

ROLL, TIDE

GULF STATE PARK IN ALABAMA IS ONE OF THE LARGEST PUBLIC PROJECTS TO BE FUNDED THROUGH THE DEEPWATER HORIZON SETTLEMENT. MANY MORE ARE COMING.

BY JARED BREY

THE LODGE at Gulf State Park is built directly into the dunes, so when you walk from the parking lot into the spacious lobby, you're looking straight through the glass back wall of the hotel, across a stretch of white-sand beach, and out into the seemingly endless Gulf of Mexico.

For Alabama, whose precious few miles of beaches all but carry the state's tourism economy, this was the essential goal of the Gulf State Park Enhancement Project: A view of the sea for visitors and, says Matt Leavell, the director of design and planning at the University of Alabama Center for Economic Development, "an experience of being in the dunes."

But being in the dunes can mean a lot of things. In 2004, Hurricane Ivan swept across the dunes and destroyed the original lodge, which was built in the 1970s. In 2010, tar balls washed onto the beach as oil gushed from an underwater well operated by BP after the explosion of the Deepwater Horizon drilling rig, which killed 11 workers. The

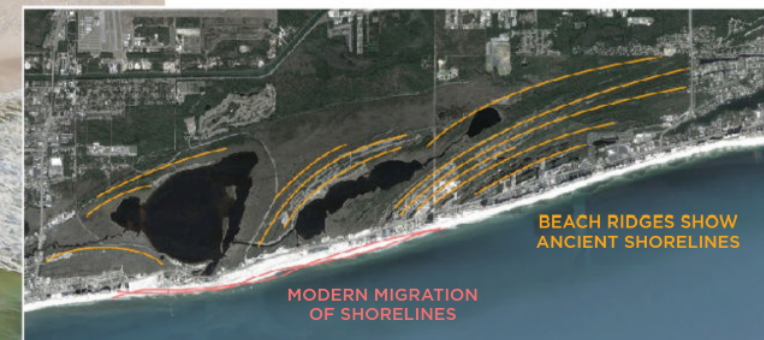
RIGHT
Alabama's tourism economy has been supported for decades by a relatively small stretch of white-sand beaches, including Gulf State Park in Gulf Shores.





LEFT
The Lodge at Gulf State Park was rebuilt as a sustainable tourism destination after a previous lodge, a popular vacation spot, was destroyed by Hurricane Ivan in 2004.

BELOW
The lodge was built into the dunes, which have migrated over the eons.



that system, the state made plans to rebuild the lodge after it was destroyed in 2004. But it didn't have a chance to fund the project until after the 2010 spill.

In 2014, a federal judge ruled that BP had acted with "gross negligence" in the lead-up to the spill,

and in the years that followed, billions of dollars in settlements and damages began flowing to gulf communities, distributed according to the terms of the RESTORE Act passed by Congress and signed by President Obama in 2012. BP settled with the U.S. Department of Justice in 2015, agreeing to pay more than \$20 billion to settle environmental and economic impact claims throughout the gulf. But even before that settlement was reached, BP had begun paying out

night before the ribbon-cutting at the new lodge in 2018, as dune-grass plantings were still taking hold, strong winds blew about two feet of sand into an area between the lobby and the restaurant, and crews scrambled to shovel it away before the governor arrived at 8:00 a.m.

"There is something really unique about designing in a dynamic dunescape," says Kate Tooke, ASLA, a principal at Sasaki, which did the

landscape architecture work for the lodge while completing a master plan for enhancements throughout the state park. "Every other landscape you design in, you can sort of assume that the landscape is going to stay mostly where it is. But a dunescape is constantly changing. Dunes are growing, they're shifting, wetlands are forming, and swales are forming in different places, and that's part of a healthy dunescape, to have that growth and change over time."

VOLKERT, INC. AND FORREST FUNK DRONE PHOTOGRAPHY

SASAKI/GOOGLE EARTH (BASE IMAGE)

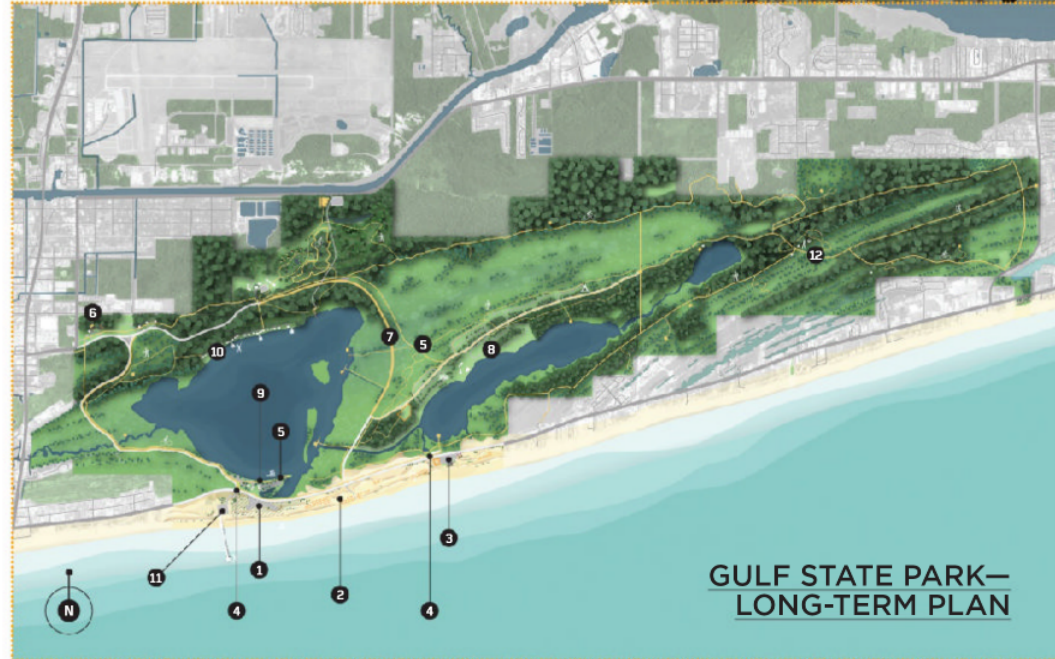
Gulf State Park was constructed by the Civilian Conservation Corps in the 1930s and opened to the public in 1939. As a culture of beachgoing developed on the Gulf Coast throughout the 20th century, the park became the crown jewel of Alabama's state park system. The lodge was a rare profit-making amenity within that system, and for years it held the system up, subsidizing the operating losses of the other 20 parks around the state. In recognition of the role it played in

COMPLETE

- 1 LODGE
- 2 DUNE RESTORATION
- 3 INTERPRETIVE CENTER
- 4 PEDESTRIAN BRIDGE
- 5 TRAILS
- 6 LEARNING CAMPUS
- 7 PARK TRAM

IN PROGRESS

- 8 CAMPGROUND IMPROVEMENTS
- 9 PICNIC AREA ENHANCEMENTS
- 10 LAKE SHELBY NORTH ENHANCEMENTS
- 11 BEACHFRONT PARKING ENHANCEMENTS
- 12 TRAILS



GULF STATE PARK—
LONG-TERM PLAN

ABOVE
A variety of ecosystems and amenities are packed into the park's 6,000 acres.

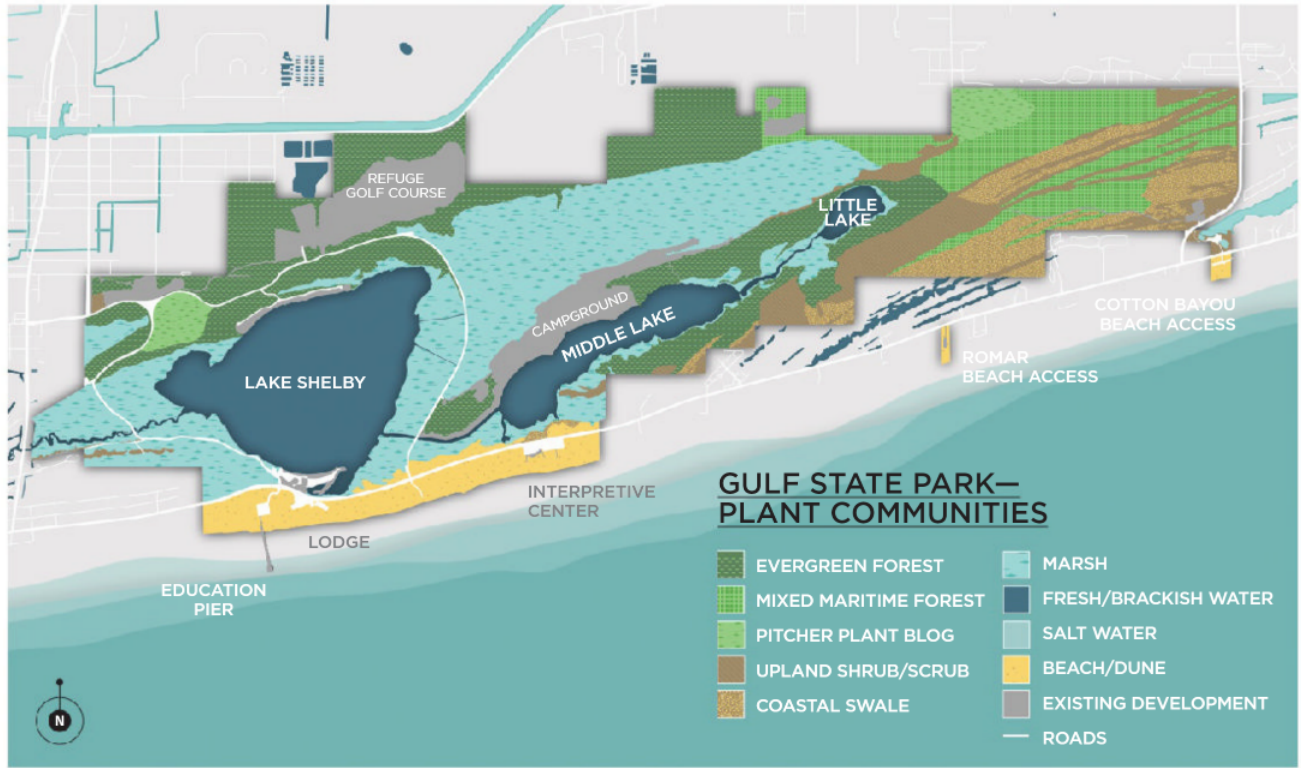
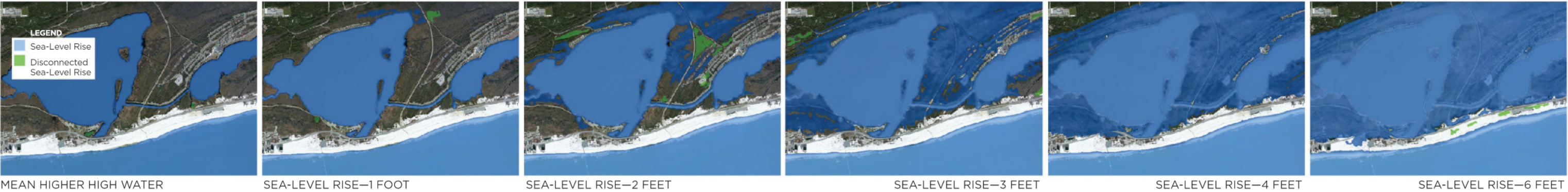
money through the Natural Resource Damage Assessment (NRDA), a federal process for assessing the effects of oil spills and other human-made disasters. One billion of those NRDA dollars went to Alabama.

The state spent \$1.5 million to launch an early restoration project in 2012, using Christmas trees to stabilize the dunes (see "Christmas on the Beach," *LAM*, March 2016) outside the lodge. And in 2014, it launched the \$85.5 million Gulf State Park Enhancement Project, with the goals of rebuilding the lodge as "a 'green' overnight stay and meeting facility," according to an NRDA project description. The project incorporated work to restore the dunes, build an interpretive center and a learning center, and improve a network of public access trails connecting a variety of ecosystems throughout the 6,150-acre state park.

SASAKI THIS PAGE AND OPPOSITE



GULF STATE PARK—SEA-LEVEL RISE



TOP
The ecology of the park is expected to evolve as the climate changes, but the lodge was sited with sea-level rise in mind.

LEFT
After the Deepwater Horizon oil spill in 2010, tar balls washed onto the beach in Gulf Shores, Alabama.

To manage the project, the state hired the University of Alabama Center for Economic Development, which turned to Sasaki to lead a master planning effort for the enhancements. Early on, the groups settled on a vision: The park would be “an international benchmark for economic and environmental sustainability demonstrating best practices for outdoor recreation, education, and hospitable accommodations,” according to the master plan. Since then, the project has won a handful of awards for sustainable tourism, includ-

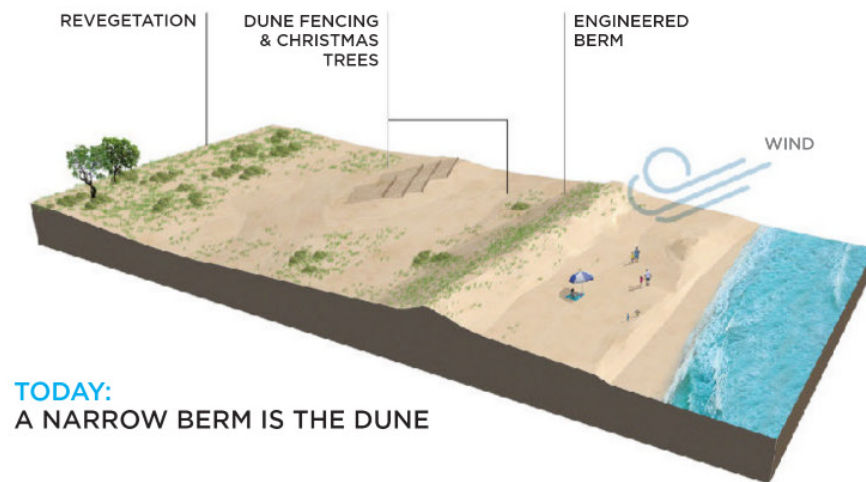
ing from the American Planning Association, the Boston Society of Landscape Architects, and the Society of American Travel Writers. The lodge has earned SITES Platinum, LEED Gold, and FORTIFIED Commercial certification, and it has become a popular regional conference space; visits to the beach rebounded after a slow season in the wake of the spill.

When I visited in May, Leavell was leading a tour for a group from the Hoover Institution, the right-

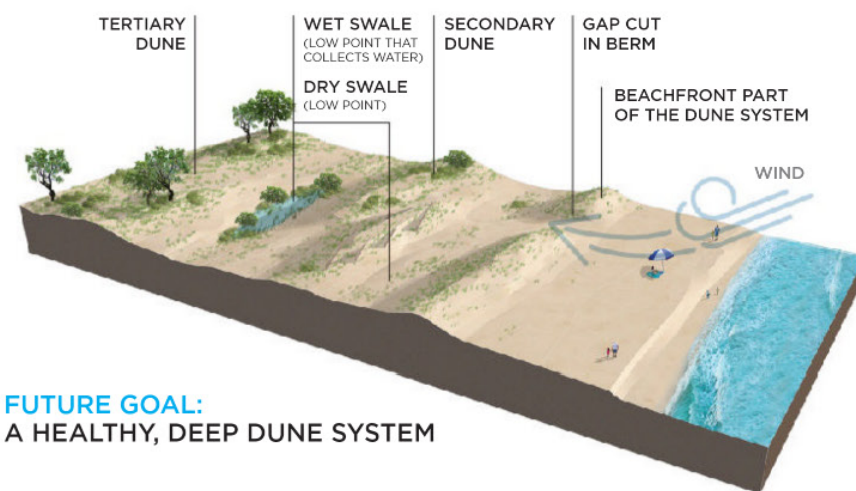
leaning think tank based at Stanford University, which had been hired to make a report to the Alabama legislature on opportunities for economic growth. The lodge sits on the beach side of Alabama’s Coastal Connection, a five-lane road that passes through the built-up resorts of Gulf Shores and Orange Beach and into the Florida Panhandle 11 miles east. The bulk of Gulf State Park—6,000 acres of wetlands, freshwater lakes, dune ridges, and maritime forest—sits on the other side of the highway. Chris Blankenship, the commissioner of

the state Department of Conservation and Natural Resources (DCNR), carted a group of us around the park in a black Chevy Suburban, surveying the damage and recovery from Hurricane Sally, which hit Gulf Shores in September 2020, and admiring the variety of the landscape.

“It’s a very spectacular coastline,” he said. “I think so many people took for granted the environment and the beach, and when we had something that took that away for a certain amount of time, it created a



TODAY:
A NARROW BERM IS THE DUNE



FUTURE GOAL:
A HEALTHY, DEEP DUNE SYSTEM

new appreciation for what we have here—the coast in general, but specifically for Alabama.”

Blankenship helped lead the state response to the oil spill in 2010 and told me that the biggest harm to the state was economic rather than environmental. Early estimates of the spill’s impacts suggested that the state could lose nearly \$1 billion in earnings and up to 49,000 jobs. But the size of the settlement was so great that, just a few years later, local news outlets were already asking whether the state’s economy could “gain more from the oil spill than it lost.” In 2019, before the COVID-19 pandemic, Alabama had its best year ever for tourism.

When Blankenship became the DCNR commissioner in 2017, he helped settle a lawsuit filed by the Gulf Restoration Network, now called

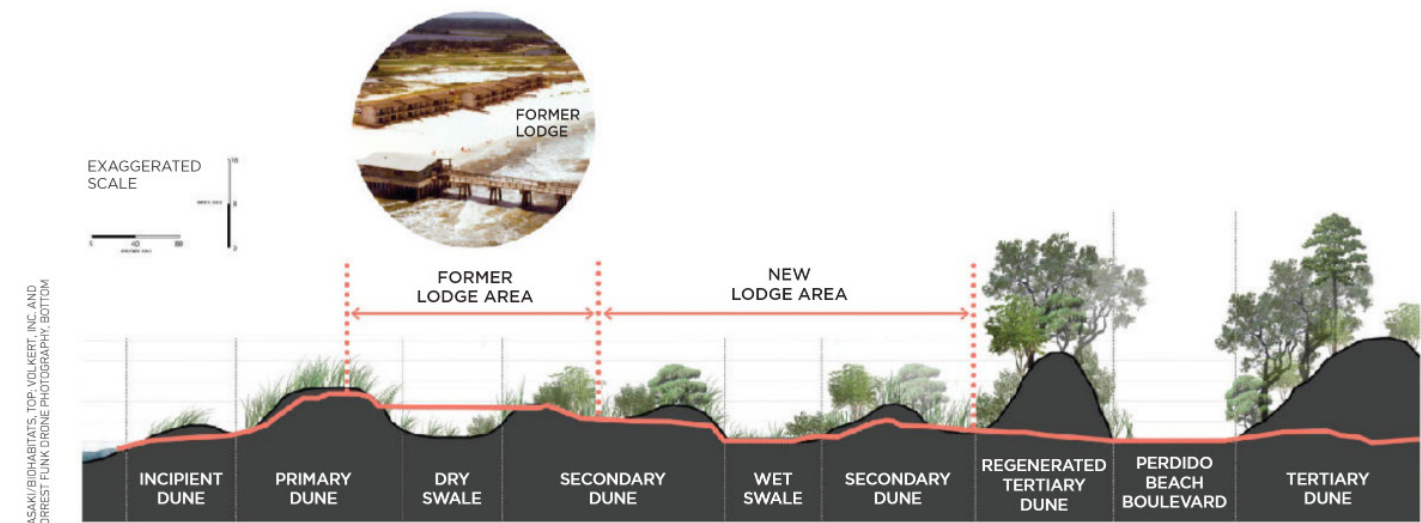
Healthy Gulf, over the use of settlement funds to reconstruct the lodge. The group argued that the project had been on the state’s wish list even before the spill and that it was inappropriate to use NRDA funds to build a private hotel with steep overnight rates instead of on work that would restore public access to the beach and state park. As part of that settlement, the state committed long-term funding to maintain public access to the park.

Jill Allen Dixon, an associate principal and planner at Sasaki who grew up in Birmingham and spent some family vacations at Gulf State Park as a kid, said the key to the plan was respecting the experience that locals and tourists had with the park, while making improvements both for public access and the health of the various ecosystems. Because of its siting, the old lodge had

LEFT
Discarded Christmas trees were used to stabilize the dunes in an early phase of the project.

OPPOSITE TOP
The lodge was placed within the secondary dune, on the gulf side of the main thoroughway.

OPPOSITE BOTTOM
The lodge and the park were intended to become a benchmark for economic and environmental sustainability.





LEFT
Money from the BP settlement is funding shoreline stabilization and ecosystem restoration projects, such as the one at left in Bayou La Batre.

It's a large park, but the transition from a luxurious beach resort to more rugged terrain happens fast. Families were lounging by the pool at the lodge when I visited in May, and sunbathers were reclining on chaise longues in the sand outside the lobby. Across the road, we drove past a bright-blue wetland lake and a group of newly built cabins, and then rode bikes up to an old dune ridge dotted with swamps. A few years prior, Leavell told me, a woman walking in the park had had her puppy suddenly eaten by an alligator, prompting officials to post new signs warning people to be aware of alligators' presence. The woman

told the local news she didn't blame the alligator. The sense of a wild landscape right next to a relaxing beach resort was something that residents and visitors had always cherished, Dixon said.

"People already loved what the park had to offer," she told me. "It was this whole range of experiences, but connected by a theme of connecting with nature, enjoying the natural environment and outdoor recreation."

The master plan supported different zones for everything from solitary bird-watching to campground concerts.

been "a middle finger to Mother Nature," Leavell told me. But the state insisted that the new lodge be located within the existing building footprint. Working with Biohabitats, a Baltimore-based ecological restoration and design firm, and Watershed, an Alabama-based sustainability consultant, the team spent a lot of time figuring out how best to orient the building both to capture the views of the beach for tourists and leave space for the dunes to evolve naturally. They ended up siting the building on the secondary dune layer, a few feet above near-term projections for sea-level rise, and expanding the number of rooms in the process.



"There's a place to be social. There's the backcountry zone, which is really more of a place to escape and be quiet and enjoy nature in that way too," Dixon says. "It's about trying to find those common themes between different perceptions about what connecting with nature means to people."

THE MORNING AFTER the tour, I rode the ferry across Mobile Bay to Dauphin Island, and drove from there to Bayou La Batre, the seafood capital of Alabama. I was aiming for the Bayou La Batre City Docks, a coastal restoration

and public improvement project funded with BP settlement money, and the route took me along Shell Belt Road, a small coastal byway strewn with trash and debris that seemed to have been flooded only moments before I arrived. I parked the car next to a large sign announcing the restoration project and walked through a narrow stand of pines to a beach, where plugs of seagrass were newly planted in neat rows on the far side of a riprap barrier. Terns nested on the sand and a reddish egret danced around in a shallow pool of water. Brown pelicans were resting on the rocks, and in my binoculars, through the quivering heat waves, I could see the production platforms of a Chevron refinery across the state line in Mississippi.

ABOVE
Sasaki completed the master plan for the park and the landscape architecture for the lodge, which achieved SITES Platinum certification.

BOTTOM LEFT
Subtle lighting along the path to the lodge fits into dunescape plantings.

THE LODGE AT GULF STATE PARK—PLANT LIST

DECIDUOUS TREES

Quercus geminata (Sand live oak)
Quercus myrtifolia (Myrtle oak)
Quercus virginiana (Live oak)

EVERGREEN TREES

Pinus clausa var. *immuginata* (Sand pine)
Pinus elliottii var. *elliottii* (Slash pine)
Pinus palustris (Longleaf pine)

UNDERSTORY TREES

Osmanthus americanus (Devilwood)

SHRUBS

Callicarpa americana (American beautyberry)
Ceratiola ericoides (Sand heath)
Chrysoma pauciflosculosa (Woody goldenrod)
Ilex vomitoria (Yaupon)
Iva frutescens (Jesuit's bark)
Iva imbricata (Sea coast marsh)
Serenoa repens (Saw palmetto)

FORBS

Canna flaccida (Bandanna of the Everglades)
Helianthus debilis (Cucumberleaf sunflower)
Heterotheca subaxillaris (Camphor weed)
Ipomoea imperati (Beach morning glory)
Ipomoea pes-caprae (Bayhops)

GRASSES

Andropogon glomeratus (Bushy bluestem)
Cyperus retrorsus (Pine barren flatsedge)
Distichlis spicata (Salt grass)
Juncus roemerianus (Needlegrass rush)
Muhlenbergia capillaris (Hairawn muhly)
Panicum amarum (Bitter panic grass)
Schizachyrium scoparium (Little bluestem)
Spartina patens (Saltmeadow cordgrass)
Uniola paniculata (Sea oats)

JARED BREV, LEFT, SASAKI, BOTTOM RIGHT, BILLY POPE, ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, OPPOSITE TOP



“EVERY ASPECT OF THE GULF ECOSYSTEM WAS INJURED BY THIS OIL SPILL.”

—KARA FOX



LEFT
The master plan was meant to connect areas designed for different recreational purposes.

The Deepwater Horizon spill was one of the worst environmental disasters in the history of the United States, pumping 134 million gallons of oil into the Gulf of Mexico over the course of nearly three months before the well was capped. In the aftermath, researchers collected the carcasses of thousands of birds. But many thousands more died in obscurity, sinking to the bottom of the gulf or being unable to escape from predators, said Kara Fox, the director of Gulf Coast restoration for Audubon. Conservative estimates put the number of dead birds around 100,000, but Audubon esti-

mates that more than a million birds were killed as a direct result of the Deepwater Horizon spill.

“Every aspect of the gulf ecosystem was injured by this oil spill,” Fox told me. “There was nothing that was left untouched.”

The deployment of the settlement money—through the NRDA and the RESTORE Act, as well as individual and state claims—is off to a good start, Fox says. Money is flowing to coastal restoration projects big and small, including many miles of new

living shorelines and epic sediment diversions in the Mississippi Delta. Those projects will help stabilize coastal areas, protect nesting habitat for birds, and control freshwater flows that were threatening wetland ecosystems well before the spill. The 15-year settlement requires BP to pay out money every year through 2031. But even the record-setting settlement looks small compared to the scale of the gulf and the variety of degradation in coastal ecosystems, both resulting from the spill and predating it.

As Fox said, “This isn’t going to be enough money.”

were degraded well before the BP oil spill and the settlement that’s paying for it, says Lee Altman, SCAPE’s director of design management.

“In response to the oil spill, there’s all of a sudden multiple, huge pots of money that can be applied to projects that were a long time in the making and should probably have been funded beforehand,” Altman says. “We saw a similar pattern with the funding that became available in the Northeast after Hurricane Sandy. So it is really unfortunate that in this kind of world of

MATTHEW ARELLY



disaster capitalism, we're only responding to these major disasters after they happen, and then we remember to go back and look on our shelf for all these amazing projects that have already been developed and never been funded."

After I left Bayou La Batre I drove down Marine Laboratory Road, aiming for the Grand Bay Savanna Nature Preserve in Mobile County. It was a gravel road through a swampy pine forest, similar to the Pine Barrens of New Jersey, near where I live. It brought to mind the Jersey Devil and all the mythical beasts that spring from seemingly interminable landscapes. And then it brought to mind the very real beasts hiding around the gulf: gators and great white sharks, dragonfish and vampire squid, the seeds of tropical storms

and the remains of organisms that lived millions of years ago, squeezed into a black ooze at the bottom of the sea. Oil has a natural presence in the gulf ecosystem even in its healthiest places, but humans are perpetually unleashing its destructive potential, whether by spilling it into the water or burning its toxins into the atmosphere. Over the summer a gas pipeline exploded in the gulf, forming a fire-breathing chimera on the surface of the water, and I later read that a Coast Guard official referred to the oil spreading after the Deepwater Horizon disaster by the name Grendel, the cursed monster from *Beowulf*. I felt a measure of relief when I came across a deep puddle on Marine Laboratory Road and had to turn around. Two months later, Hurricane Ida struck Louisiana.

ABOVE
Matt Leavell bikes through live oaks that line an ancient dune ridge in the back half of the park.

OPPOSITE
The American alligator is native to the Gulf Coast and is found in groups, or congregations.

JARED BREY

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"IT'S ABOUT TRYING TO FIND THOSE COMMON THEMES BETWEEN DIFFERENT PERCEPTIONS ABOUT WHAT CONNECTING WITH NATURE MEANS TO PEOPLE."

—JILL ALLEN DIXON



GINA FORD, FASLA, a cofounder and principal at Agency Landscape + Planning, worked on the Gulf State Park plan at Sasaki before leaving to start her own firm. A few days before I visited the park, she sent me what she called "a little mood deck" with a few slides of her favorite spots in the park. Included was a picture of a bike path on Gulf Oak Ridge, on the far side of the park from the lodge. The path is lined with live oaks, droopy with Spanish moss. Her caption said, "mmmmmm."

After lunch at the park, Leavell and I rode up to the ridge with Wes Michaels, ASLA, a principal at the New Orleans-based firm Spackman Mossop Michaels, which worked on the enhancement project, and Rebecca Bryant, a cofounder of Watershed. At the top we paused at an overlook and surveyed the expanse of pine forest, the freshwater lakes and the marsh, the faraway pedestrian bridge over Alabama's Coastal Connection, and the lodge.

When we continued, riding on a boardwalk over one of the lakes, Bryant told me that 10 years earlier she had gone with her young kids to the beach at Gulf Shores on a day when tar balls were washing up on the shore. The older one was angry, she said; the younger one thought it was a game. When it came to planning the enhancements to Gulf State Park, though, there was an opportunity to consider the health of the ecosystem as a whole, rather than just responding to specific harms from the disaster.

"The way the spill itself factored into it was mostly just that realization in the community that the economy is tied to a healthy ecology," Bryant said. "Obviously that was a wake-up call. And then extending that—not just ecology that doesn't have oil on top of it, but *really* a healthy ecology."

We were paused at a small lake just off the bike path when Leavell asked the rest of us if we could see an alligator in the water.

"Maybe," said Bryant, who then continued describing to me the early discussions about situating the lodge. "Because we were doing SITES, that defended the landsc—Oh, that is totally a gator."

"That is a *big* alligator," Michaels said.

"I don't think I've ever seen one that big," Leavell said.

The top of its head was sticking out of the water, wide and craggy, just hinting at the extent of the terrible submerged form. ●

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