

Surfers Deal a Blow to a Beach Dredging Project

By Cornelia Dean
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Terry Gibson grew up surfing the waters off Palm Beach, Fla., and loved its beaches and prized breaks.

“The reefs here in this area, and the sand bars that attach to them, form these perfectly shaped waves,” he said. “When it’s good, it’s incredibly good.”

So when the Town of Palm Beach proposed a beach repair project that Mr. Gibson thought posed a threat to those prized breaks, he and other surfers challenged the project in court.

Last week they succeeded in blocking — at least temporarily, on environmental grounds — a strategy widely used against the beach erosion that threatens most of the nation’s coast and is accelerating as global warming fuels the rise of sea levels.

In ruling against the project, the administrative law judge who heard the case, Robert E. Meale, criticized its potential environmental effects and denounced as “worthless” some of the engineering behind it. Advocates of the project, a sand-pumping effort known as beach nourishment, called the ruling misguided and said they feared that if it held up it would drive coastal towns to remedies that are more environmentally dangerous, like constructing seawalls or other coastal armor.

But the surfers and their supporters were delighted.

“These things are claimed to be so beneficial, but not if you don’t do the due diligence,” said Ericka D’Avanzo, who surfs regularly on the beach, which is known as a center of competitive surfing where many champions have trained. She is the Florida regional manager for the Surfrider Foundation, an organization of surfers that backed the challenge. The Snook Foundation, a group of anglers, also joined.

The beach, a section of Palm Beach shoreline known as Reach 8, comprises a park owned by the nearby town of Lake Worth, which supported the surfers, and beaches immediately to the north and south.

“It’s one of the most beautiful areas to surf,” Ms. D’Avanzo said. “It’s like going to the Bahamas — how clear the water is and how much life there is at the reef.”

Mr. Gibson, the fishing editor of Outdoor Life magazine, said surfers also prize the beach because it offers relatively easy public access.

The Reach 8 project would be the latest in a number of beach nourishment efforts Palm Beach has made against its chronic erosion problem. As is typical, the project would involve dredging sand from offshore, mixing it with water and pumping it in a slurry onto the beach and into the nearby surf zone.

Like other critics of beach nourishment, the surfers and their allies argued that unless replacement sand is well matched to the beach, which is hard to do, the sand causes problems, interfering with nesting sea turtles and small animals like sand fleas that form the bottom of beach and marine food webs.

If the sand is too fine — a particular issue in this case — it can cause the water to become cloudy. And because the replacement sand moves around after it is pumped onto the beach, it can end up covering underwater rocks and coral reefs that are important to surfers, divers and anglers.

There are also growing worries about environmental damage where replacement sand is dredged. And the projects are heavily criticized because they often do not last as long as engineering models say they will.

Critics of such models were exultant at the judge's harsh language about them.

"I am absolutely exhilarated," said Orrin H. Pilkey, a coastal geologist at Duke University and a longtime critic of development in erosion hazard areas.

Robert S. Young, a coastal geologist who succeeded Dr. Pilkey as head of the Program for the Study of Developed Shorelines, now at Western Carolina University, said that the models "are really useless for prediction."

Dr. Young, who testified for the surfers, said in an interview that such beach projects were nevertheless rarely challenged. "For a small, underfunded group to have a permit pulled because the project was poorly designed and there is potential environmental damage — this is the first time," he said.

But Robert G. Dean, a coastal engineer at the University of Florida who testified for Palm Beach in the case, said in an interview that Florida offered abundant evidence for beach nourishment as an erosion remedy.

"This experiment has been done in Palm Beach County and it has been successful," Dr. Dean said. In the last 50 years, he said, beach nourishment has restored many heavily eroded Florida beaches, much to the benefit of the state and its economy.

He conceded that one model, called Genesis, used in planning the Reach 8 project displayed serious deficiencies in the design process, but said it had been abandoned in favor of another that worked better.

Anyway, Dr. Dean added, “whatever models may say, we have a demonstrated record of success on the east coast of Florida. Absolutely.”

Martha Collins, a lawyer who represented the surfers, said each side had 30 days to comment on the ruling, which would then go to Michael W. Sole, secretary of the Florida Department of Environmental Protection. Mr. Sole must accept or reject the ruling, in toto or in part, by June, she said.

Ms. Collins is not a surfer but said she decided to become an environmental lawyer when, as a high school student in Marco Island, on Florida’s west coast, she saw a beach nourishment project leave a beach she loved “more or less destroyed.” She said Judge Meale’s decision to bar the project on environmental grounds was a first.

Peter B. Elwell, the town manager of Palm Beach, said the Town Council would meet with lawyers who argued the town’s case “to review the options and prospects for appealing all or some of this decision.” Until then, Mr. Elwell said, “it would not be appropriate to talk about it.”

Dr. Dean said challenges like in the Palm Beach case would only make a bad situation worse, as people whose buildings are threatened turn instead to seawalls or other hard structures known to damage beaches.

Many communities that rely on sea walls or the like have seen their beaches vanish under rising waters.

Dr. Dean said he had spoken to the Palm Beach Shore Protection Board shortly before Judge Meale issued his decision.

“They are hell-bent on structures now,” he said. “Anything they try to do in the water, there is just so much weight lined up against them.”

A previous version of this article misstated Robert Young's middle initial. He is Robert S. Young, not Robert G. Young.