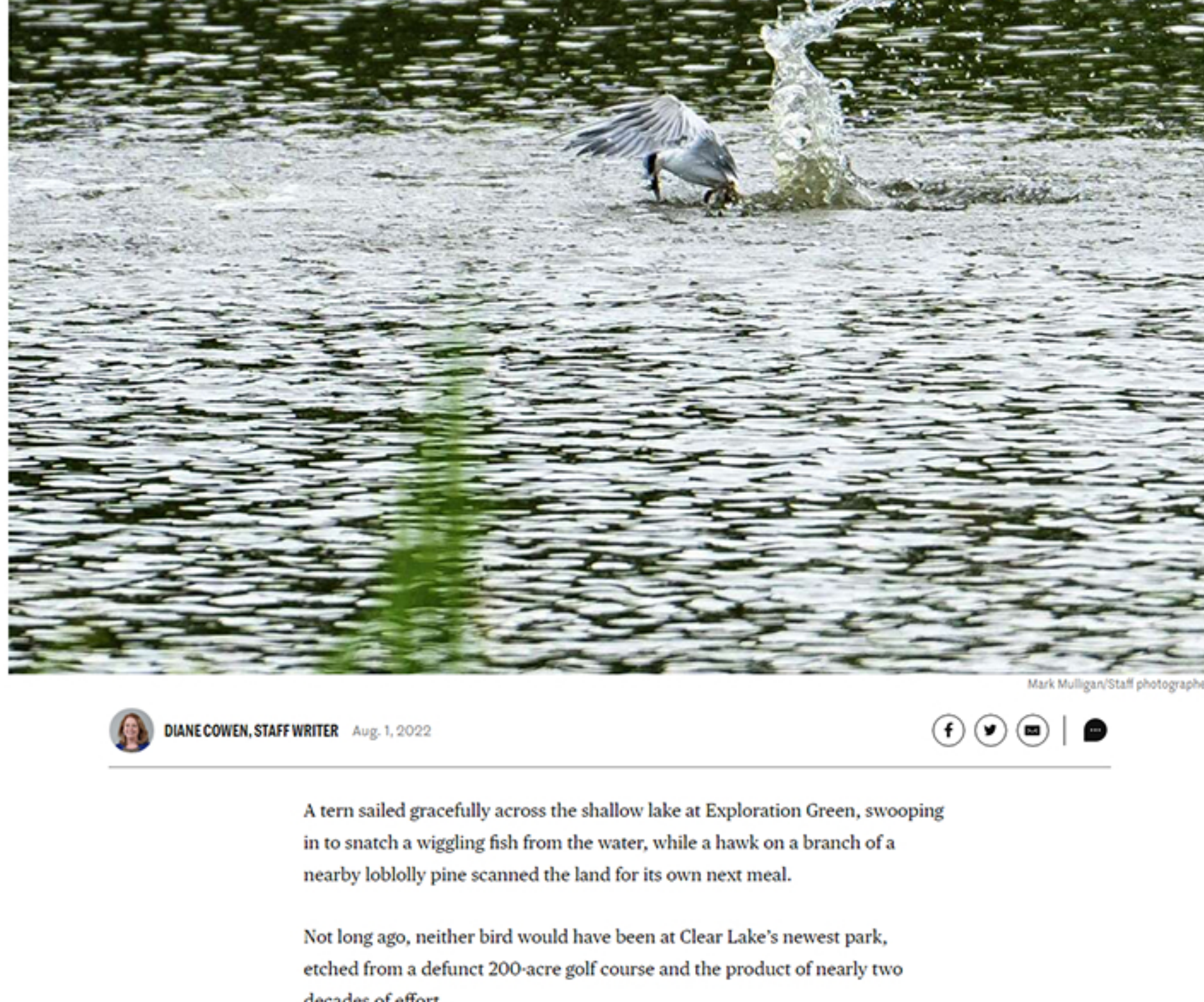


Clear Lake's newest flood control is Exploration Green – a park to hold 500 million gallons of stormwater

The hottest topic in flood control is one that might surprise you: parks.



Mark Mulligan/Staff photographer



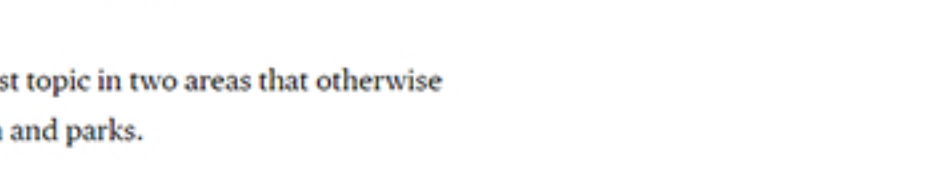
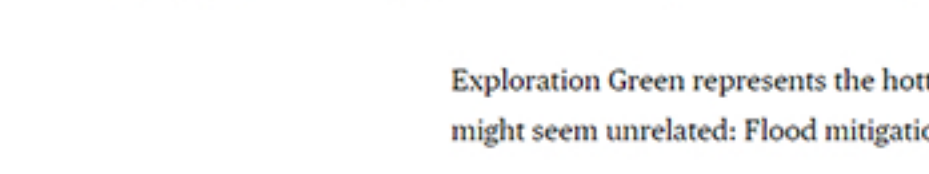
DIANE COWEN, STAFF WRITER Aug. 1, 2022



A tern sailed gracefully across the shallow lake at Exploration Green, swooping in to snatch a wiggling fish from the water, while a hawk on a branch of a nearby loblolly pine scanned the land for its own next meal.

Not long ago, neither bird would have been at Clear Lake's newest park, etched from a defunct 200-acre golf course and the product of nearly two decades of effort.

Construction on the fifth and final phase of the \$43 million project is underway and should finish in early 2023. When it's done, the park will have five man-made ponds with wildlife habitat islands, thousands of new trees, six miles of walking-biking trails and 200 species of native flowers, grasses and other plants.



People enjoy Exploration Green, a park created on a former golf course and built in phases, Monday, July 11, 2022, in Clear Lake.

Exploration Green represents the hottest topic in two areas that otherwise might seem unrelated: Flood mitigation and parks.

"What stands out to me about Exploration Green is the depth of commitment through the community from people of all ages, all professions, all backgrounds and income groups – a real appreciation of what the space could become and making it happen," said James Vick, the SWA architect and urban planner in charge of the park's master plan. "If you've gone out like I have and seen kids and parents and grandparents go out and install trees and plant grasses – the scale of what has happened is striking."

Getting started

Decades ago, as NASA and the petrochemical industry grew in Clear Lake, Exxon's real estate arm, Friendswood Development, planned neighborhoods around the space industry headquarters. It was the first master-planned community in Texas, and homeowners paid a premium for homes on the then-private Clear Lake Golf Course.

Many were built in the 1960s, and longtime neighbors like Nina Johnston and Ellen King have watched each other's children grow up and start families of their own. As neighborhoods spread all around them, so did flooding events from tropical storms and hurricanes.

So when the private golf club decreased in popularity as golfers gravitated to newer, nicer options, the Clear Lake Golf Club was bought by a firm that ran it as a public course. Then, a new buyer eyed it as prime land for more houses, and Johnston, King and their neighbors rallied to block it.

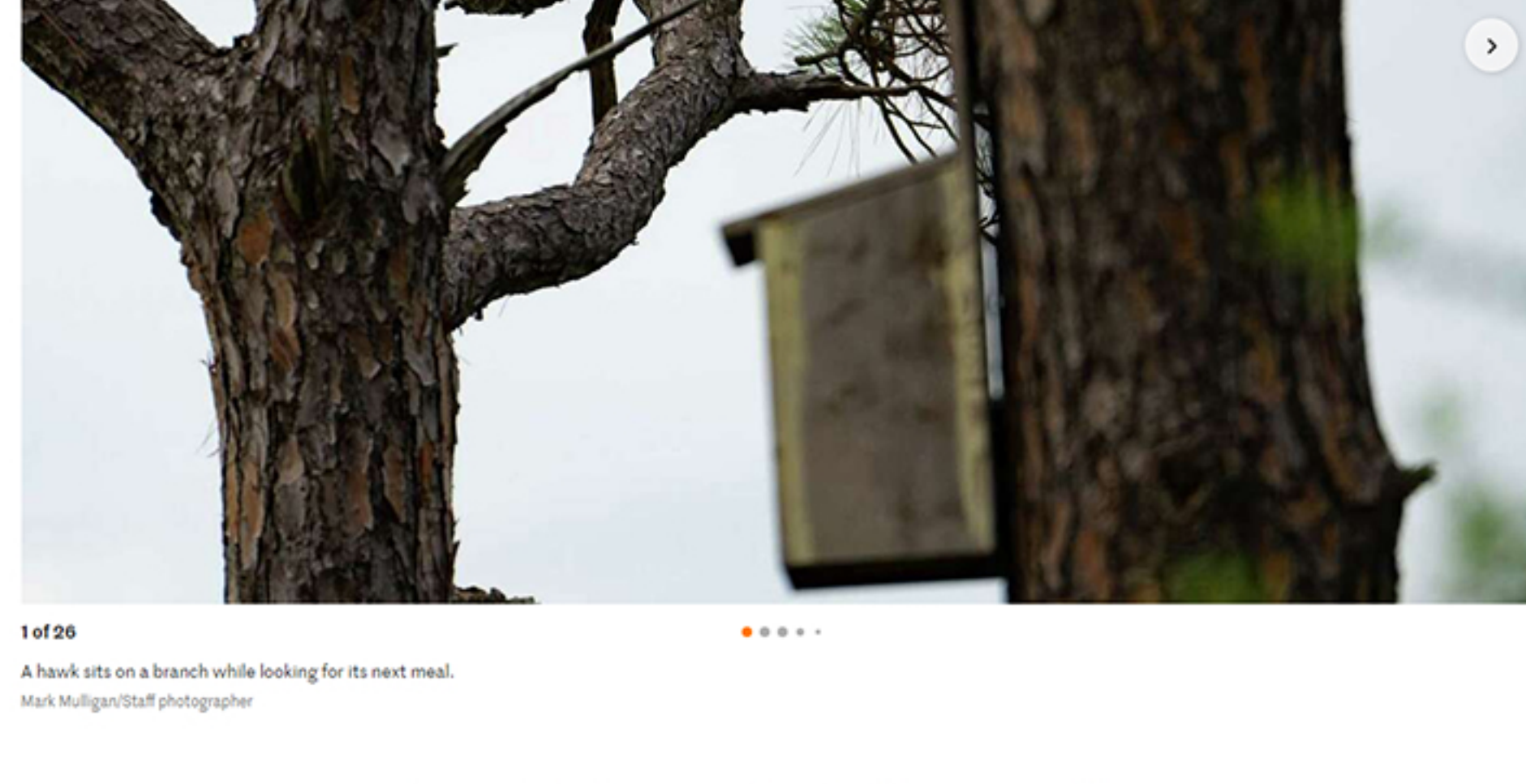


David Sharp, chairman of the Exploration Green Conservancy, points out a sign about the bluebird boxes at the park. They were built for Eagle Scout projects and one scout comes back regularly to maintain them; they affectionately call him the "Bluebird Landlord." Mark Mulligan/Staff photographer

The neighbors formed the Green Space Preservation Committee, and Johnston was its outreach person. With every news story about the golf course and its buyer, Johnston and her friends sprang into action, writing rebuttals from their kitchen tables. To raise money, they hosted hot dog socials, charging \$5 per person and netting \$2,000 from their first event.

Quickly, though, the Clear Lake Water Authority stepped in, seeing the open land as an ideal option for flood control. Stormwater from 2,000 nearby branches flows into the 200-acre site and the water authority's president, John Branch, recognized the opportunity.

The water authority hired SWA to assemble a master plan and initiate hydrology studies. When Vick and Branch took committee members to see Willow Waterhole, a similar project then just getting started in southwest Houston, the neighbors were sold: Flood control could look a whole lot better than they ever imagined.



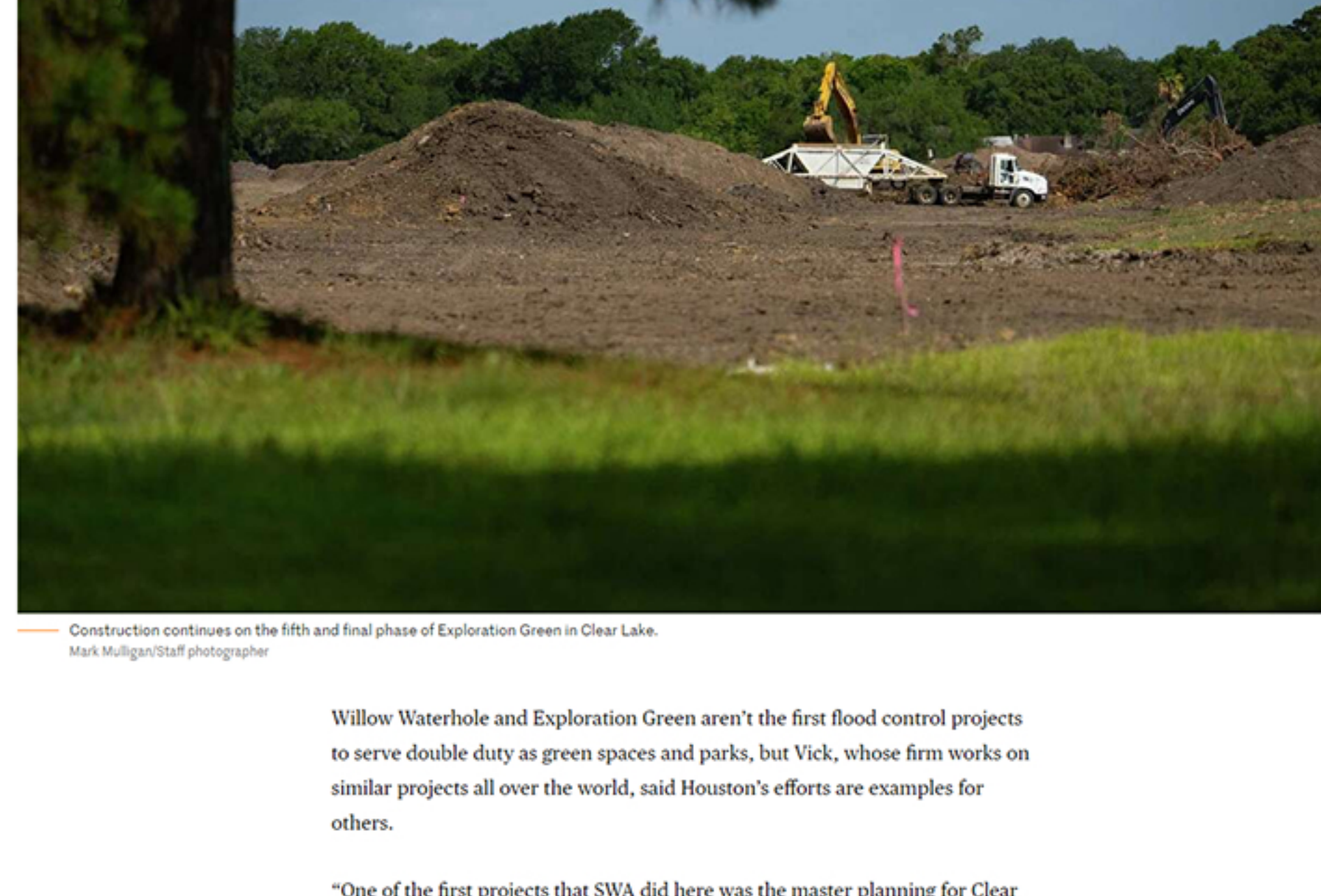
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A hawk sits on a branch while looking for its next meal. Mark Mulligan/Staff photographer

The project had its detractors, residents who felt their privacy would be invaded or that it would draw too many people too close to their homes. Others worried the lakes would become a breeding ground for mosquitoes. In time, their concerns were addressed.

Construction on the first phase of Exploration Green started in 2016, and when Hurricane Harvey dumped four feet of rain on the Houston area, the "big dig" as the neighbors called it, proved its worth. Homeowners looked out their back doors at the giant hole in the ground and saw it filling with water – doing its job before it was even finished. Some 120 homes that usually flood stayed dry.

Each of the five phases, which contain a pond and a basin, is deep enough to hold 100 million gallons of stormwater – a half billion gallons of water for the full park – eventually draining into Horsepen Bayou, alleviating pressure on other creeks and bayous during heavy rains.

Homes in the neighborhood's 77062 ZIP code sold for 24 percent more in 2022 than in 2021, according to data from Alina Rogers of Sparrow Realty.



Construction continues on the fifth and final phase of Exploration Green in Clear Lake. Mark Mulligan/Staff photographer

Willow Waterhole and Exploration Green aren't the first flood control projects to serve double duty as green spaces and parks, but Vick, whose firm works on similar projects all over the world, said Houston's efforts are examples for others.

"One of the first projects that SWA did here was the master planning for Clear Lake. It's fun for us, decades later, to come back in and get involved in Exploration Green," Vick said of the pairing of flood control and parks.

"For this to be a model that can be replicated would be an enormous reward for the community that has put so much heart and soul into it. It's not one-and-done and can't be done somewhere else. Houston, being the city it is, we borrow and duplicate," he continued.

How it's used

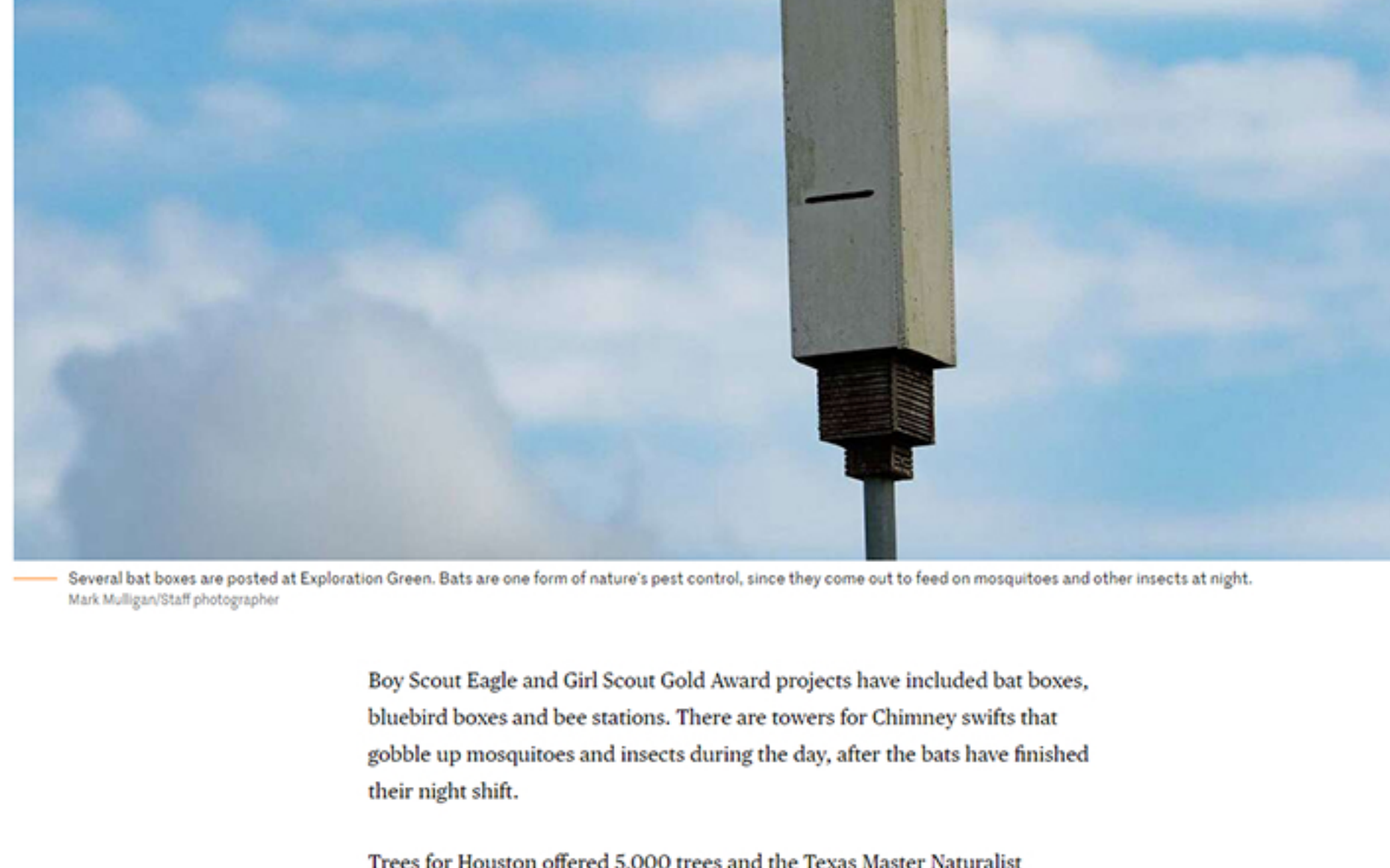
In four town hall meetings, each of which drew at least 300 residents, it was clear that the people who lived near the park site wanted a lot from it: walking trails, resilient plants that could represent the seasons, protection for wildlife and accessibility for all.

King – who soon will be 80 and has lived here for 50 years – said she's not much of a walker, but watches the park from her backyard, waving to neighbors as they go by.

"I used to look across a golf course and now I look at a hill. It's a graduated terraced area – like being in Peru or something," King giggled. "I looked out and see the water. I say to people 'It's wonderful, I have moved to lakefront property and I didn't have to pack a box.'"

FROM DIANE COWEN: [A home design that's kind to the planet? Here's how you can reduce your carbon footprint.](#)

In the spring, habitat islands in the center of each pond become rookeries, where a variety of birds build nests and raise their young. Around the edges of the lake are wetlands, Mother Nature's filter that helps purify stormwater before it moves on. None of the ponds are stocked, but they've all got fish, frogs and toads, likely born from eggs deposited by birds or the roots of wetlands plantings.



Several bat boxes are posted at Exploration Green. Bats are one form of nature's pest control, since they come out to feed on mosquitoes and other insects at night. Mark Mulligan/Staff photographer

Boy Scout Eagle and Girl Scout Gold Award projects have included bat boxes, bluebird boxes and bee stations. There are towers for Chimney swifts that gobble up mosquitoes and insects during the day, after the bats have finished their night shift.

Trees for Houston offered 5,000 trees and the Texas Master Naturalist program handles the plant nursery where trees, wetland grasses and other plants are nurtured before they're put in place.

Branch noted that while their pre-project planning was extensive, they weren't afraid to adapt when needed. "These trails would have been higher up and when we did a walk-around, we were spending all our time looking in people's backyards – there goes their privacy," he said. "That's when we decided to put tiers in, and put the path 10 feet below grade. Now you look at the pond and it feels more like a nature area. We changed up the plans as we worked up better ideas."

When the lake suffered an algae bloom and a fish kill, marine biologists recommended bubblers and aerators to add oxygen to the water.



Grates cover drain pipes at Exploration Green. Mark Mulligan/Staff photographer

David Sharp is retired from the chemical industry and volunteers as chairman of the Exploration Green Conservancy, which plans programming, holds fund raisers and mobilizes hundreds of volunteers when it's time for planting.

They've held nature classes for kids, including a recent moth event, and let local groups hold fun runs on the trails. Before the pandemic, a yoga studio held free classes here and at Easter, a nearby church used the park for a Stations of the Cross event.

Sharp also calls himself a beginner birder, rattling off the names of birds he saw one warm summer morning: anhingas, terns, roseate spoonbills and the hungry hawk. Before the park took off, watchers might have spotted 40 ordinary birds. Today, Audubon Society counts have registered more than 140 species, he said.

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