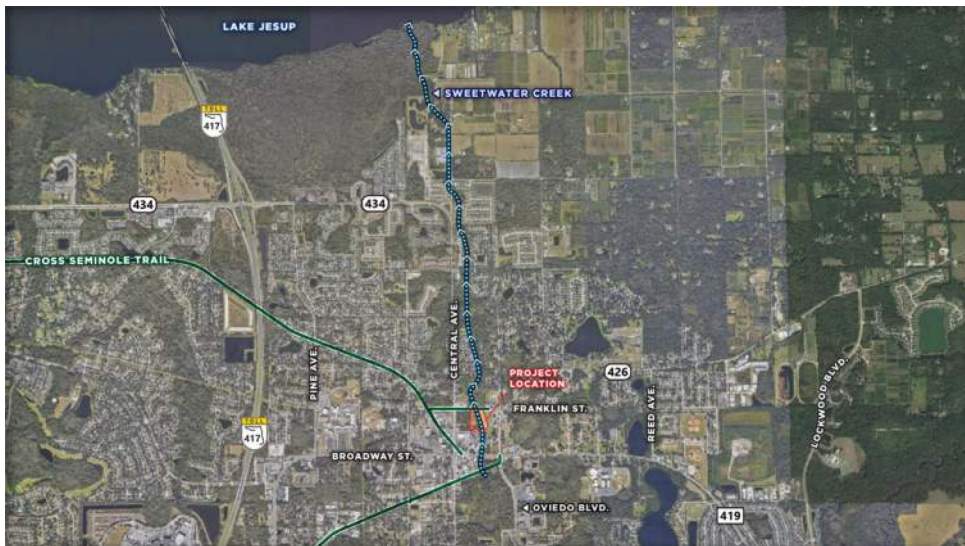


Supporting Information

The following summarizes how the five overall project goals have been met.

Goal 1 – Enhance the Water Quality in Sweetwater Creek and Lake Jesup

Prior to the construction of the construction of the regional pond, a portion of the historic downtown area of Oviedo discharged to Sweetwater Creek and ultimately to Lake Jesup without treatment or attenuation. The newly construction pond is a 6-acre wet detention pond that not only serves the downtown of Oviedo, but it also serves State Road (SR) 434, Franklin Street, Geneva Drive and Broadway Street. These roadways are part of an overall plan to improve the transportation network in Oviedo. The stormwater management system provides treatment to approximately 22 acres of downtown Oviedo and will lead to reductions in Total Suspended Solids (TSS), Total Phosphorus (TP), Total Nitrogen (TN) and Biological Oxygen Demand (BOD) in the stormwater runoff that currently drains directly to Sweetwater Creek and ultimately to Lake Jesup. The project also supports the initiatives of the Lake Jesup Basin Management Action Plan (BMAP) to reduce nutrient loads to Lake Jesup.



Goal 2 – Enhance Sweetwater Creek

Prior to the construction of Solary Park, Sweetwater Creek conveyed stormwater from a box culvert at Geneva Drive to a box culvert at Franklin Street. The creek was truly more of a ditch with a trapezoidal cross section with nuisance and exotic species along its banks. While it served a conveyance function, it did not provide a benefit to the environment.

As a part of the Solary Park project, the creek was re-routed around the regional pond. The cross section was revised to mimic a creek with overbanks and native vegetation. Revetment in the form of rip rap was added at critical locations to provide erosion protection. The newly restored and constructed creek provides a more natural creek that improves water quality and opportunities for birds and wildlife. In fact, Solary Park has already become a refuge for local wildlife. State designated threatened species have been sighted and documented, such as Roseate Spoonbills, Otters, Woodstorks and Snowy Egrets to name a few.



Before Solary Park

Solary Park

Goal 3 – Create a Park Destination for the Residents

The City of Oviedo has an active recreation and parks program and was looking for innovative ways to engage the public. One of the key features of the park is an 1800-foot-long boardwalk/trail system around the regional pond. It provides a connection to the Cross Seminole Trail via the multi-use trail along Franklin Street. The park also has a number of opportunities for the public to view the lake and creek through overlooks and benches along the boardwalk. There is also a pavilion with tables and a restroom.



Goal 4 – Provide an Opportunity to Engage and Educate the Public Regarding Stormwater

Given the proximity of the regional pond and park to the impaired waterbody, Lake Jesup, the City wanted to create an opportunity to educate and engage the public. Integrated with the boardwalk and trail are monument display boards are located throughout the park that provide educational information on the local watersheds, environmental benefits of wetlands and conservation areas, ways to help preserve the natural floodplains and how residents can help prevent pollution. Additional educational information is available in the kiosk located at the park entrance.

How the Water Flows

A typical Florida watershed

Have You Ever Wondered Where the Water Goes After a Rainstorm?

Rainfall that runs over roads and hard surfaces carries pollutants to nearby ponds and ditches for treatment. When runoff enters these treatment areas, pollutants and harmful nutrients are filtered from the water by settling to the bottom before discharging to nearby creeks or rivers. Solary Park provides treatment of runoff from 58 acres of land that drains to Sawtooth Creek. Sawtooth Creek is a historic remnant with that provides flood control, starting at Oviedo on the Park, traveling north to Lake Jesup. Solary Park is a 4-acre wet detention pond designed as a treatment pond, wetland storage area and habitat zone. Solary Park was designed to significantly reduce pollutants and unwanted nutrients before the water enters Sawtooth Creek and discharges to Lake Jesup.

Oviedo Watersheds

The City of Oviedo Drains Into Four Watersheds

A watershed is an area of land that channels rainfall to creeks, streams and rivers, eventually to outflow points such as reservoirs, bays and the ocean.

Lake Jesup

The City of Oviedo has 2,268 acres within this watershed. Sawtooth Creek is one of the main tributaries to Lake Jesup. The lake is over 8,000 acres in size and the water quality quickly degrades over the years. A plan was created to reduce pollution affecting the lake. All dischargers that discharge into the lake have to secure Best Management Practices (BMPs) are used to reduce pollutants. Solary Park is one of Oviedo's efforts to reduce its pledge to improve water quality.

Howell Creek

The City of Oviedo has 3,960 acres within this watershed. This area is a mixture of agricultural, commercial and residential properties. Howell Creek is a 17.2 mile long, naturally occurring creek. This watershed contains 28 named lakes and ponds as well as 6 named rivers, streams and canals, including Bear Creek which conveys with the water from Lightwell River Canal in Oviedo and flows north into Howell Creek and ultimately discharges into Lake Jesup.

Little Econlockhatchee River

The City of Oviedo has 2,754 acres within this watershed. The Little Econlockhatchee River (Little Econ) runs from south to north and joins the Big Econ just south of County Road 400. The Little Econ River is very shallow and during major storms the city's Twin Rivers Golf Course discharges the excess flood water. There is a wide buffer zone along the river that is protected from development and is a habitat to a large variety of wildlife.

Big Econlockhatchee River

The City of Oviedo has 3,800 acres within this watershed. The Big Econlockhatchee River (Big Econ) is the largest watershed within Oviedo. The Big Econ flows from Lake County in Orange County to its northern point near Prichard Lake in Seminole County. The Big Econ is 54 miles long and flows into the St. Johns River. As a part of Oviedo's commitment to preserve the beauty and sustain water quality of the Big Econ River, the City has additional development set back rules along its shores.

ALWAYS REPORT ILLICIT DUMPING TO 407-971-5682
WE CAN STOP THE ACTION-WE CANNOT STOP THE EFFECT!

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THE CITY OF OVIEDO

With assistance provided by
THE DEPARTMENT OF ENVIRONMENTAL PROTECTION
through the
STATE WATER QUALITY ASSISTANCE GRANT PROGRAM

Wetlands & Conservation Areas of Oviedo

Wetlands and Conservation Areas Are Important

Conservation areas function similar to wetlands.

Benefits

Wetlands function as a natural sponge that traps and filters out contaminants through vegetation and slows the movement of water over land. This process improves the overall water quality going into our waterways and into the ocean.

- Among the most productive ecosystems in the world, comparable to rainforests and coral reefs.
- Habitat for fish and wildlife including threatened and endangered species.
- Filters pollutants improving natural water quality of our streams, lakes and natural waterbodies.
- Provide shoreline erosion control and flood protection by slowing water flow.
- Educational and scientific research opportunities.

Ways to Help Preserve Our Wetlands

The community can help preserve wetlands in many different ways.

- Never dump yard waste because weeds and invasive plants can regrow.
- Pick up after your pet; animal waste is a major pollutant to our lakes and rivers.
- Wash your car in a designated carwash or grassy area.
- Don't fertilize during the rainy season and use only slow release formulas.
- Hold a community clean up day, with the ponds and wetlands in your area to collect trash.
- Never blow grass clippings or leaves into the street.
- Dispose of chemicals and paints at designated facilities.

A Home for Wildlife

Wetlands provide the ideal habitat for hundreds of different species of birds, fish, reptiles, amphibians and mammals.

Florida Softshell Turtle

Florida Softshell Turtles are flat with a leathery skin covering its shell. The softshell turtle eats insects and fish and can be found basking in the sun. Threats to the softshell turtle include harvesting for meat, pet trade and residential development.

Bobcat

Bobcats are about the size of a domestic cat, have long legs and pointed ears. The bobcat was named after its bobbed tail. Threats to the bobcat include illegal hunting for fur, habitat loss and continuing habitat fragmentation.

North American River Otter

North American River Otters are burrowing and are protected by two coats of fur. A fish underwater for months and an otter that is water resistant. Threats to the otter include habitat loss, water pollution and trapping.

Eastern Indigo Snake

Eastern Indigo Snakes are non-toxic and the largest native snake in North America, growing up to 8 feet in length. Eastern Indigo Snakes are an identified threatened species due to pet trade and habitat destruction.

Bald Eagle

Bald Eagles are predators that hunt for live prey, most from other animals or scavenging. Bald Eagle nesting season is from October through May. Eagle pairs often build more than one nest within their territory; in living trees, that after a week of the area, nests are usually within 2 miles of water. Threats to the bald eagle include nest poisoning and habitat loss.

Florida Black Bear

Florida Black Bears' diet consists of about 80 percent plants, 20 percent insects and 5 percent meat. Florida Black Bears are excellent climbers. Threats to the Florida Black Bear include habitat loss and road mortality.

Florida Sandhill Crane

Florida Sandhill Cranes eat plants and grains, as well as mice, small birds, amphibians and reptiles. Sandhill Cranes have a patch of bald, red skin on the top of their head and a wing span of 80 inches. The Florida Sandhill Crane is a non-migrating, non-wooded, Florida Sandhill Crane is an identified threatened species due to habitat loss and road mortality.

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Goal 5 – Provide a Catalyst for the Redevelopment of Downtown Oviedo

The main part of downtown Oviedo consists of a strip shopping center and other commercial areas that need redevelopment. One of the challenges for developers is how to provide stormwater management as parcels are redeveloped. With the construction of the regional pond approximately 22 acres of the historic downtown will be accommodated in the regional pond, addressing the challenge to developers. The City is already seeing conceptual plans to redevelop portions of the area.

