is likely a vector of disease pathogens, again indicating the Project may affect the species in a manner or to an extent not previously considered. Because the Corps has failed to reinitiate after learning of this new information, the agency is violating the ESA.

**1. Satellite imagery and sediment monitoring demonstrate impacts from the Sand Bypass Project are greater than NMFS anticipated in its biological opinions.**

<sup>47</sup> Letter from Andrew Strelcheck, Regional Administrator of the Southeast Regional Office of the National Marine Fisheries Service to Colonel Brandon L. Bowman, U.S. Army Corps of Engineers, Jacksonville District at 3 (April 17, 2026) [hereinafter 2026 Letter from Andrew Strelcheck].

<sup>48</sup> *Id.* at 5, fig. 1.

<sup>49</sup> 50 C.F.R. § 402.16 (emphasis added).

<sup>50</sup> 2026 Letter from Andrew Strelcheck at 2.

<sup>51</sup> 50 C.F.R. § 402.16(a)(2).

The biological opinions for the Sand Bypass Project assumed sediment and turbidity impacts would stay within a defined area of impact. The 2025 biological opinion also assumed most of the critical habitat within the Project area would receive 1.5 mm or less of sediment accumulation.<sup>52</sup> But as explained below, the Project's impacts already exceed these predictions, even though the project is only partially complete.

*a. Satellite imagery shows sedimentation impacts exceed the anticipated area of impact.*

The biological opinions for the Sand Bypass Project predicted increased sedimentation and turbidity from the project would remain within an area of impact that extended “up to 500 m to the east, 300 m to the north, 150 m to the south, and 1,000 m to the west from the proposed activities.”<sup>53</sup>

However, increased sedimentation from the Project is occurring well beyond this predicted area of impact, as illustrated in the satellite image below, as well as the images contained in Appendix A. Figure 1 shows sediment traveling at least 2,000 meters north of the predicted area of impact, which is depicted with a dashed red line.<sup>54</sup>

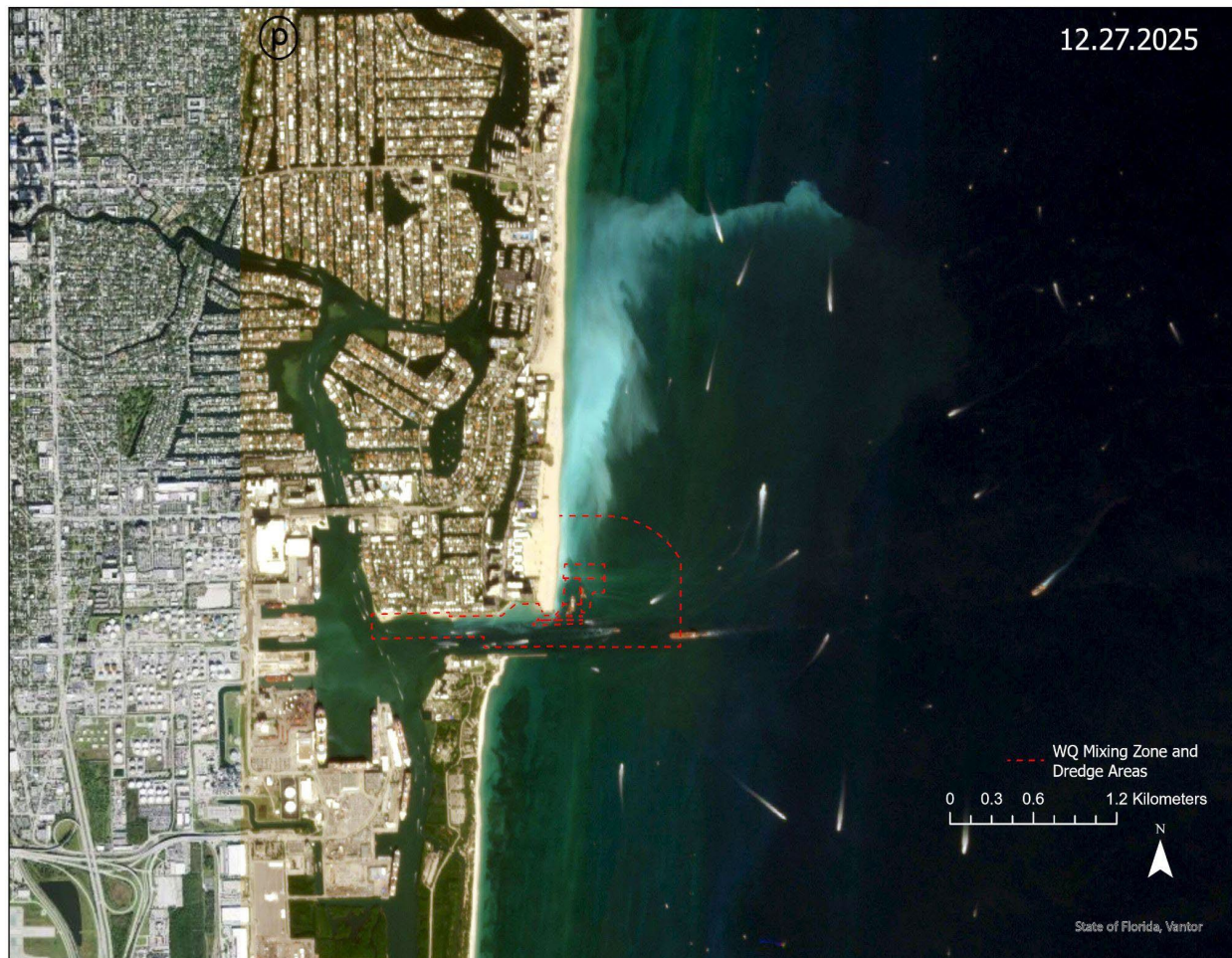
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<sup>52</sup> 2025 Sand Bypass Project BiOp at 58, 69.

<sup>53</sup> 2020 Sand Bypass Project BiOp at 16.

<sup>54</sup> Mixing zone boundary GIS shapefile retrieved from the Florida Department of Environmental Protection.





*Figure 1. Satellite showing extent of sediment plume relative to the Sand Bypass project initial construction mixing zone, taken on December 27, 2025 at 11:30 am ET. Imagery is derived from SuperDove true-color data. The visible northern edge of the plume extends approximately over 2,000 meters from the northern edge of the mixing zone.*

As noted in NMFS’s letter to the Corps, sediment plumes traveling north outside the area of predicted impact are especially concerning for staghorn, because staghorn colonies exist in high abundance along the reef in that location.<sup>55</sup> One of the only known eklhorn colonies left in the state is also located north of the area. The figures in Appendix A show at least seven instances of plumes exceeding the bounds of the biological opinions’ predicted area of impact, and these examples do not represent all exceedances that occurred.

Figure 1 and the Appendix A images demonstrate that the predicted area of impact—that is, the area where NMFS determined “increased turbidity and sedimentation is likely to occur”<sup>56</sup>—was

<sup>55</sup> 2026 Letter from Andrew Strelcheck at 5, fig. 2.

<sup>56</sup> 2020 Sand Bypass Project BiOp at 16.

erroneously defined. Increased sedimentation is occurring beyond the bounds of that area. Because this new data demonstrates effects of the Project “may”—and indeed likely—affect listed species and critical habitat to an extent not previously considered, the Corps must reinitiate consultation.

*b. Sediment monitoring data shows sedimentation within the predicted area of impact exceeds that anticipated in the 2025 biological opinion.*

The 2025 biological opinion assumes that 6.03 acres of critical habitat will be permanently destroyed due to sediment accumulation of 0.5 cm (5 mm) or more.<sup>57</sup> Of the remaining 39.6 acres of critical habitat within the Project area,<sup>58</sup> NMFS determined that 10.13 acres would receive up to 1.5 mm of sediment total—a level NMFS concluded would have insignificant and temporary effects on coral critical habitat—and the remaining 23.44 acres would receive no sediment accumulation at all.<sup>59</sup> But sediment monitoring shows these assumptions are not accurate and that sediment accumulation has already exceeded predicted levels.

The County is monitoring sediment accumulation at 50-m to 150-m long transects at 13 monitoring stations within the Project area, as depicted in Figure 14 below.

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<sup>57</sup> 2025 Sand Bypass Project at 69.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.* at 66 (stating that sedimentation will be limited to the 1.5 mm contour and that this level of sediment accumulation “will be temporary and insignificant.”).



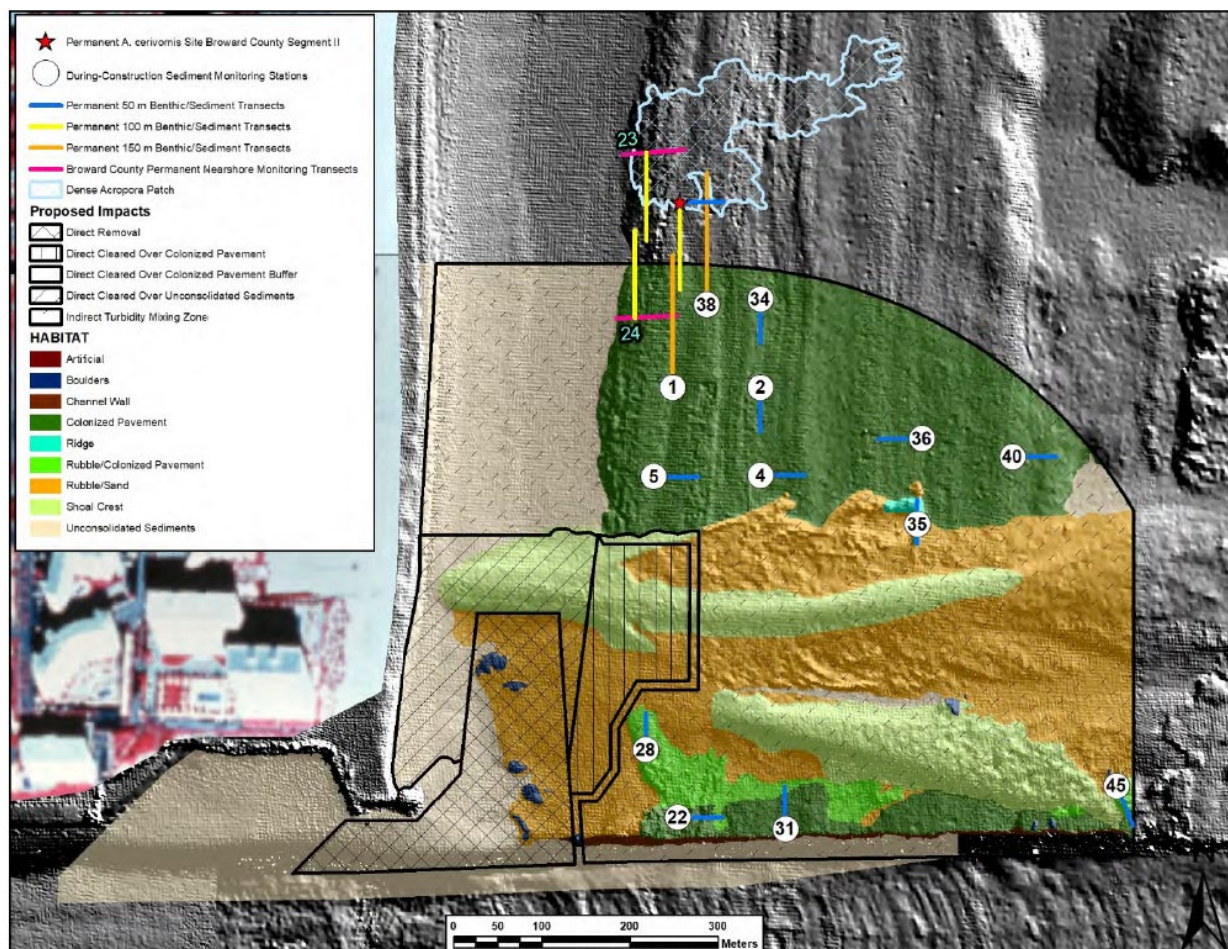


Figure 14 from page 56 of the Minimization, Mitigation, and Monitoring Plan for the Port Everglades Sand Bypassing Project (2020) [hereinafter Minimization, Mitigation, and Monitoring Plan], depicting *monitoring* stations and transects.

Station Transect 34 is located outside the 1.5 mm contour line, in an area where the 2025 biological opinion assumed critical habitat would receive no sediment accumulation.<sup>60</sup> However, during a monitoring event on January 24, 2026, Station Transect 34 had accumulated an average of 0.4 cm (4 mm) sediment depth along its 50 m length compared to baseline levels,<sup>61</sup> more than double the level NMFS determined would have only a temporary and insignificant impact.<sup>62</sup> Localized meter-level measurements at Station Transect 34 repeatedly documented substantially higher average increases in sediment accumulation than the entire transect average value increase

<sup>60</sup> 2025 Sand Bypass Project BiOp at 58; Sand Bypass Biological Monitoring Plan at 56.

<sup>61</sup> These measurements were calculated by the monitoring firm at each survey event by first averaging three sediment depth measurements taken at each meter along the respective transect, and then computing an overall average from each per-meter value. This final during-construction value was then subtracted from the respective transect's baseline average. In doing so, localized sedimentation exceedances are obscured.

<sup>62</sup> See Attachment 1, mean difference sediment depth measurements for Transect 34 (Tab SedimentDepth\_MeanData), downloaded from the Florida Department of Environmental Protection, [https://dep-file-portal.dep.state.fl.us/public/folder/4carqwyoduirdml0wtowvg/0289308\\_PE\\_Sand\\_Bypass](https://dep-file-portal.dep.state.fl.us/public/folder/4carqwyoduirdml0wtowvg/0289308_PE_Sand_Bypass), password provided to Miami Waterkeeper.



of 0.4 cm suggests. Multiple monitoring events recorded meter-level average sediment increases exceeding 40 -50 mm, including approximately 50 mm at meter 35 during the January 7, 2026 survey, approximately 48 mm at meter 35 during the November 17, 2025 survey, and approximately 47 mm at meter 39 during the December 5, 2025 survey.<sup>63</sup> This level of sediment accumulation substantially exceeds the sediment accumulation levels predicted in the 2025 biological opinion. For example, localized average increases approaching 50 mm are more than 30 times higher than the 1.5 mm sediment accumulation contour discussed in the 2025 biological opinion, and ten times higher than the 5 mm sediment depth NMFS determined could result in permanent loss of critical habitat.

Due to inconsistencies between the descriptions of sediment modeling in the 2020 biological opinion and the 2025 biological opinion, it is difficult to ascertain the location of the monitoring stations in relation to the areas expected to receive 1 cm, 0.5 cm, and 1.5 mm of sediment accumulation.<sup>64</sup> However, based on the contour lines depicted in Figure 21 of the 2025 biological opinion, it appears that Station Transect 28 and Station Transect 5 are within the area that was predicted to receive no more than 1.5 mm of sediment.<sup>65</sup> If so, these transects have also experienced more sediment accumulation than was predicted in the 2025 biological opinion. Station Transect 28 repeatedly documented transect-average sediment accumulation exceeding the 1.5 mm sediment depth predicted in the biological opinion, including approximately 0.4 cm (4 mm) in November 2025, approximately 1.5–1.6 cm (15–16 mm) during January 2026 monitoring events, approximately 0.3–0.8 cm (3–8 mm) during February 2026 monitoring events, and approximately 0.5 cm (5 mm) in March 2026.<sup>66</sup> These transect-average measurements ranged from approximately two to ten times higher than the 1.5 mm sediment accumulation predicted in the 2025 biological opinion. In some locations, surveyors observed raw sediment depths of up to 16 centimeters (160 mm), including areas where hardbottom habitat had become buried under sediments, as shown in Figure 1 below.<sup>67</sup> If Station Transect 28

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<sup>63</sup> *Id.*

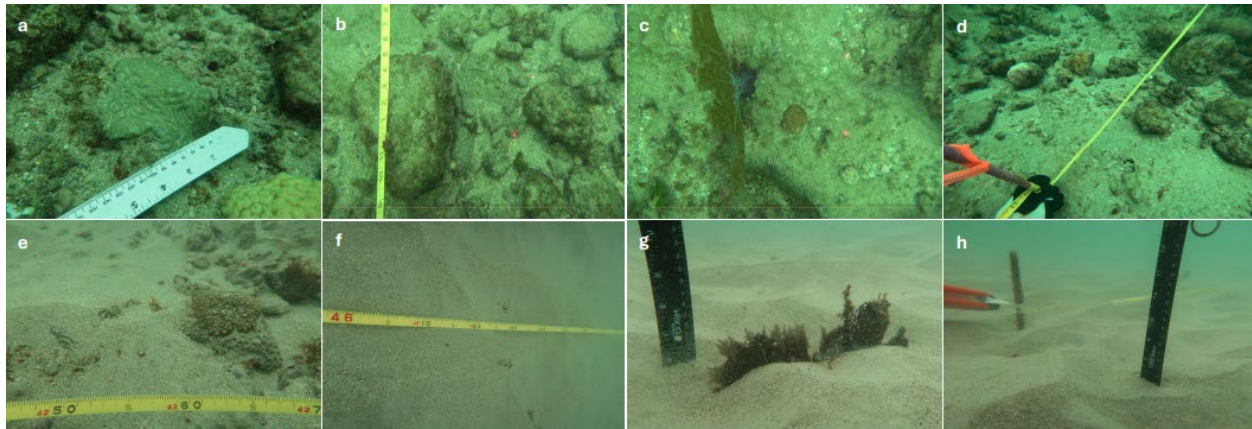
<sup>64</sup> In particular, figs. 12 & 14 in the 2020 Sand Bypass Project BiOp and fig. 21 in the 2025 Sand Bypass Project BiOp show the 1 cm contour and the 1.5 mm contour in different locations. The sediment modeling that generated these contours, however, are not different between the two opinions. Likewise, the estimates of critical habitat permanently lost based on the modeling does not change between the biological opinions. The 2025 Sand Bypass Project BiOp also states that fig. 21 is an “updated” version of the figure originally provided by the consulting group that conducted the modeling (*see* 2025 Sand Bypass Project BiOp at 61). We therefore believe that fig. 21 is the accurate version of the sediment contours. However, unlike fig. 14 in the 2020 Sand Bypass Project BiOp, fig. 21 does not appear to depict the 0.5 cm contour line and therefore we cannot determine with certainty which monitoring stations are located inside or outside the 0.5 cm contour line.

<sup>65</sup> *Compare* 2025 Sand Bypass Project BiOp at 58, fig. 21 (sediment contours) *with* Minimization, Mitigation, and Monitoring Plan at 56, fig. 14 (location of the monitoring stations).

<sup>66</sup> *See* Attachment 1, downloaded from the Florida Department of Environmental Protection, [https://dep-file-portal.dep.state.fl.us/public/folder/4carqwyoduirml0wtowvg/0289308\\_PE\\_Sand\\_Bypass](https://dep-file-portal.dep.state.fl.us/public/folder/4carqwyoduirml0wtowvg/0289308_PE_Sand_Bypass), password provided to Miami Waterkeeper.

<sup>67</sup> *See id.* Attachment 2, photos of sediment monitoring at Transect 28, downloaded from the Florida Department of Environmental Protection, <https://dep-file->

is within the 1.5 mm contour, then these measurements are **ten to 100 times** higher than the maximum level NMFS predicted in the 2025 biological opinion.



*Figure 2: Photos from Sedimentation Monitoring at Transect 28. Panels a-d show hardbottom during pre-construction survey events on September 17, 2025. Panels e-h show hardbottom at the same locations on January 17, 2026, during-construction monitoring. Partial burial and tissue loss is evident on coral colonies in panel e, and mean sediment depth across this range of the transect (42 – 50 meters) increased by approximately 7.0 cm between the baseline and during-construction survey.*

Station Transect 5 also exhibited average increases in sediment depths above 1.5 mm, with measurements on January 15, March 10, and April 30, 2026 showing transect-average increases of 0.2 cm (2 mm), 0.2 cm (2mm), and 0.3 cm (3mm), respectively.<sup>68</sup> Localized meter-level average sediment increases were substantially higher, including approximately 2.3 cm (23 mm) at meter 24 of the transect on January 15, 2026, and approximately 2.2 cm (22 mm) at meter 6 of the transect on March 10, 2026.<sup>69</sup> The highest localized meter-level average increase documented at Station Transect 5 was approximately 3.7 cm (37 mm), occurring on December 5, 2025, at meter 34 of the transect.<sup>70</sup> Once again, these depths greatly surpass those predicted in the 2025 biological opinion.

In addition, the Florida Department of Environmental Protection recently released a Site Inspection Report for the Sand Bypass Project, documenting at-site inspections for 10 of the monitoring stations within the Project area to see if the hardbottom was experiencing dredge-related sediment impacts. The Site Inspection Report was published on May 12, 2026, but the inspection dates occurred on March 24-25, 2026. The Site Inspection Report found that “[t]he current condition at” Station 5, Station 1, Station 2, and Station 4 “indicates likely dredging-

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[portal.dep.state.fl.us/public/folder/4carqwyoduirdml0wtowvg/0289308\\_PE\\_Sand\\_Bypass](https://portal.dep.state.fl.us/public/folder/4carqwyoduirdml0wtowvg/0289308_PE_Sand_Bypass), password provided to Miami Waterkeeper.

<sup>68</sup> See Attachment 1, downloaded from the Florida Department of Environmental Protection, [https://dep-file-portal.dep.state.fl.us/public/folder/4carqwyoduirdml0wtowvg/0289308\\_PE\\_Sand\\_Bypass](https://dep-file-portal.dep.state.fl.us/public/folder/4carqwyoduirdml0wtowvg/0289308_PE_Sand_Bypass), password provided to Miami Waterkeeper.

<sup>69</sup> *Id.*

<sup>70</sup> *Id.*

related sedimentation in the form of very thin to thin layers of mud.”<sup>71</sup> At Stations 1 and 5, the Report found that organisms were exhibiting signs of sediment related stress “such as closed polyps and excessive mucous production.”<sup>72</sup> Three of these monitoring stations (Station 1, 2, and 4) appear to be located outside the 1.5 mm contour line, and the 2025 biological opinion therefore assumed these areas would receive no sedimentation impacts at all.<sup>73</sup>

This data demonstrates that even within the predicted area of impact, impacts are greater than federal agencies analyzed or anticipated in the 2025 biological opinion, and therefore the Project may—and is—affecting listed species and their critical habitat in a manner and to an extent not previously considered. Reinitiation is therefore required.

2. New science demonstrates that the 2023 heatwaves caused the functional extinction of elkhorn and staghorn coral in large portions of Florida’s Coral Reef and that recovery depends on survivors, some of which exist near Port Everglades.

New evidence reveals the abundance levels, geographic range, and environmental baseline for staghorn and elkhorn coral are far different now than what NMFS analyzed in the 2020 biological opinion. (And NMFS did not update any of its analyses for staghorn or elkhorn coral in the 2025 biological opinion). Due to the 2023 heatwaves and a resulting widespread coral mortality event, the status of these species is much more dire than what was assumed or analyzed in the biological opinions, and the effects of the Sand Bypass Project on the survival and recovery of these species are likely much greater than what NMFS determined, as the staghorn corals near Port Everglades are some of the last populations left in the State. Therefore, the Corps must reinitiate consultation on the Project’s effects on staghorn and elkhorn coral and their critical habitat.

In 2023, massive marine heatwaves occurred along Florida’s coast, causing severe coral bleaching and mortality. Heat exposures for the reef tract during these heatwaves “were unprecedented.”<sup>74</sup> Manzello et al., 2025 documented losses to both wild and restored populations of elkhorn and staghorn coral along Florida’s Coral Reef during the marine heat wave. They found these species experienced mortalities of 97.8-100% in the Florida Keys and Dry Tortugas,<sup>75</sup> and determined that the “2023 heatwave has extirpated *Acropora* from most of” Florida. Manzello et al., 2025 also found that the few *Acropora* survivors surveyed in 2024

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<sup>71</sup> Florida Department of Environmental Protection, Site Inspection Report for the Port Everglades Inlet Sand Bypassing Project (May 12, 2026) at 5, 11, 20, 22.

<sup>72</sup> *Id.* at 5, 11.

<sup>73</sup> See 2025 Sand Bypass Project BiOp at 58, 69; compare 2025 Sand Bypass Project BiOp at 58, fig. 21 (sediment contours) with Minimization, Mitigation, and Monitoring Plan at 56, fig. 14.

<sup>74</sup> Derek Manzello et al., *Heat-driven functional extinction of Caribbean Acropora corals from Florida’s Coral Reef*, 390 SCIENCE 361 (2025). This study was submitted for publication on March 27, 2025, and accepted on August 8, 2025.

<sup>75</sup> *Id.*

following the heat wave were primarily located in the northern region of the reef tract “in the Biscayne and Broward-Miami subregions.”<sup>76</sup> The authors stated that the severity of this mortality event depends in part on “the possible presence of unknown survivors and their resilience potential.”<sup>77</sup>

A second study conducted by scientists from NOAA and Shedd Aquarium (Cunning et al., 2025) documented coral density and community structure of the reef around Port Everglades. This study found that around Port Everglades, the “[l]ocal densities of naturally-occurring ESA-listed staghorn corals (*Acropora cervicornis*) may be higher than anywhere else in Florida, representing some of the last survivors following widespread mortality during the 2023 heatwave”<sup>78</sup> and “that Port Everglades reef habitats are conducive to coral recruitment, survivorship, and growth.”<sup>79</sup> This is highly unusual for Florida, where corals are largely declining along the reef tract. The Port Everglades reef is the only known location that is currently reversing this trend and showing unparalleled signs of recovery and resilience, even following the peak of stony coral tissue loss disease (SCTLD) in 2016—as opposed to other regions of Florida where disease recovery “could be impeded by the more severe impacts of the heatwave in 2023.”<sup>80</sup> The authors stated “our findings show that [the Port Everglades reefs] are a site of active recovery from SCTLD and a potential last refuge for Florida’s wild *A. cervicornis*.”<sup>81</sup> These survivors could be critical to the fate of the entire species in Florida.

None of this critical information about the status of elkhorn and staghorn coral, or the importance of the heatwave survivors, was factored into NMFS’s determinations for these species or their critical habitat in the biological opinions for the Project. The Corps must reinitiate consultation for the Sand Bypass Project so that NMFS can reassess its determinations for elkhorn and staghorn coral, taking into account the new information about the species’ abundance and distribution and the importance of the surviving staghorn colonies near the Project area for the species’ recovery in Florida.

3. Recent science demonstrates that sediment can serve as a vector of disease, transferring pathogens from one coral to another and that the 2014 SCTLD outbreak may have been instigated or exacerbated by large-scale dredging.

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<sup>76</sup> *Id.* at 364.

<sup>77</sup> *Id.*

<sup>78</sup> Ross Cunning et al., *Integrated Analysis of Coral Density and Community Structure Across Reef Habitats Near Port Everglades in Advance of Dredging Operations* 1 (2025), [https://www.ncei.noaa.gov/data/oceans/coris/library/NOAA/CRCP/NMFS/SERO/Projects/31329/Serrano2025\\_Port\\_Everglades\\_CoralDensity\\_CommunityStructure\\_Analysis.pdf](https://www.ncei.noaa.gov/data/oceans/coris/library/NOAA/CRCP/NMFS/SERO/Projects/31329/Serrano2025_Port_Everglades_CoralDensity_CommunityStructure_Analysis.pdf).

<sup>79</sup> *Id.*

<sup>80</sup> *Id.* at 18.

<sup>81</sup> *Id.* at 20.

Studivan et al. (2022) found that reef sediments can act as a vector and reservoir for SCTLD, meaning sediments can directly transmit disease.<sup>82</sup> In the study, healthy corals were directly exposed to diseased coral tissue, and visible lesions generally developed after approximately one to two weeks. However, when the experiment was repeated using sediments previously inoculated with diseased coral material, healthy corals showed signs of disease in approximately 24 hours.<sup>83</sup> Based on this finding, the authors state, “sediments may have played a critical role in the uncharacteristically rapid spread of SCTLD throughout Florida’s Coral Reef [during the 2014 disease outbreak], as well as the persistence of the disease over the last 7 years.”<sup>84</sup> The authors concluded that “[u]ltimately, the ability of sediments to act as a SCTLD vector and/or reservoir throughout the endemic zone will likely impact local disease prevalence and coral mortality, potentially prolonging the outbreak, and representing a threat of reemergence following disturbance events, such as storms and future coastal development activities.”<sup>85</sup>

Another recent study from Dobbelaere et al. (2024) investigated various transmission scenarios to determine how the 2014 SCTLD outbreak initially emerged and spread. The authors concluded that the PortMiami “dredging operations might be responsible for the onset of the [SCTLD] epidemics.”<sup>86</sup> The study also found that the hypothesis that the disease spread originated with a sewage leak was not supported by the data.<sup>87</sup>

Serrano et al. (2024) further supports the findings of Studivan and Dobbelaere, demonstrating that “[PortMiami] sediments had different microbiome profiles and significantly higher abundances of potentially pathogenic bacteria compared to Reef sediments,” suggesting that port sediments can contain coral disease pathogens.<sup>88</sup> Neither of the biological opinions for this Project discuss the implications of sediment as a vector of disease or the relationship between a dredging project and the worst coral disease outbreak in Florida’s history. Therefore, this new information reveals the Project may affect listed species and critical habitat in a manner and to an extent not previously considered. The Corps must reinitiate consultation so that NMFS can incorporate the findings of Studivan et al. (2022), Dobbelaere et al. (2024), and Serrano et al. (2024) into its jeopardy and adverse modification determinations for listed coral species.

**C. The new information discussed above invalidates many of the key assumptions in the biological opinions that NMFS used to determine no jeopardy and no**

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<sup>82</sup> Michael S. Studivan et al., *Reef Sediments Can Act as a Stony Coral Tissue Loss Disease Vector*, 8 FRONTIERS IN MARINE SCI. 815698 (2022).

<sup>83</sup>

<sup>84</sup> *Id.* at 12.

<sup>85</sup> *Id.* at 2.

<sup>86</sup> Thomas Dobbelaere et al, *Investigating the link between the Port of Miami dredging and the onset of the stony coral tissue loss disease epidemics*, 207 MARINE POLLUTION BULLETIN 116886 (2024).

<sup>87</sup> *Id.*

<sup>88</sup> Xaymara M. Serrano et al., *Sediment source and dose influence the larval performance of the threatened coral *Orbicella faveolata**, 19 PLoS ONE e0292474 (2024).



**adverse modification for coral and conch and the Corps' continued reliance on the biological opinions, without reinitiating consultation, violates the ESA.**

The new evidence discussed above undermines the accuracy of NMFS's jeopardy and adverse modification determinations for the Sand Bypass Project. First, all the jeopardy and adverse modification determinations for coral and conch are erroneously based on the assumption that the Project's impacts would remain within the predicted area of impact, would remain below certain levels of increased sedimentation, or both. As explained above, new evidence demonstrates these assumptions are undoubtedly false and impacts are greater than predicted. Second, the biological opinions fail to consider new information on the effects of sediment-induced disease on coral or the possibility of another dredge-induced disease outbreak even though new science demonstrates the two are likely linked. The Corps' failure to reinitiate and continued reliance on these deficient biological opinions violates Section 7.

1. The Corps' continued reliance on the biological opinions, without reinitiation, violates the ESA because the new information described above shows the opinions' jeopardy and adverse modification determinations are based on the erroneous assumption that Project impacts would remain within predicted bounds.

The jeopardy determinations for all listed coral species in the 2020 biological opinion are based on assumptions that new evidence shows are erroneous. First, the jeopardy analysis for listed corals assumes that the only corals that will be affected by the Project are those located within the area of predicted impact. Based on this assumption, the 2020 biological opinion concluded that the Project would take 785 (224 lethal and 561 nonlethal) colonies of staghorn coral and one lobed star coral, and that this level of take would not jeopardize either species.<sup>89</sup> Since the biological opinion determined that the rest of the five listed coral species were "not present"<sup>90</sup> in the Project area, the opinion concluded that the Project would have no effect on these species.<sup>91</sup> Similarly, the jeopardy determination in the 2025 biological opinion for queen conch assumes the only conch that will be killed and otherwise harmed by the Project are those found within the area of impact.<sup>92</sup> And both biological opinions assume critical habitat will only be affected within the Project area, estimating permanent losses of critical habitat between zero to 23.6 acres based on this assumption.<sup>93</sup> But now, satellite imagery shows Project impacts outside the predicted impact area. The Project therefore may be affecting far more listed coral and queen conch, as well as far more coral critical habitat than analyzed. The opinions' determinations are therefore no longer rational nor based on the best available science, reinitiation is required, and the Corps' continued reliance on these opinions is arbitrary.

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<sup>89</sup> 2020 Sand Bypass Project BiOp at 62, 79.

<sup>90</sup> *Id.* at 22.

<sup>91</sup> *Id.* at 23.

<sup>92</sup> 2025 Sand Bypass Project BiOp at 61–62 (estimating lost conch based on how many are in the direct and indirect area of impact for project construction; same for maintenance dredging events).

<sup>93</sup> *Id.* at 64, 7; 2020 Sand Bypass Project BiOp at 64.



Likewise, the 2025 biological opinion based its adverse modification determination for pillar coral, rough cactus coral, lobed star coral, mountainous star coral, and boulder star coral critical habitat on the assumption that most of this habitat within the Project area would only receive up to 1.5 mm of sediment accumulation:

NMFS concludes that the 10.13 ac of habitat within the 1.5 mm contour is likely to be subjected to low levels of temporary sedimentation. Such levels and degree of sedimentation are not expected to permanently preclude coral larval settlement or fragment attachment. Therefore, NMFS concludes that the sediment impacts to this area will be temporary and insignificant based on the dredge methodology and the model results, and thus are not likely to adversely affect the coral critical essential feature.<sup>94</sup>

However, as discussed above, multiple transects have already received more than the predicted level of sediment accumulation, with some areas receiving up to 16 cm of sediment. The 2025 biological opinion's adverse modification determinations are therefore no longer rational nor based on the best available science and reinitiation is required.

In addition, the jeopardy determination for staghorn and elkhorn coral fails to take into account the dramatic decrease in species abundance and distribution following the 2023 heatwaves. This means that all the determinations for elkhorn and staghorn coral, including the jeopardy determinations, adverse modifications determinations, and the staghorn incidental take statement are based on erroneous, outdated information that assumes the species are more abundant and widespread than they actually are.

For example, for staghorn coral, NMFS determined the Project would not adversely modify staghorn critical habitat nor jeopardize the continued existence of the species even though the Project could lethally take up to 224 staghorn colonies.<sup>95</sup>

NMFS based these determinations on outdated, invalidated information about the species abundance and range, assuming that there were tens of millions of staghorn corals range-wide<sup>96</sup> and that staghorn was distributed across Florida's Coral Reef "from Palm Beach County through Monroe County."<sup>97</sup> But Manzello et al. (2025) demonstrates this information is not accurate, that abundance and distribution are much smaller, and that every surviving colony in Florida is important. Moreover, NMFS justified the lethal incidental take of up to 224 staghorn colonies as well as its no jeopardy and adverse modification determinations by reasoning that the Project's "impacts ... will be limited to the immediate action area."<sup>98</sup> But the assumption that the Project

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<sup>94</sup> 2025 Sand Bypass Project BiOp at 66.

<sup>95</sup> 2020 Sand Bypass Project BiOp at 72.

<sup>96</sup> *Id.* at 45, 72.

<sup>97</sup> *Id.* at 72.

<sup>98</sup> *Id.* at 73.

will have only localized impacts is no longer a rational basis to conclude no jeopardy or adverse modification if the action area is one of the only locations in Florida where the species still persists and is actively reproducing, as Manzello et al. (2025) and Cunning et al. (2025) indicate. Moreover, as described above, the effects of the action are not as limited as the federal agencies assumed.

Likewise, given widespread mortality of staghorn following the 2023 heatwaves and the importance of survivors for the species recovery, an incidental take statement authorizing the take of up to 785 (224 lethal and 561 nonlethal) staghorn coral colonies is likely not rational or based on the best available science.

Because the jeopardy and adverse modification determinations for elkhorn and staghorn coral and the staghorn incidental take statement are demonstrably incorrect considering the new information described above, the Corps' continued reliance on these biological opinions, without reinitiation, is arbitrary and unlawful.

2. The Corps' continued reliance on the 2020 biological opinion violates the ESA because the opinion's jeopardy determinations for listed coral species fail to consider implications of sediment as a vector of disease or the possibility of another widespread disease outbreak induced or exacerbated by dredging.

The biological opinions acknowledge that sediment and turbidity can exacerbate disease prevalence, and NMFS bases its conclusion that up to 125 non-relocated staghorn will be killed by the Project in part due to increased risk of disease from sedimentation.<sup>99</sup> The biological opinions also note that fine-grained sediments like those at ports are more likely to have active bacterial communities that make disease outbreak more likely.<sup>100</sup> However, both opinions fail to discuss the relationship between the PortMiami dredging project and the worst coral disease outbreak in Florida's history (the 2014 SCTLTD outbreak) even though mounting scientific evidence from Studivan et al. (2022) and Dobbelaere et al (2024), published after the 2020 opinion but before the 2025 opinion, indicates there is a likely link between the two and that such an event could happen again. Since the 2014 outbreak caused the extirpation of pillar coral in Florida,<sup>101</sup> such an event has serious implications for the survival and recovery of listed coral species but this possibility was not considered in the biological opinions. The 2020 biological opinion's jeopardy analysis for corals assumes that the Project would only kill corals within the bounds of the Project area.<sup>102</sup> However, if sediment is a potential vector of disease, then even very low levels of sediment traveling outside the mixing zone could potentially transfer disease

<sup>99</sup> See, e.g., 2020 Sand Bypass Project BiOp at 56, 59, 79.

<sup>100</sup> *Id.* at 56.

<sup>101</sup> Karen Neely, *Pillar coral (Dendrogyra cylindrus) fragment rescue for preservation of genetic diversity*, Florida Fish & Wildlife Research Institute (2016) (on file with the Florida Fish and Wildlife Conservation Commission); Nicholas Jones et al., *Temperature stress and disease drives the extirpation of the threatened pillar coral, Dendrogyra cylindrus, in southeast Florida*, 11 SCIENTIFIC REPORTS 14113 (2021).

<sup>102</sup> See, e.g., 2020 Sand Bypass Project BiOp at 56, 59.

from corals within the Project area to corals outside the Project area. This possibility was also not considered in the biological opinions. The Corps' continued reliance on biological opinions that fail to consider new evidence about the role dredged sediment plays as a vector of disease and in contributing to the worst coral disease outbreak in Florida's history is arbitrary.

**D. Even absent new information, the Corps' reliance on the biological opinions violates ESA Section 7 because NMFS's analyses and conclusions in the opinions are arbitrary, irrational, and not based on the best available science.**

The Project significantly exceeding the existing biological opinions' predicted impacts is all the more concerning because the existing opinions already severely underestimate and ignore serious adverse effects to coral critical habitat and queen conch.

First, the 2025 biological opinion's jeopardy analysis for queen conch arbitrarily omits impacts from the Project on conch in their early life stages, even though these life stages are the most sensitive to sediment exposure. In addition, the opinion's no jeopardy conclusion for queen conch contradicts the evidence before the agency, which shows both that the Project will cause significant reproductive losses, substantially diminishing the Port Everglades aggregation's reproductive capacity, and that this aggregation is critical for the species' recovery in Florida.

Second, the biological opinions arbitrarily rely on mitigation actions that are not reasonably certain to yield tangible benefits to species and habitat. This unlawful reliance on ineffective mitigation results in an underestimation of the Project's impacts on coral critical habitat.

Third, the biological opinions' analyses rely on unlawful, invalidated regulatory definitions of "effects of the action" and "destruction or adverse modification" that unlawfully ignore the best available science and dismiss serious impacts to listed corals' critical habitat by requiring that the modification affect the "overall critical habitat designation."

The Corps' reliance on these biological opinions, even though the opinions were deficient and arbitrary at the time they were issued, violates the ESA.

1. The Corps' reliance on the jeopardy analysis for queen conch violates the ESA because the 2025 biological opinion fails to analyze the Project's impacts on conch in their early life stages and the no jeopardy conclusion contradicts evidence before the agency.

The 2025 biological opinion's jeopardy determination for queen conch fails to account for the Project's impacts on conch eggs and larvae and how the loss of these early life stages will affect the species' survival and recovery. This is arbitrary because elsewhere the biological opinion recognizes that "[d]eveloping embryos, hatching veliger larvae, and metamorphic post-settlement larvae are intolerant of fine sediments. These early life stages may experience severe

mortality in sediment accumulation as little as 0.1 mm.”<sup>103</sup> Likewise, sediment deposition of just 1 mm can kill one- to five-month-old infaunal conch juveniles.<sup>104</sup> But the biological opinion never attempts to estimate how many conch in their early life stages the Project will injure and kill, instead focusing solely on the loss of relocated adult conch and their reproductive potential.<sup>105</sup> Indeed, the biological opinion does not even consider impacts associated with sediment accumulation of less than 1.5 mm, even though conch larvae and juveniles can be harmed by substantially lower levels. By failing to analyze the Project’s impact on conch in their early life histories, the biological opinion underestimates the Project’s harm on the species. The biological opinion also underestimates impacts to queen conch by only counting losses from relocation events prior to construction and maintenance dredging events. The biological opinion fails to consider losses from conch that migrate back into the area between dredging events, fall into the 10.8-acre sand trap, and die.

Second, the biological opinion’s conclusion that the Project will not impede the queen conch’s survival or recovery and thus will not jeopardize the species contradicts the evidence before the agency. In particular, the biological opinion finds that the Project will kill 457 adult conch and that “this translates to a decrease of approximately 6.87 million individuals” over the Project’s ten year period due to reproductive losses.<sup>106</sup> The biological opinion acknowledges that “the proposed action is expected to reduce the abundance of adult queen conch and the overall spawning capacity of the large Port Everglades aggregation.”<sup>107</sup> Nevertheless, the biological opinion concludes no jeopardy because this loss “does not indicate a significant negative survival trend for the species *as a whole*”<sup>108</sup> and “is not expected to hinder the ... overall recovery of the queen conch *throughout its range*.”<sup>109</sup> But analyzing conch losses from the Project in the context of the species’ global population and range fails to account for the specific importance of the Port Everglades aggregation, even though the biological opinion acknowledges the importance of the aggregation elsewhere. For example, the biological opinion states that “[t]he aggregation at Port Everglades may play a major role in sustaining nearshore Florida populations, and may also have important seeding potential for both the Florida Keys and the nearby Bahamas archipelago”<sup>110</sup> and that “[t]he population at Port Everglades is likely a large contributor to the recovery of conch populations throughout Florida, including the Florida Keys.”<sup>111</sup> The jeopardy determination fails to address the aggregation’s critical role in seeding nearby populations, much less explain why such dramatic reproductive losses would not impair its special role in the

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<sup>103</sup> 2025 Sand Bypass Project BiOp at 60.

<sup>104</sup> Doerr et al. in review, cited in FWC, Second Request for Additional Information (RAI) for Port Everglades Environmental Resource Permit Application (0401375-002-BI) 1 tbl. 1 (2025).

<sup>105</sup> 2025 Sand Bypass Project BiOp at 71.

<sup>106</sup> *Id.*

<sup>107</sup> *Id.* at 72.

<sup>108</sup> *Id.*

<sup>109</sup> *Id.*

<sup>110</sup> *Id.* at 35.

<sup>111</sup> *Id.* at 44.

species' recovery. The Corps' reliance on an arbitrary jeopardy determination for queen conch violates the ESA.

2. The Corps' continued reliance on the biological opinions violates the ESA because the opinions arbitrarily rely on mitigation for coral critical habitat losses that are not likely to yield tangible benefits for listed coral.

If an agency relies on mitigation measures to find no jeopardy or no adverse modification, those mitigation measures “must be reasonably specific, certain to occur and subject to deadlines or other forcible obligations.”<sup>112</sup> Moreover, the benefits of those mitigation measures to the species and habitat at issue must also be “‘reasonably certain’ to occur.”<sup>113</sup>

The Sand Bypass Project biological opinions rely on the re-exposure of hardbottom habitat within a rubble removal area to compensate for critical habitat losses elsewhere in the Project area.<sup>114</sup> Based on this proposed mitigation, both biological opinions reduce the net loss of coral critical habitat due the Project, assuming that seven acres of critical habitat will be regained via the re-exposure of the rubble removal area.<sup>115</sup> However, this rubble removal area is located adjacent to the sand trap and within the zone expected to experience sedimentation during Project construction.<sup>116</sup> Monitoring results from the nearest transect (Transect 28 discussed above) already indicate significant sediment accumulation in the surrounding area. If similar sediment deposition occurs within the rubble removal area, it is unlikely that the newly exposed hardbottom will function as effective coral habitat in the near term.<sup>117</sup>

Furthermore, maintenance dredging of the sand trap is expected to occur every two to four years. Because the rubble removal area is located within the anticipated mixing zone for these operations,<sup>118</sup> the exposed hardbottom is likely to experience repeated sediment exposure over time. The rubble removal area is also located in the area expected to receive substantial sediment deposition during the Port Everglades Harbor Expansion Project.<sup>119</sup> NMFS has included hard

<sup>112</sup> *Fla. Key Deer v. Brown*, 364 F. Supp. 2d 1345, 1355 (S.D. Fla. 2005), *aff'd sub nom. Fla. Key Deer v. Paulison*, 522 F.3d 1133 (11th Cir. 2008); *Ctr. for Biological Diversity, v. U.S. Dep't of Interior*, No. 24-cv-04651-JST, 2026 WL 898264, at \*16 (N.D. Cal. Mar. 30, 2026) (rejecting current regulations that allow agency conclusions to rely on nonbinding mitigation measures as inconsistent with ESA's requirement to ensure against jeopardy and adverse modification).

<sup>113</sup> *Ctr. for Biological Diversity v. Haaland*, 87 F.4th 980, 987 (9th Cir. 2023).

<sup>114</sup> 2020 Sand Bypass Project BiOp at 64–65 (“Under Outcome A there would be no net loss of designated critical habitat for elkhorn and staghorn coral because the amount of re-exposed hardbottom [from the rubble removal area] exceeds the amount of critical habitat lost due to burial by sedimentation. Under Outcome B there will be a net loss of up to 16.29 ac of designated coral critical habitat (23.6 ac – 7.31 ac [from the rubble removal area] = 16.29 ac).”; *see also* 2025 Sand Bypass Project BiOp at 67.

<sup>115</sup> 2025 Sand Bypass Project BiOp at 74; 2020 Sand Bypass Project BiOp at 65.

<sup>116</sup> Minimization, Mitigation, and Monitoring Plan at 45, fig. 4.

<sup>117</sup> 2020 Sand Bypass Project BiOp at 64 (stating “even small increases in sedimentation can significantly reduce coral recruitment and survivorship.”)

<sup>118</sup> *Id.* at 21, fig. 10; Minimization, Mitigation, and Monitoring Plan at 45, fig. 4.

<sup>119</sup> U.S. Army Corps of Engineers, Revised Supplemental Biological Assessment for the Port Everglades Deep Dredge Project (May 31, 2024) at 4.

substrate free from sediment cover as an essential feature of coral critical habitat.<sup>120</sup> And indeed, coral recruitment requires clean substrate that is free from sediment cover,<sup>121</sup> and repeated sedimentation events may prevent corals from successfully colonizing the area. As a result, this mitigation strategy likely will not create new critical habitat as defined by regulation nor provide the ecological benefits anticipated in the biological opinions. The biological opinions' reliance on the rubble removal area to reduce the net loss of critical habitat from the Project—even though this area is unlikely to function as coral critical habitat—is arbitrary.

3. The biological opinions employ unlawful, invalidated regulatory definitions of “effects of the action” and “destruction or adverse modification” that caused NMFS to dismiss the best available science and serious impacts to critical habitat.

The Corps cannot rely on the biological opinions because NMFS used unlawful regulatory definitions in its analyses that render the biological opinions unlawful. For example, the biological opinions' analyses rely on at least two unlawful, invalidated regulatory definitions of terms within the ESA, which renders NMFS's analyses that underpin its biological opinion, jeopardy determination, destruction and adverse modification determination, and incidental take statement unlawful.

First, NMFS applied a definition of “effects of the action” that a district court invalidated and vacated on March 30, 2026 for violating the ESA. In the 2025 biological opinion, NMFS explained that it defined “effects of the action” as follows:

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action but that are not part of the action. A consequence is caused by the proposed action if the effect *would not occur but for the proposed action and the effect is reasonably certain to occur*. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR 402.02).<sup>122</sup>

The 2020 biological opinion also relied on this definition of “effects of the action.”<sup>123</sup> As District Judge Jon S. Tigar explained in his March 30, 2026 order, this definition of effects violates the

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<sup>120</sup> 50 C.F.R. § 226.216(a) (defining critical habitat for elkhorn and staghorn); 50 C.F.R. § 226.230(c) (defining critical habitat for Caribbean Boulder Star Coral, Mountainous Star Coral, Pillar Coral, and Rough Cactus Coral).

<sup>121</sup> 2020 Sand Bypass Project BiOp at 64 (citing Babcock and Smith (2000)); *see also* 50 C.F.R. §§ 216.226(a), 226.230(c).

<sup>122</sup> 2025 Sand Bypass Project BiOp at 57 (emphasis added).

<sup>123</sup> 2020 Sand Bypass Project BiOp at 51 (“Effects of the action are defined as including all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is considered to be caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (50 C.F.R. 402.02).”).



text of the ESA and is unlawful because the “reasonably certain to occur” language contradicts the ESA’s clear statutory requirements that NMFS use the best scientific data available and determine whether jeopardy is “likely” (rather than “reasonably certain”—a much higher bar).<sup>124</sup> Specifically, the definition unlawfully “ensures that categories of evidence are removed from consideration before the Services analyze the likelihood of jeopardy or harm,”<sup>125</sup> which cuts directly against the ESA’s mandate to use the “best scientific and commercial data available.”<sup>126</sup> NMFS’s application of this unlawful, vacated regulation substantively undermines NMFS’s biological opinions because it precluded NMFS from considering all of the best available science, as required by the ESA.

Upon reinitiating consultation, NMFS must apply the now-reinstated regulations that were in existence before the unlawful 2019 regulatory revisions were made, which define “effects of the action” as:

direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.<sup>127</sup>

NMFS also applied an invalidated and vacated regulatory definition of “destruction or adverse modification.” In the 2025 biological opinion, NMFS explained that it defined “destruction or adverse modification” as follows:

NMFS’s regulations define *destruction or adverse modification* to mean “a direct or indirect alteration that appreciably diminishes the value of critical habitat *as a whole* for the conservation of a listed species” (50 CFR 402.02). . . . NMFS will

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<sup>124</sup> *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, 2026 U.S. Dist. LEXIS 68386, at \*30. The court also found that the Service’s regulation was arbitrary and capricious because it was not reasonably explained. *Id.* at \*40.

<sup>125</sup> *Id.* at \*33–34.

<sup>126</sup> 16 U.S.C. § 1536(a)(2).

<sup>127</sup> 50 C.F.R. § 402.02 (2018); see *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, 2026 U.S. Dist. LEXIS 68386, at \*72 (“The Court vacates the definitions of ‘effects of the action’ and ‘destruction or adverse modification,’ 50 C.F.R. § 402.02, and reinstates the versions in effect before the problematic revisions were made in 2019.”).

generally conclude that a federal action is likely to “destroy or adversely modify” critical habitat if the action results in an alteration of the quantity or quality of the essential physical or biological features of critical habitat and if the effect of the alteration is to appreciably diminish the value of critical habitat as a whole for the conservation of the species.<sup>128</sup>

The 2020 biological opinion also uses this invalidated definition.<sup>129</sup> As Judge Tigar explained, the “as a whole” language in the regulation “authorizes piecemeal diminution of critical habitat, which, by definition, has already been deemed ‘essential.’”<sup>130</sup> This cuts against “[t]he statutory text, [which] by contrast, prohibits adverse modification entirely.”<sup>131</sup> Although NMFS claimed in the 2025 biological opinion that “[d]estruction or adverse modification does not depend strictly on the size or proportion of the area adversely affected,” it clearly explained that it measured its determination against “the function of the *overall critical habitat designation*.”<sup>132</sup> However, even stated another way, this comparison to the function of the critical habitat designation as a whole “imposes a significant restriction on the statutory language of the ESA.”<sup>133</sup> In fact, it was precisely this comparison—and NMFS’s opinion that the destruction affected “a very small portion of the Florida Area Unit of critical habitat”—that led NMFS to “conclude that . . . the proposed action will not appreciably diminish the conservation value of designated critical habitat in the Florida unit for lobed star, mountainous star, boulder star, pillar, and rough cactus coral.”<sup>134</sup> NMFS’s interpretation of the ESA cuts directly against the ESA’s statutory mandate to prohibit adverse modification entirely, and because NMFS’s determination in the 2025 biological opinion is based on this unlawful standard, it is arbitrary and unlawful.

Upon reinitiating consultation, NMFS must apply the now-reinstated regulations that were in existence before the unlawful 2019 regulatory revisions were made, which define “destruction or adverse modification” as “a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species.”<sup>135</sup> NMFS used unlawful regulatory standards that violated the ESA’s clear statutory mandates when it formulated the biological opinions for the Project. This legal error substantively affected the outcome of key analyses in the opinions, including the jeopardy determinations, the destruction or adverse modification determinations, and the incidental take statement. Consequently, the Corps cannot proceed with the Project in reliance on the erroneous biological opinions, and NMFS must revise its analysis using lawful regulatory standards.

<sup>128</sup> 2025 Sand Bypass Project BiOp at 73 (emphasis added).

<sup>129</sup> 2020 Sand Bypass Project BiOp at 75.

<sup>130</sup> *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, 2026 U.S. Dist. LEXIS 68386, at \*46.

<sup>131</sup> *Id.*

<sup>132</sup> 2025 Sand Bypass Project BiOp at 73 (emphasis added); *see also* 2020 Sand Bypass Project BiOp at 75.

<sup>133</sup> *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, 2026 U.S. Dist. LEXIS 68386, at \*47.

<sup>134</sup> 2025 Sand Bypass Project BiOp at 74.

<sup>135</sup> 50 C.F.R. § 402.02 (2018).

**E. The Corps has violated ESA Section 9 because the Project is likely taking staghorn coral and the incidental take statement is invalid and cannot shield the agency from liability.**

The ESA prohibits any person from “taking” endangered species<sup>136</sup> and imposes civil or criminal liability for those who violate this prohibition.<sup>137</sup> The ESA defines take, in relevant part, to mean “harass, harm, . . . wound, [or] kill.”<sup>138</sup> However, the ESA “provides an escape hatch” from liability for take if the take “*is in compliance* with the terms and conditions specified’ in an [incidental take statement].”<sup>139</sup> But if the terms and conditions are “disregarded,” this escape hatch is no longer valid and “the action agency or the applicant may be subject to potentially severe . . . penalties.”<sup>140</sup> The ITS also loses validity when “an action agency does not reinstate consultation” after “the failure of promised conservation measures.”<sup>141</sup> The 2020 biological opinion’s incidental take statement for staghorn coral is invalid for both these reasons.

First, the Corps failed to reinstate consultation after the permittee broke its conservation commitment to prohibit overflow.<sup>142</sup> Second, the Corps failed to comply with the terms and conditions of the ITS. Specifically, NMFS included an incidental take statement for staghorn coral, authorizing the lethal take of 224 staghorn coral colonies and the nonlethal take of 561 colonies in the 2020 biological opinion.<sup>143</sup> NMFS specified a list of reasonable prudent measures (RPMs) the agency deemed necessary to minimize the impact of this incidental take as well as associated terms and conditions the Corps must comply with to implement those RPMs.<sup>144</sup>

Term and Condition 9 for the Sand Bypass Project requires:

USACE shall ensure that the applicant coordinates the preconstruction survey event is with NMFS and USACE. NMFS staff shall attend the initial survey dive to provide training and guidance on the implementation of the Sediment Monitoring Protocol. If it is determined during the initial survey dive that the Sediment Monitoring Protocol is not practicable within the action area then changes to the protocol will be discussed and determined by NMFS, USACE, and the applicant. (RPM 6).<sup>145</sup>

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<sup>136</sup> 16 U.S.C. § 1538(a)(1)(B).

<sup>137</sup> *Id.* § 1540.

<sup>138</sup> *Id.* § 1532(19).

<sup>139</sup> *Ctr. for Biological Diversity v. Regan*, 734 F. Supp. 3d 1, 20 (D.C. Cir. 2024), judgment entered, 729 F. Supp. 3d 37 (D.C. Cir. 2024), and *aff’d sub nom. Ctr. for Biological Diversity v. Zeldin*, No. 24-5101, 2026 WL 850257 (D.C. Cir. Mar. 27, 2026).

<sup>140</sup> *Ariz. Cattle Growers’ Ass’n v. U.S. Fish & Wildlife, Bureau of Land Mgmt.*, 273 F.3d 1229, 1239 (9th Cir. 2001).

<sup>141</sup> *Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 698 F.3d 1101, 1115 (9th Cir. 2012).

<sup>142</sup> 2026 Letter from Andrew Strelcheck at 3.

<sup>143</sup> 2020 Sand Bypass Project BiOp at 72–74.

<sup>144</sup> *Id.* at 80–83.

<sup>145</sup> *Id.* at 82.

Available information indicates the Corps failed to implement this term and condition prior to the onset of construction by neglecting to coordinate a pre-construction survey event with NMFS. Per e-mail communications between Miami Waterkeeper and Mr. Andrew Strelcheck on March 5, 2026:

NMFS was not coordinated with to participate in a pre-construction survey event. We have inquired with the USACE regarding this matter and requested the resulting reports and survey data. We recommend you direct your inquiry to the USACE and FL DEP.<sup>146</sup>

This email indicates that NMFS was not present to “provide training ... on the implementation of the Sediment Monitoring Protocol” or to determine if “changes to the protocol” were needed for effective implementation.<sup>147</sup> Moreover, this failure to abide by Term and Condition 9 also undermines other terms and conditions, including Term and Condition 8, which states, “USACE shall ensure that pre- and post-construction sediment monitoring is completed at sites 1, 2, 4, 33, and 34 *in accordance with the Sediment Monitoring Protocol (Appendix C) (RPM 6).*”<sup>148</sup> However, if that protocol has not been vetted by the expert agency, as the biological opinion required, it is less likely this required monitoring will be effective.

This failure to comply with the biological opinions’ terms and conditions means that the Corps could be liable for take of staghorn coral if such take occurs. And it is likely that take is occurring.

Based on the erroneous assumption that sediment accumulation would likely be less than 1.5 mm at multiple sites within the Project area (including sites 2, 33, and 34 as marked at Figure 13 of the 2020 biological opinion),<sup>149</sup> NMFS and the Corps decided to leave staghorn colonies *in situ* at these locations rather than relocating them.<sup>150</sup> Available evidence demonstrates that staghorn are likely being harmed by the Project. For example, the closest sediment monitoring stations to these sites where staghorn were left *in situ*, appear to be Station 1, Station 2, Station 38, and Station 34. As discussed above, sediment monitoring demonstrates that average sediment accumulation has exceeded this predicted level at least at Station Transect 34, which seems to be located at or near site 34 where staghorn remain *in situ*.<sup>151</sup> Sediment monitoring from January 24, 2026, showed an average increase of sediment of 4 mm at Station Transect 34, with some areas of the transect receiving up to 5 cm (50 mm).<sup>152</sup> And the Florida Department of

<sup>146</sup> E-mail communication between Jessica Ganim, Environmental Policy Specialist (Miami Waterkeeper) and Andrew Strelcheck, Regional Administrator (NMFS Southeast Regional Office), dated March 5, 2026.

<sup>147</sup> 2020 Sand Bypass Project BiOp at 82.

<sup>148</sup> *Id.* (emphasis added).

<sup>149</sup> 2025 Sand Bypass Project BiOp at 58.

<sup>150</sup> 2020 Sand Bypass Project BiOp at 80.

<sup>151</sup> Minimization, Mitigation, and Monitoring Plan at 55, 56.

<sup>152</sup> See Attachment 1, mean difference sediment depth measurements for ST34 (tabs *SedimentDepth\_MeanData* & *SedimentDepth\_RawData*), downloaded from the Florida Department of Environmental Protection, <https://dep-file->

Environmental Protection's Site Inspection Report, shows that Station 1 and Station 2 are also showing signs of impacts from dredging, with organisms at Station 1 exhibiting signs of stress.<sup>153</sup> This evidence indicates that staghorn left *in situ* at Sites 2 and 34 could also likely be experiencing harm from dredge related sediment.

Under the ESA "take" includes "harm",<sup>154</sup> which NMFS defines as "significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering."<sup>155</sup>

Even low levels of sedimentation may impede the survival and settlement of coral larvae, thereby impairing coral reproduction and inhibiting coral recruitment. The burial of substrate under 0.4 cm of fine sediment can "cause drastic decreases in larval settlement and recruit survival,"<sup>156</sup> the necessary process for new corals to attach to hard substrate and grow. Burial under 0.2 cm of fine sediment can even reduce settlement probability or inhibit it entirely for species like staghorn.<sup>157</sup> Moreover, older coral recruits that do manage to settle in these conditions still have higher mortality rates than those on sediment-free substrate,<sup>158</sup> and obstruction by surrounding sediments can impair the growth of settled recruits into adults.<sup>159</sup> Likewise, corals that asexually reproduce through fragmentation will be unable to re-attach to a substrate with sedimentation. Consistently, NMFS asserts that hardbottom levels of "fine" sediment less than 0.5 cm "is not functioning as recruitment habitat for corals, including staghorn corals."<sup>160</sup> Staghorn left *in situ* may already be experiencing this level of sediment exposure and thus are likely subject to unlawful take. In addition, sediment can introduce or exacerbate disease and smother corals through burial, which would also constitute take.

The Project is likely taking staghorn coral. Moreover, the ITS no longer shields the Corps from liability for this take because the Corps failed to comply with the terms and conditions of the ITS and because the Corps failed to reinitiate after conservation commitments were broken. As a result, the Corps is violating ESA Section 9.

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[portal.dep.state.fl.us/public/folder/4carqwyoduirml0wtowvg/0289308\\_PE\\_Sand\\_Bypass](https://portal.dep.state.fl.us/public/folder/4carqwyoduirml0wtowvg/0289308_PE_Sand_Bypass), password provided to Miami Waterkeeper.

<sup>153</sup> Florida Department of Environmental Protection, Site Inspection Report for the Port Everglades Inlet Sand Bypassing Project (May 12, 2026) at 5, 11.

<sup>154</sup> 16 U.S.C. § 1532(19).

<sup>155</sup> 50 C.F.R. § 222.102.

<sup>156</sup> Victor Rodriguez-Ruano et al., *Understanding the effects of sediment on coral settlement and coral recruits*, Florida DEP, Internal Report 1-23 (2024); see also Victor Rodriguez-Ruano et al., *Assessing the effects of sediment grain size on coral settlement and recruit survival across multiple Caribbean species*, Florida DEP, Internal Report 1-29 (2025).

<sup>157</sup> Rodriguez-Ruano et al. (2025).

<sup>158</sup> Rodriguez-Ruano et al., at 15 (2024).

<sup>159</sup> Rodriguez-Ruano et al., at 4 (2025).

<sup>160</sup> NMFS, Examination of Sedimentation Impacts to Coral Reef along the Port of Miami Channel Entrance Channel at 48 (2016).

## VI. CONCLUSION

The Corps is violating ESA Section 7 by failing to reinstate consultation after 1) the Project was subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the biological opinion and 2) the Corps learned of new information revealing that the effects of the Project may affect listed species and critical habitat in a manner or to an extent not previously considered. Subsequent changes to the project design and new information render key assumptions in the biological opinions that NMFS used to determine no jeopardy and no adverse modification for coral and conch erroneous and invalid, and the Corps' continued reliance on these opinions, without reinstatement, violates ESA Section 7. In addition, even absent new information, the Corps' reliance on the biological opinions violates ESA Section 7 because NMFS's analyses and conclusions in the opinions are arbitrary, irrational, and not based on the best available science. Finally, the Corps is violating ESA Section 9 because the Project is likely taking staghorn coral and the incidental take statement cannot shield the Corps from liability.

Sincerely,

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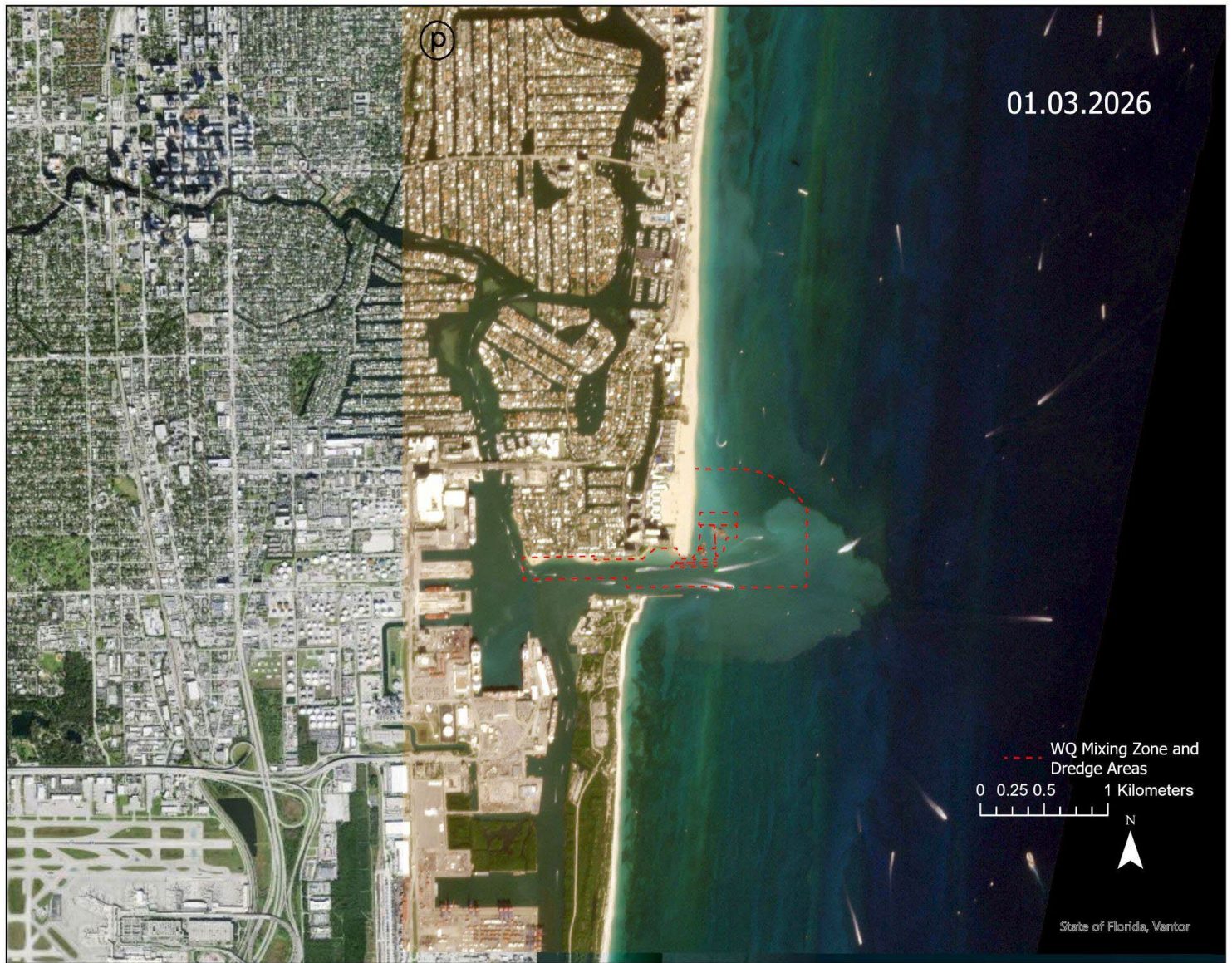


## **APPENDIX A**



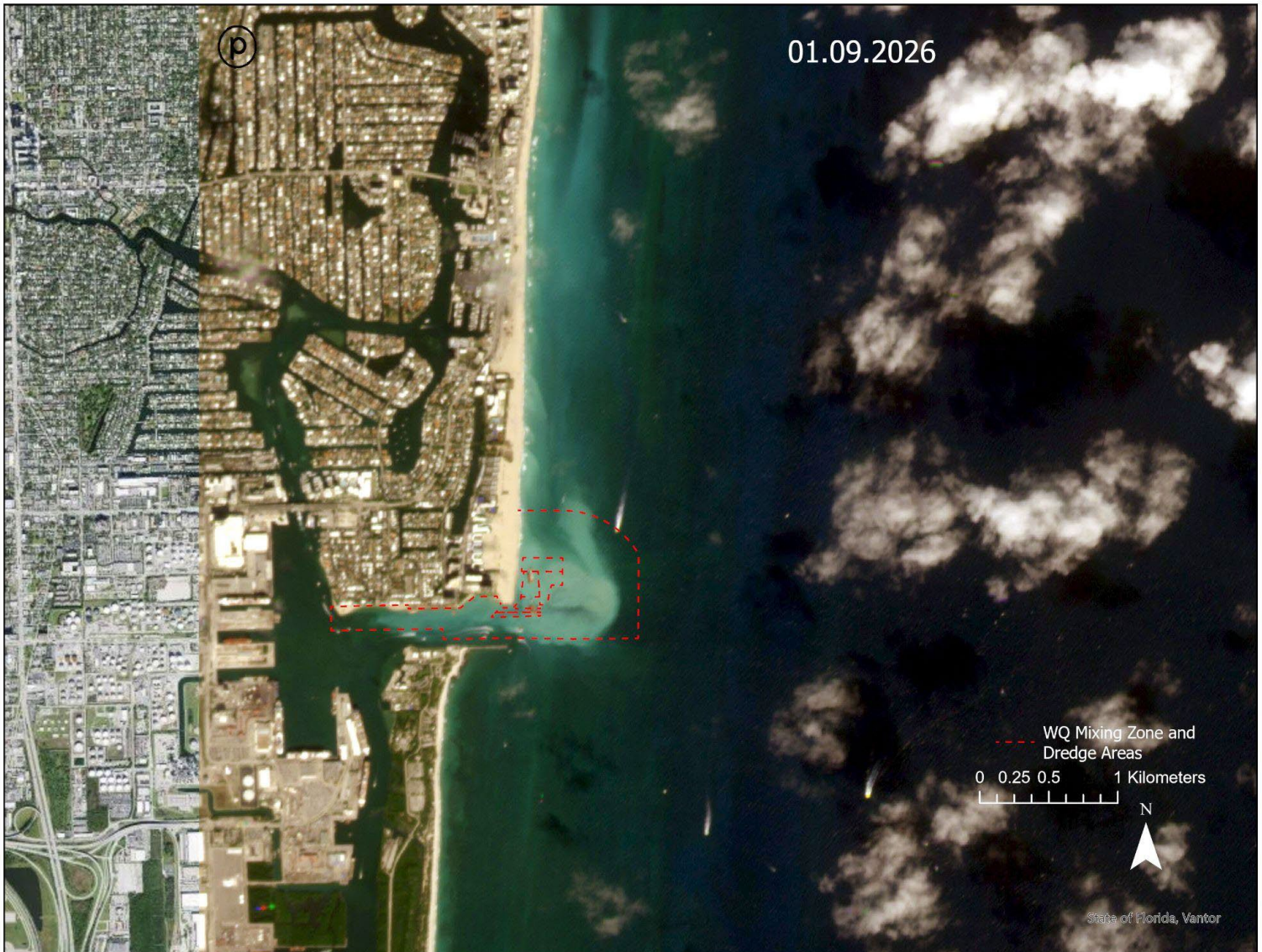
*Figure 1A. Satellite showing extent of sediment plume relative to the Sand Bypass project initial construction mixing zone, taken on December 27, 2025 at 11:30 am ET. Imagery is derived from SuperDove true-color data. The approximate distance from the northern edge of the mixing zone boundary to the visible northern edge of the plume is greater than 2,100 meters.*





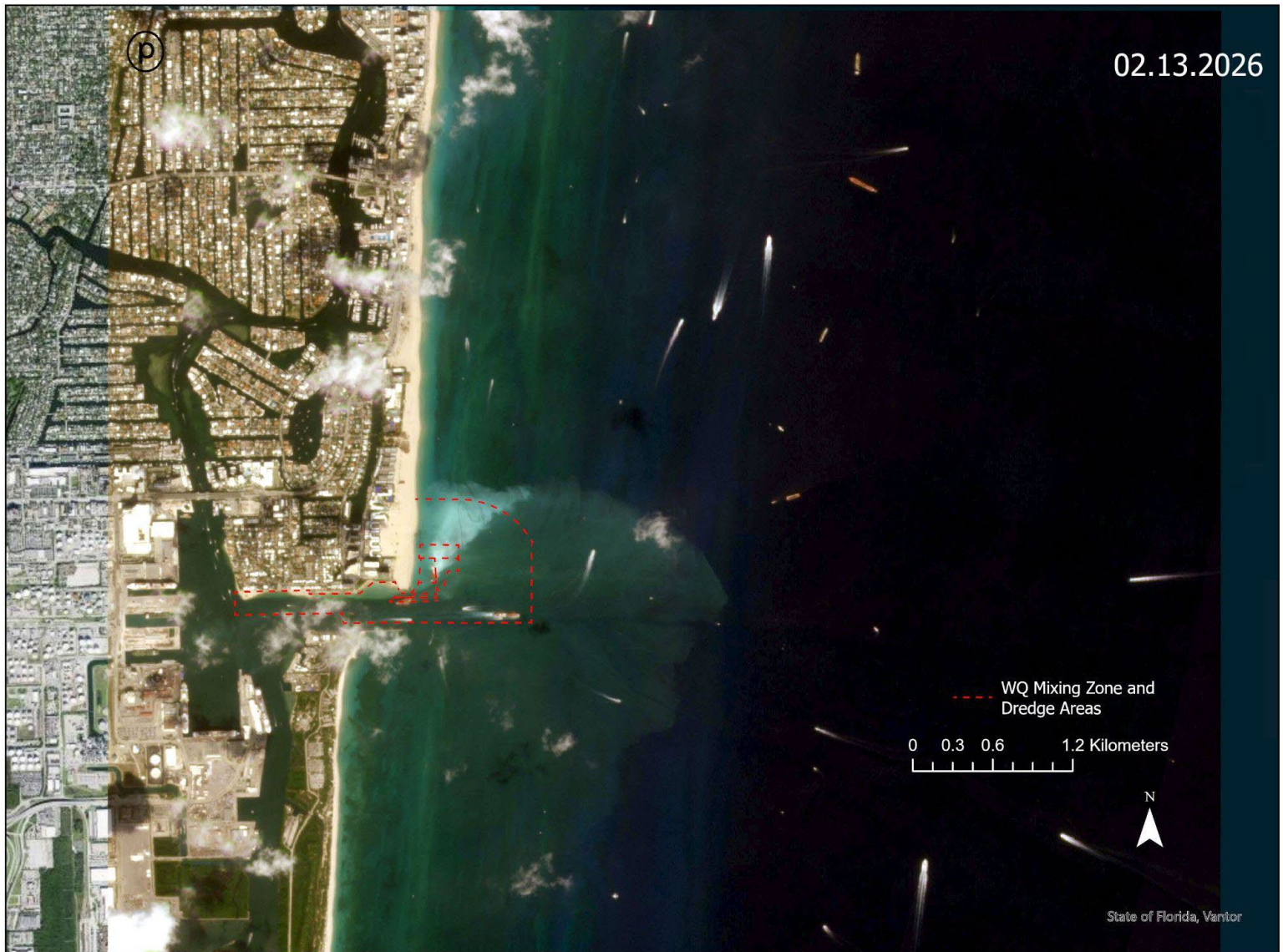
*Figure 2A. Satellite showing extent of sediment plume relative to the Sand Bypass project initial construction mixing zone, taken on January 3, 2026 at 11:28 am ET. Imagery is derived from SuperDove true-color data. The plume is observed travelling approximately 300-600 meters beyond the eastern edge of the mixing zone and approximately 500 meters beyond the southern edge of the mixing zone.*





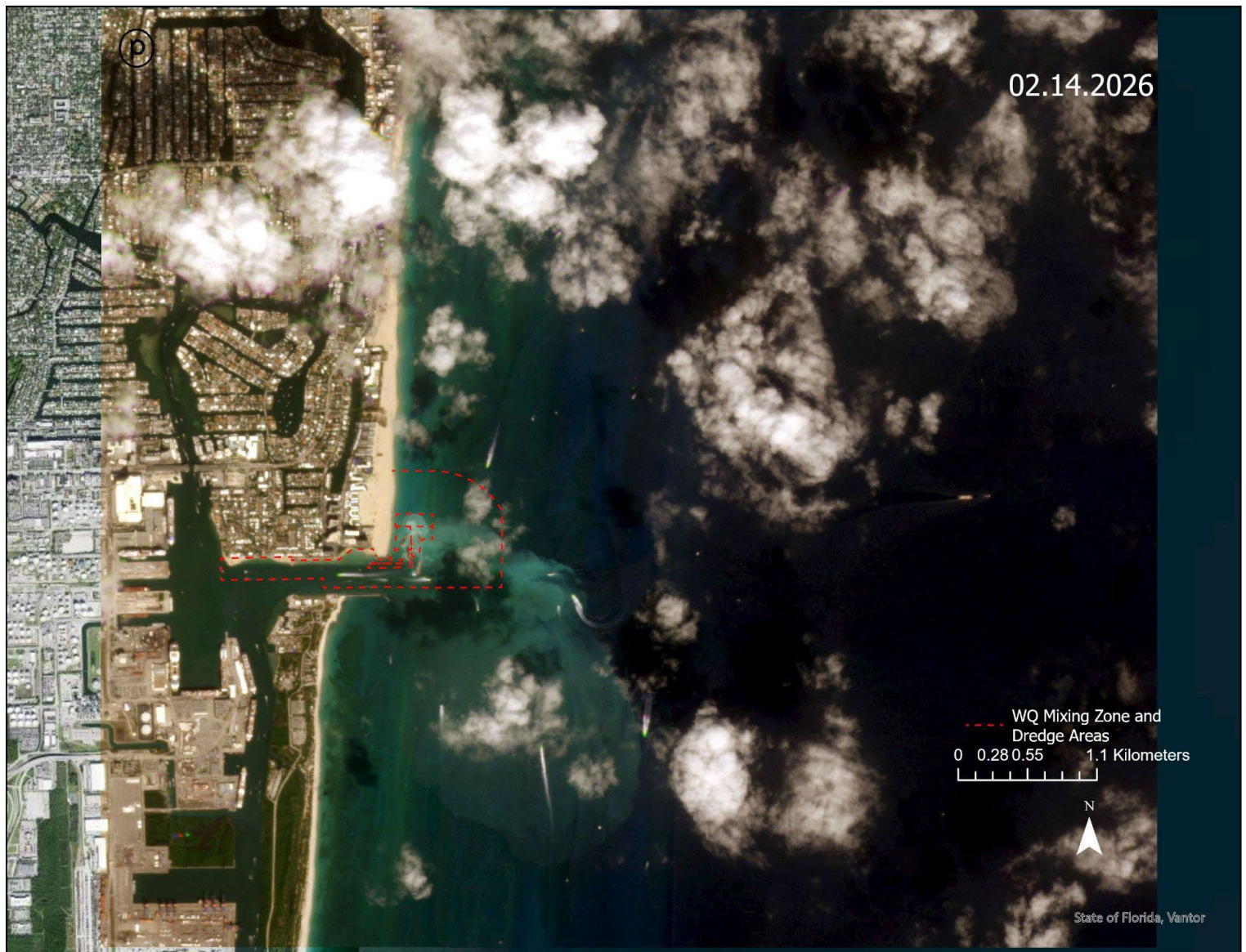
*Figure 3A. Satellite showing extent of sediment plume relative to the Sand Bypass project initial construction mixing zone, taken on January 9, 2026 at 11:44 am ET. Imagery is derived from SuperDove true-color data. The approximate distance from the northern edge of the mixing zone boundary to the visible northern edge of the plume is greater than 3,500 meters.*





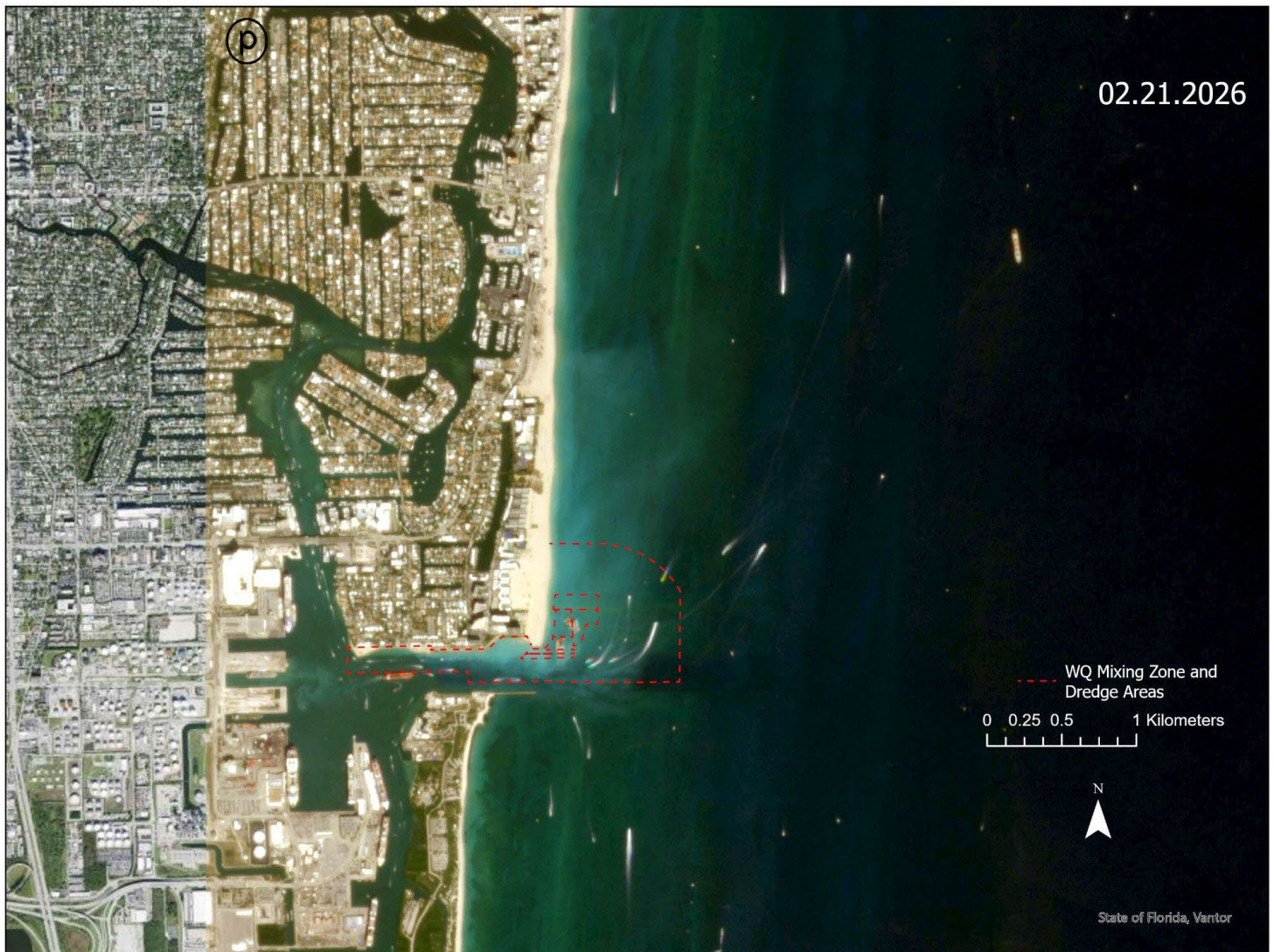
*Figure 4A. Satellite showing extent of sediment plume relative to the Sand Bypass project initial construction mixing zone, taken on February 13, 2026 at 11:57 am ET. Imagery is derived from SuperDove true-color data. The visible extent of the plume appears to be traveling approximately more than 1,300 meters beyond the eastern edge of the mixing zone.*





*Figure 5A. Satellite showing extent of sediment plume relative to the Sand Bypass project initial construction mixing zone, taken on February 14, 2026 at 11:35 am ET. Imagery is derived from SuperDove true-color data. The sediment plume is visible extending approximately 500 meters east and over 1,800 meters south of the mixing zone boundaries.*





*Figure 6A. Satellite showing extent of sediment plume relative to the Sand Bypass project initial construction mixing zone, taken on February 21, 2026 at 11:27 am ET. Imagery is derived from SuperDove true-color data. The approximate distance from the northern edge of the mixing zone to the visible northern edge of the plume is over 1,200 meters.*





*Figure 7A. Satellite showing extent of sediment plume relative to the Sand Bypass project initial construction mixing zone, taken on March 10, 2026 at 11:42 am ET. Imagery is derived from SuperDove true-color data. The approximate distance from the northern edge of the mixing zone boundary to the visible northern edge of the plume is greater than 2,500 meters.*