Scenic Watch



News from March 2022

"20 millionth longleaf!"



Photo: Samantha Neely, The News Herald

"A group of agencies are working together to make the Panhandle a better place, one tree at a time.

The Northwest Florida Water Management District celebrated the planting of the 20 millionth longleaf pine on district lands on Thursday.

The event at Wolf Pond North Recreational Area was joined by the Longleaf Alliance, Florida Department of Environmental Protection, the Arbor Day Foundation, the Nature Conservancy and officials from state Rep. Allison Tant's delegation.

Their work of planting trees has gone back almost 30 years, with the district and their partners planting 28 million trees in total since 1993. With its mission to protect the district's water, Northwest Florida Water Management District Chairman George Roberts said he is proud of the milestone.

"Today was a good day for our 20th million longleaf pine," Roberts said. "We do a lot of reforestation projects throughout our district and also to help with our water quality, as well as getting trees planted back to help with our water levels, which was very high due to Hurricane Michael..."

-- Samantha Neely, The News Herald

Read entire article

2022 Florida Legislative Session

SB 1338/HB 1411

State requirement for amendments to local land regulations to promote floating solar panels

Backgrounder: "Where to put solar panels? How about on the water?"



"A floating solar array on a pond in Orlando. Florida has thousands of lakes and ponds where floating panels could be used". Photo: Paul Hennessy, SOPA Images, ZUMA Press in WallStreet Journal

"Floating solar panels are still a small part of the energy mix. But they have some advantages over land-based systems.

As befits its location in the Sunshine State, Orlando International Airport looked at installing solar panels on its property to help it reduce its electricity costs. But ultimately it decided not to commit land for such a purpose.

The airport's land is too precious to use it for solar development, says Mark Birkebak, director of engineering for the airport.

Its water, however, proved to be a different matter. In December [2020], the Orlando Airport and the city's main power provider rolled out floating solar panels on one of several ponds on airport property. Now, almost a year in, the water-based array provides energy equal to what 14 homes would consume, and the airport earns credits for the energy it pumps back into the grid.

As an extra flourish, Mr. Birkebak says, the panels are arranged in a stylized 'O'— the Orlando airport emblem—illuminated at night by LED lighting and visible to passengers on jets and trams.

'You can add a little artsy-ness to this and still have a great benefit,' Mr. Birkebak says...

The number of solar-energy installations grew 23% world-wide in 2020, according to an International Energy Agency report, and are expected to keep growing globally through 2022 as power providers continue to fulfill mandates to add

renewables to their energy mix. A small but increasing portion of that growth is expected to come from water-based solar arrays.

While land-based panels are the more popular choice for solar by far, largely due to higher installation costs for water-based systems, developers and scientists increasingly agree there are situations in which water-based arrays have advantages.

Continuing to find new places to accommodate solar panels is becoming more of a challenge. In the U.S. and elsewhere, opposition has been voiced by residents in some communities where large solar arrays have been proposed—by farmers who don't want to convert food-crop land to solar farms, and by conservationists who don't want forests cleared for panels."



"Mayor Buddy Dyer walks past a floating solar array at Orlando Airport after a ribbon-cutting ceremony for the installation last December." Photo: Joe Burbank. Associated Press

"Floating solar arrays, by deploying their panels on man-made reservoirs or lakes that aren't used for recreation, can alleviate such concerns. The state of Florida, for instance, has thousands of lakes and ponds where floating panels could be used...

In addition to overcoming land-related issues, it is also possible that water, due to its cooling effects, could make solar panels work more efficiently. A study by

Brazilian scientists published by IET Renewable Power Generation found that floating arrays generate as much as 12.5% more electricity than ground or rooftop solar installations. The panels can also slow evaporation, protecting essential water sources already affected by increased demand and climate change...

Asia is expected to account for more than 80% of floating solar through 2026, Europe an estimated 7% to 10%, and the U.S. 1% to 2%...

Many of the bodies of water highlighted in the NREL study were in regions with high electricity rates and high land prices. In such areas, floating solar, despite its higher installation costs, could still be the cheaper solar option, in part by removing the need for expensive land purchases.

To be sure, water-based solar does have some disadvantages, such as higher installation costs due to the need for floats, moorings and waterproof electrical components. Such items tend to cancel out any savings that water-based arrays might offer in terms of requiring no earthmoving or vegetation removal, says Evan Riley, chief executive and founder of White Pine Renewables, a company that has installed both floating solar and land-based systems.

Because of its higher installation costs, developers of floating solar tend to target reservoirs that already host hydropower and have connections to the grid in place.

'For commercial or industrial-size floating solar, access to transmission can easily make or break a project,' says NREL's Mr. Macknick.

Another disadvantage for floating panels is their inability—so far—to track the sun's movement. In the U.S., most ground-mounted solar panels are installed on trackers that allow the panels to turn and absorb the sun's rays at the most favorable angle throughout the day. This isn't possible yet for floating solar. So, despite having better efficiency, floating solar panels can't produce as much energy as trackers allow.

'We either need a technological innovation so that the panels can track the sun while floating,' Mr. Riley says, or floating solar will have to 'take off in markets where it doesn't have to compete with a ground-mounted tracker.'...

'We just now have the price of solar panels low enough that the business case is really getting to pick up.' Mr. Lehner says. 'It's just a matter of time that floating solar will conquer many of these markets."

-- Jackie Snow, WallStreet Journal

Read entire background article

Florida's floating solar bills

"SB 1338 (Diaz) and HB 1411 (Salzman) would require that a floating solar facility be a permitted use in the appropriate land use category in each local government's comprehensive plan. Each local government would be required to amend its land development regulations to promote the expanded use of floating solar facilities.

Senate referrals: Regulated Industries (approved 2/1); Community Affairs (approved 2/8); Rules (approved 2/15)

House referrals: Tourism, Infrastructure & Energy Subcommittee (approved 1/25); Local Administration & Veterans Affairs Subcommittee (approved 2/7); Commerce Committee (approved 2/17). PASSED HOUSE 2/24 PASSED SENATE 3/2"

From 1000 Friends of Florida

Large install example:

"Singapore's floating solar farm on the Tengeh Reservoir"



Photo: Sembcorp Industries in Euronews.green

From 2021:

"Singapore's floating solar farm on the Tengeh Reservoir has officially been opened.

Made up of 122,000 solar panels spanning 45 hectares, it is roughly equivalent to the size of 45 football fields. The 60 megawatt-peak solar photovoltaic (PV) farm is now officially one of the largest operational inland floating solar PV systems in the world.

The solar farm, installed by Sembcorp Industries, was deployed as part of Singapore's goal to quadruple solar energy capabilities by 2025, in a bid to help the country do its part to tackle the global climate crisis.

Read article about large scale project in Euronews.green

"Chaparral Slough: A Win for Florida's Panther, People and Nature"



Photo: Nature Conservancy

"The Lykes Bros., Inc. and TNC [The Nature Conservancy] are one step closer to protecting Chaparral Slough, securing the 11-mile long wildlife corridor... As this Florida Forever project proceeds, it will conserve native habitats and important waters within a region of the state with renowned, high-quality natural resources.

The Chaparral Slough project area—eleven miles long and one mile wide—runs

along Chaparral Slough, a tributary to Cypress Branch, and is part of the 122,213-acre Fisheating Creek Ecosystem Florida Forever Project. This conservation easement connects protected habitat from south of the Caloosahatchee River to Fisheating Creek, securing the wildlife corridor for Florida panther migration north toward protected lands flanking Fisheating Creek.

The Nature Conservancy has long recognized the need to establish and expand interconnected landscapes that provide nature room to move and grow while offering people necessary spaces for agriculture, recreation and resilience to a changing climate. Chaparral Slough is a prime example of a functional wildlife corridor and is a key step in our Florida panther protection efforts,' said Temperince Morgan, Executive Director of The Nature Conservancy in Florida. Protection of Chaparral Slough Wildlife Corridor Learn about the protection of Chaparral Slough from Lykes Bros. Inc. President and CEO Johnnie P. James, Jr. and TNC Florida Director of Protection and Sustainable Communities Strategy Lindsay Stevens, as they discuss the importance of the land and the partnerships that enabled its protection.

TNC first began working with Lykes Bros., Inc. in 1990 to figure out a way to protect this important region. The wildlife corridor is home to the endangered Florida panther in addition to other iconic species including Florida black bear, eastern indigo snake, gopher tortoise, Florida sandhill crane, great egret, great blue heron, little blue heron, snowy egret, wood stork, white ibis, black-crowned night heron, crested caracara, American bald eagle, Florida burrowing owl, swallow-tailed kite, and snail kite.

Chaparral Slough features a vast array of natural habitats, including depression marsh, wet prairie, forested wetlands, floodplain swamp, slough, floodplain marsh, hydric hammock, prairie hammock, dry prairie, and mesic pine flatwoods.

These lands also provide critical water supplies, enhanced water quality, and a wide variety of essential ecosystem services to the residents of South Florida. Chaparral Slough captures, stores, and slowly releases water that travels to the Caloosahatchee River and the downstream San Carlos Bay estuarine system.

In 2014, Lykes Brothers, TNC and key partners first proposed the Chaparral Slough project be acquired with Florida Forever funds. Chaparral Slough was added as a new project and then immediately included within the Fisheating Creek Ecosystem Florida Forever project in June 2015. The completion of this conservation easement in 2022 signifies a new era of protection for Florida's natural habitats.

The Lykes family's outstanding stewardship of this land since the 1930's has successfully combined a working cattle ranch, sustainable forestry and private hunting with tremendous wildlife habitat that supports some of the rarest species in Florida. The Nature Conservancy commends the Lykes family for its commitment to conservation, and fully recognizes the essential role the Florida Forever

program, administered by the Florida Department of Environmental Protection, has in bringing projects like Chaparral Slough to completion,' said Lindsay Stevens, TNC Florida Director of Protection and Sustainable Communities Strategy."

-- Nature Conservancy Press Room

Read entire article

Technical Trees? Email Address for Each Public Tree "Befriending Trees to Lower a City's Temperature"



Photo: Alana Holmberg, The New York Times

"A program in Melbourne, Australia, that tracks every public tree — and even gives each an email address — is seen as a way to manage climate change.

High in the branches of a 122-year-old Dutch Elm, two workers in a bucket crane framed by the city's skyline used a chain saw to slice large limbs from the top of the tree.

Office workers strolled past, seemingly enjoying the afternoon sunshine of

Flagstaff Gardens, the city's oldest public park, while the workers carried out their 'reduction pruning' aimed at controlling the tree's bulk to help improve its vitality and extend its lifespan.

It is one of the most time-tested forms of tree maintenance, but at ground level the workers' supervisor, Jake Shepherd, added a high-tech wrinkle.

Mr. Shepherd, a 27-year-old Englishman, touched a yellow circle on a portable electronic device. The circle was within a map of the park that is part of the city's elaborate tree database and it instantly turned green to register that this specific elm was back in top shape...

New York, Denver, Shanghai, Ottawa and Los Angeles have all unveiled Million Tree Initiatives aimed at greatly increasing their urban forests because of the ability of trees to reduce city temperatures, absorb carbon dioxide and soak up excess rainfall.

Central Melbourne, on the other hand, lacks those cities' financial firepower and is planning to plant a little more than 3,000 trees a year over the next decade. Yet it has gained the interest of other cities by using its extensive data to shore up the community engagement and political commitment required to sustain the decadeslong work of building urban forests.

A small municipality covering just 14.5 square miles in the center of the greater Melbourne metropolitan area — which sprawls for 3,860 square miles and houses 5.2 million people in 31 municipalities — the city of Melbourne introduced its online map in 2013.

Called the Urban Forest Visual, the map displayed each of the 80,000 trees in its parks and streets, and showed each tree's age, species and health. It also gave each tree its own email address so that people could help to monitor them and alert council workers to any specific problems.

That is when the magic happened.

City officials were surprised to see the trees receiving thousands of love letters. They ranged from jaunty greetings — 'good luck with the photosynthesis' — to love poems and emotional tributes about how much joy the trees brought to people's lives.

Members of the public were subsequently recruited to help with forestry programs such as measuring trees and monitoring wildlife, and politicians were left in no doubt about how much Melburnians valued their trees...

Gregory Moore, an expert on ecosystems and forests at the University of Melbourne, said another major problem was that planning laws controlled by the

state of Victoria did little to protect greenery on private land, allowing development that contributed to the annual loss of 1.5 percent of canopy cover across the greater metropolitan area.

'A good tree cover can save you an enormous amount in health spending alone by reducing deaths in heat waves and getting people outside and taking more exercise,' he said. 'Politicians and bureaucrats seem to think that all of these benefits from planting trees are simply too good to be true, but I think they will eventually get the point when economists keep telling them how much money they will save."

-- Peter Wilson, New York Times

Read entire article

Legal: "Is customary use doctrine constitutional? Walton County judge declines to rule on it."



Photo: Daily News File Photo

"In two separate rulings, one on a motion and the other following a court hearing,

Walton County Judge David Green declined to rule on the constitutionality of Florida's existing customary use doctrine.

His doing so didn't shock anyone paying attention to the 3 1/2-year legal battle being waged between the county and private beach landowners over control of the white sand of the county's beaches. Green had succinctly stated his intentions regarding constitutional questions last November.

"This court does not have the authority to rule that the customary use doctrine adopted by the Florida Supreme Court is unconstitutional," he wrote.

Daytona Beach vs. Tona-Rama is the landmark 1974 Florida Supreme Court case that established a standard of proof for what constitutes customary use. Customary use is a proposition by which Walton County has staked a claim that the dry sand areas of its coastline should be open to the public.

"This came as no surprise to us based on the judge's prior rulings," said Kent Safriet, who represented two private beach property owners at the hearing when constitutionality issues were turned aside. "Judge Green believes he is handcuffed. He believes he has to follow the Tona-Rama decision no matter how bad he feels it is."

In ruling against Safriet's clients in Walton County vs. Northside Holdings LLC and Lavin Family Development LLC, Green opened the door for the attorney to appeal his constitutionality case to the First District Court of Appeals. That brings it one step closer to the Florida Supreme Court, where Safriet believes "Tona-Rama" must ultimately face scrutiny..."

-- Tom McLaughlin, Northwest Florida Daily News

Read entire article

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