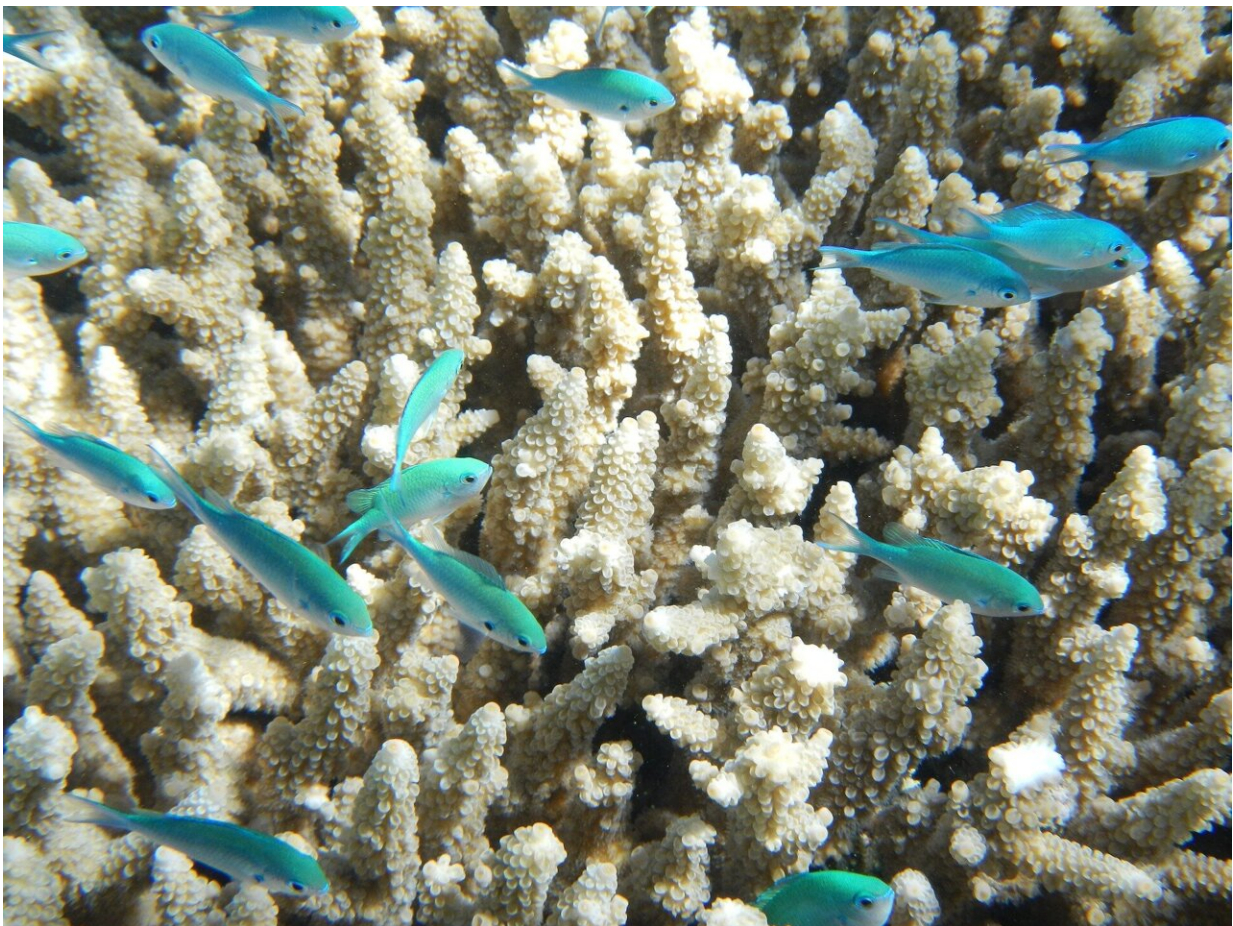


# PortMiami dredging killed 80 times more coral than expected. More digging coming soon

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When the U.S. Army Corps of Engineers first set out to deepen PortMiami to make room for bigger and more ships in 2013, it estimated all that work would kill about 3.3 acres of corals.

A new report from the National Oceanic and Atmospheric Administration found the toll was exponentially greater—278 acres of [coral](#) reef gone forever.

The report, released last week, confirms suspicions that were raised even before the Corps started chopping away at the rock underbelly of the busiest cruise port in the world. All that activity raised clouds of sand and dirt that smothered corals—and may have led to or exacerbated the outbreak of a terrible disease that's since killed corals all over the Caribbean.

And yet, eight years after the project officially finished, no agency has been held accountable for destroying nearly 300 acres of coral, although Miami-Dade County could be on the hook for it. And more South Florida dredging is on the way.

PortMiami is gearing up for the next phase of its dredging project, one that could cover even more ground than the 2013 project. And Port Everglades, in Broward County, is well underway on its own dredging project, which it now estimates could also kill a similar number of corals.

"At this point, I think it's safe to say that more money has been spent planning the next dredging project than fixing the last one," said Rachel Silverstein, head of Miami Waterkeeper and a longtime foe of PortMiami dredging.

She and her organization sued over the project and successfully got 10,000 corals replanted to replace the million or more she estimated

were killed by the dredging.

"That's a drop in the bucket in terms of the total scale of the impact that was done," Silverstein said. "This gaping wound in the reef has been sitting unanswered for almost a decade. It is beyond time we fix it."

## Who pays for it?

The NOAA report's record of the damage from the dredging project is more than just an accounting of the environmental losses from [economic expansion](#), it could also mean a financial penalty to the taxpayers of Miami-Dade.

The Army Corps of Engineers was in charge of the dredging project, but its "local sponsor" was Miami-Dade County. So while the Corps was the one who hired the company to dredge—and monitor the corals—Miami-Dade signed a 2012 local sponsor agreement to handle the additional coral monitoring required by law after the project finished.

The document states Miami-Dade is responsible for "meeting the mitigation success criteria or any associated additional mitigation that may be necessary."

Silverstein said that, according to the county's permit, anything that remains damaged a year after a project is completed is considered [permanent damage](#), and state and federal rules require someone to fix it, usually by paying for mitigation.

The NOAA report does conclude that "compensatory mitigation is essential to jump-start recovery of this invaluable ecosystem."

But NOAA isn't in charge of determining what's permanently damaged, Florida's Department of Environmental Protection is. And DEP has yet

to complete its survey of the damage.

DEP did not respond to the Herald's questions of why it hasn't finished the survey work after nearly a decade, whether it would come after Miami-Dade to fix the problem or how much it would consider charging for the damage. But last June, in a meeting with several agencies including the county and Waterkeeper, DEP said its preliminary estimate showed 213 acres of corals smothered by sediment.

The price tag for fixing that much damage could be high.

One estimate, used by the Army Corps for mitigation costs in Port Everglades in 2016, pegged the cost of replacing an acre of reef at about a million dollars, using an arguably less effective method of replacing reefs. With NOAA's estimate, or even the state's early findings, that could potentially leave Miami-Dade on the hook for more than \$200 million—or more.

Miami-Dade declined to comment on its legal or [financial responsibility](#) for the damage, and instead sent a statement from Mayor Daniella Levine Cava, who said she advocated for increased monitoring during her time as a commissioner, while the project was ongoing.

"My priority is and will continue to be safeguarding our environment—which is inextricably linked to our economy and future prosperity—and ensuring sustainable growth for our community," she said. "I'm deeply concerned about the damage of coral colonies and committed to learning everything we can about what took place and where we go from here."

Levine Cava said her staff is reviewing the report and speaking with DEP about next steps.

But it isn't guaranteed that DEP will come after Miami-Dade for a hefty check. In some cases, like in Fort Lauderdale after its dilapidated and saltwater corroded sewage pipes burst and spewed filth into local waterways, the state turned the mandatory fines for the city into a demand for a list of projects to fix the problem.

Silverstein said she'd like to see the same thing in this situation. She sees this amount of funding as a potentially "transformative" source of money to ramp up coral reef restoration in South Florida.

"Rather than a penalty or an enforcement action, we want to see something truly positive out of this and see funding go toward helping the coral restoration community," she said. "We need to be able to restore millions, if not tens of millions or hundreds of millions, of coral in a year."

"The time has come to scale it to industrial levels."

## **Future dredging**

The NOAA report noted that lessons learned from the 2015 PortMiami dredging project are already being worked into other dredge projects, like PortMiami's and Port Everglades' latest expansions.

"The development of additional lessons learned and translation to dredging project best practices near coral reefs or other sensitive habitats is warranted," the report said. "Future port expansions cannot further contribute to the downward trajectory of the condition of Florida's coral reef and must be in the public interest."

Phase IV of PortMiami's dredging project has only just begun and is in the planning stage. Officials don't yet have an estimate for how many corals could be hurt by the project, which has four times the footprint of

the Phase III project.

Port Everglades' project is much further along. Earlier this year, the Corps said in a presentation that it expects the Port Everglades dredging project to directly kill about 449,000 corals. That includes about 26 acres of coral habitat directly killed by digging and anywhere from 124 to 177 acres smothered by sediment.

The Corps told restoration companies it would likely need to replant anywhere from 498,000 to 720,000 corals—with 100,000 to 500,000 coming from the coral nurseries dotting South Florida's coast.

That might be a tall order for Florida's nascent coral nursery market, especially after a summer of "apocalyptic" bleaching and death.

The biggest producer in South Florida, Coral Restoration Foundation, said it makes 45,000-50,000 "reef-ready" corals every year, each about the size of a hand. University of Miami's Rescue A Reef program said it can produce about 5,000 corals a year, but that can be scaled up with additional funding.

"No one in the field right now can handle coral restoration of that size," Silverstein said. "And if we don't have the ability to phase up coral restoration to meet the mitigation needs for these projects, there will be a [dredging](#) moratorium."

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