Sanctuary protections put oil over coral

By Emily Foxhall *STAFF WRITER*

Godofredo A. Vásquez / Staff photographer

G.P. Schmahl, superintendent of the Flower Garden sanctuary, pushed for wider protections.

Emma Hickerson was working in a College Station dive shop when a graduate student came in, looking for help counting fish around a group of coral. Hickerson had grown up in Australia. What could the muddy Gulf of Mexico offer? But she volunteered for the job.

Hickerson studied zoology at Texas A&M University. She's now the research coordinator for the federal sanctuary that protects the coral she saw. The spot hooked the Australian, and her work exploring the imperiled undersea habitats in the 30 years since fueled an effort to protect more.

A plan to expand the sanctuary to 14 other places where coral and other animals live is expected to take effect this month. Some cheer it as a victory, but it falls short of wider protections Hickerson and her colleagues hoped for against activities such as fishing and oil exploration. Hickerson felt decision-makers didn't fully take her research into account.

"It was a gut punch," Hickerson said.

The Flower Garden Banks National Marine Sanctuary, where Hickerson works, currently protects three batches of coral about 100 miles offshore of the Texas coast. It's the only sanctuary centered in the Gulf (another sits in the Florida Keys), and its coral are in relatively good health. Coral reefs are an important part of the marine ecosystem: They support many ocean species, help the ocean produce oxygen, are a source of pharmaceutical ingredients and help many economies through tourism.

"You think about trying to protect as much as we can now," said G.P. Schmahl, the sanctuary's superintendent .

So the scientists used improving technology to document what was in the sanctuary and beyond. A string of salt domes push up the sea floor, forming small underwater mountains, where coral grow and oil and gas can be found. Hickerson helped discover a coral named for her: Distichopathes hickersonae.

They built a case for other areas to protect from the effects of commercial activity. Traps, nets and marine debris can damage coral. Oil and oil dispersants can be deadly to coral. Fuel and other materials

from boats and equipment used for fishing and for oil and gas exploration and extraction can harm coral.

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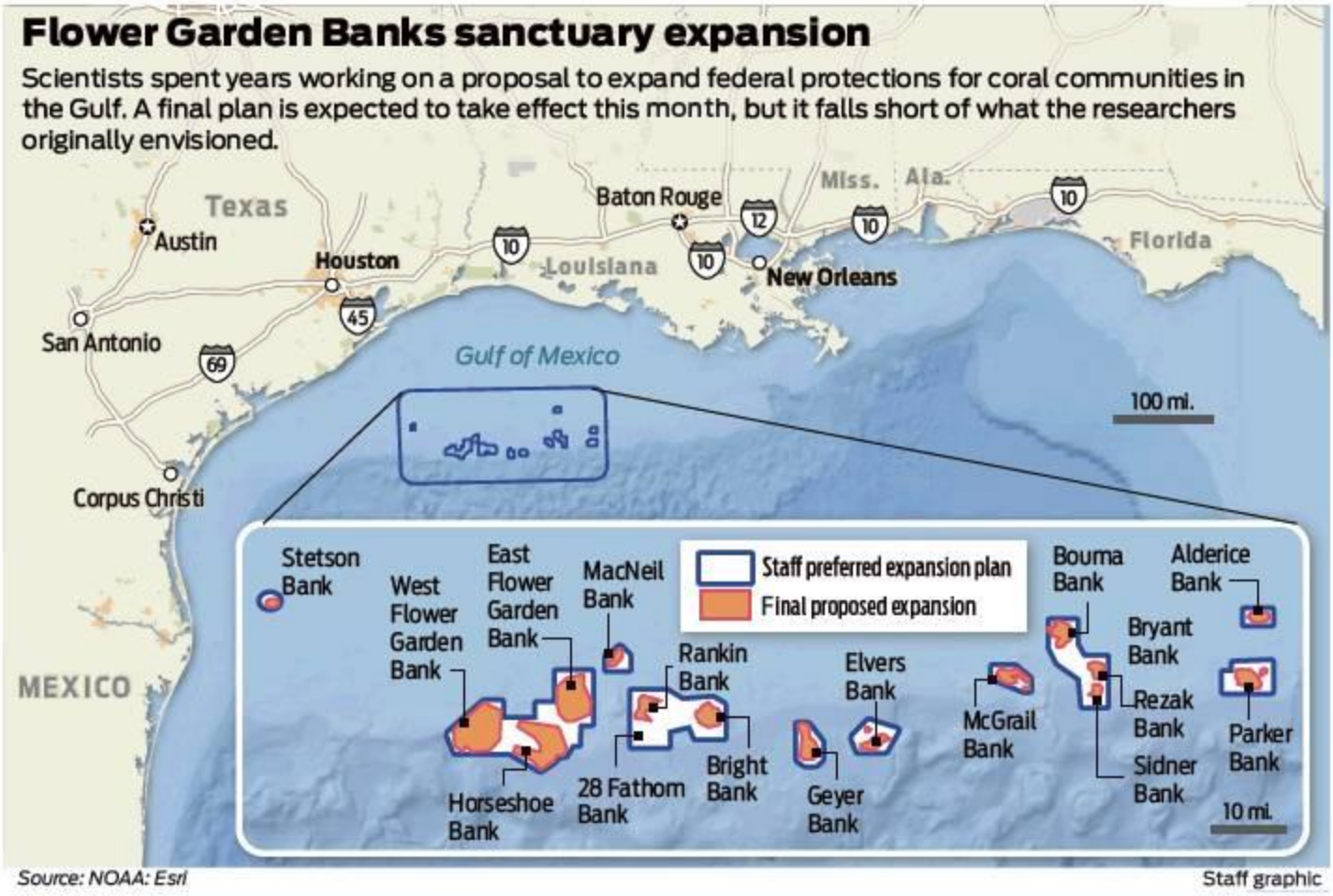
Karol Breuer, center, and Justin Blake feed a winch cable through a pulley that goes on a research vessel, which helps maintain the Flower Garden Banks National Sanctuary in the Gulf of Mexico.

Warming ocean temperatures, overfishing and disease are harming coral worldwide. But those in and out the sanctuary are buffered in part by being in deep water, far from shore. While scientists can't save them from progressing climate change, they can shield more from anchors and drilling.

They accepted input from stakeholders such as fishermen, conservationists and representatives of oil and gas. For some, expansion meant potential lost revenue. Fishermen would have to moor boats rather than anchor them. Oil and gas companies would face more restrictive and costly leases.

The stakeholder group preferred a whittled-down plan that mirrored the boundaries of oil restrictions already in place



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“There is a balance because we do derive so many benefits from the ocean and from the Gulf of Mexico,” said Brent Greenfield, executive director of the National Ocean Policy Coalition, which advocates for fishing, energy and other interests. “Achieving that balance is made all the more important, given those existing opportunities, as well as opportunities in the future.”

‘A waiting game’

Industry and fishing representatives praised the final result as compromise. Environmentalists begrudgingly accepted it. The National Oceanic and Atmospheric Administration pushed the agreed-upon plan ahead, publishing the proposal one day before Joe Biden took office as president and starting the clock on 45 continuous session days for Congress to review it.

“It’s a waiting game for us now,” Hickerson said.

Hickerson’s first dive in what is now the sanctuary took place Oct. 11, 1993. After that, she dove there regularly, learning the fish and coral. She hired a babysitter for her daughter so she could volunteer for the sanctuary. She focused her graduate work on sanctuary sea turtles. She felt endless curiosity to discover.

In 1999, Hickerson was working full time for the sanctuary and Schmahl took over as superintendent. Schmahl studied marine biology in Florida, awestruck by the beauty of coral and fascinated by

organisms with such different ways of life. He worked for a suffering sanctuary there before arriving in Texas.

The duo and other staff built on the work of Tom Bright, the so-called father of the Flower Gardens. Bright studied the area from a two-man submarine in the 1970s when federal officials asked Texas A&M, where he taught oceanography, for help determining what to protect as offshore exploration expanded.

Bright's research then informed the designation of oil and gas "no-activity zones," he said. Congress established the sanctuary in 1992 to protect two areas further, East and West Flower Garden Banks. Both were well-known, impressive reefs — "model banks," Bright calls them. Congress added Stetson Bank to the sanctuary in 1996.

Hickerson and Schmahl had improved, detailed sea floor maps to guide them as they used one-person submarines and remotely operated vehicles. In the deeper water, they saw intricate sea whips, sea fans, algae and sponges. Compared with the hulking coral in shallower water, these coral looked like delicate trees. They're not considered coral reefs.

"Wow," Hickerson thought. "There's a lot more here that we need to learn about."

The idea grew to consider protecting these spots. An advisory council including volunteers from various interest groups gives input to the sanctuary. Around 2007, the group agreed it should be a priority to figure out what else might meet the threshold for being "nationally significant."

Hickerson's team measured the density of the coral and the animal diversity. Experts helped them identify unknown specimens. They stitched together a proposal by 2016.

Industry pushes back

The 2016 proposal caught Andy Radford off guard. A senior policy adviser for the American Petroleum Institute, a trade association, Radford said members of industry and the sanctuary had worked well together for years. But the new plan, in his view, went beyond parameters previously discussed. (Hickerson disagreed.) It wasn't what he expected, nor was he initially familiar with all the new data, he said.

Among Radford's concerns: How would they run pipelines from deeper in the Gulf? Should they expand so far from the original banks? Did the boundaries place excessive, unnecessary limits on further opportunity for exploration?

The association joined other industry groups in submitting an excoriating letter to Schmahl saying they did not support an expansion "due to the lack of scientific basis for benefits, expected high negative effects on the economy and energy production, and lack of justification to satisfy statutory requirements."

Advisory council members created a group to negotiate the friction. A commercial fisherman, Shane Cantrell, co-chaired it with Clint Moore, who co-founded GulfSlope Energy and represented oil and gas while also holding a passion for the place.

Cantrell runs a company called Galveston Sea Ventures. He wanted to find a way to allow people access to coral communities while also preserving them. (Moore died in 2019; his obituary mentions his dedication to the sanctuary.) Cantrell said science informed their decisions, but they did not adopt what scientists recommended.

Instead, members of the group pushed to see the boundaries be no larger than those “no-activity zones.”

What they settled on after numerous meetings was what Cantrell called a “phenomenal step” toward expanding the sanctuary in a realistic way. The plan will triple the sanctuary’s size, from 56 square miles to 160. The alternative that staff proposed would have expanded it to 383.

Recreational fisherman Scott Hickman said in support of the project, “Everybody’s got to give.”

Diver Jesse Cancelmo saw it differently. He’s visited what’s now the sanctuary since 1978. The final decision seemed to him less like a compromise and more like what they could get.

The negotiating process wasn’t based in science, said Joanie Steinhaus, a conservationist and sea turtle expert. Bright, the father of the banks, agreed politics swayed it. But even with the disappointment, he supported the final result. Schmahl and Hickerson too describe it as an important step.

They’d spent decades learning about this place, and not getting exactly what they wanted wasn’t going to stop their push to keep learning. Under the water were animals such as the damselfish, which stake out an area among coral, chasing away other fish so algae can grow. A friend of Schmahl’s studies them and by counting fish earbones was able to deduce some had tended their spots for nearly 20 years.

It shifted one’s perspective, Schmahl said.

“We are not in charge,” he said, “even though we think we are.” ***emily.foxhall@chron.com*** ***twitter.com/emfoxhall***