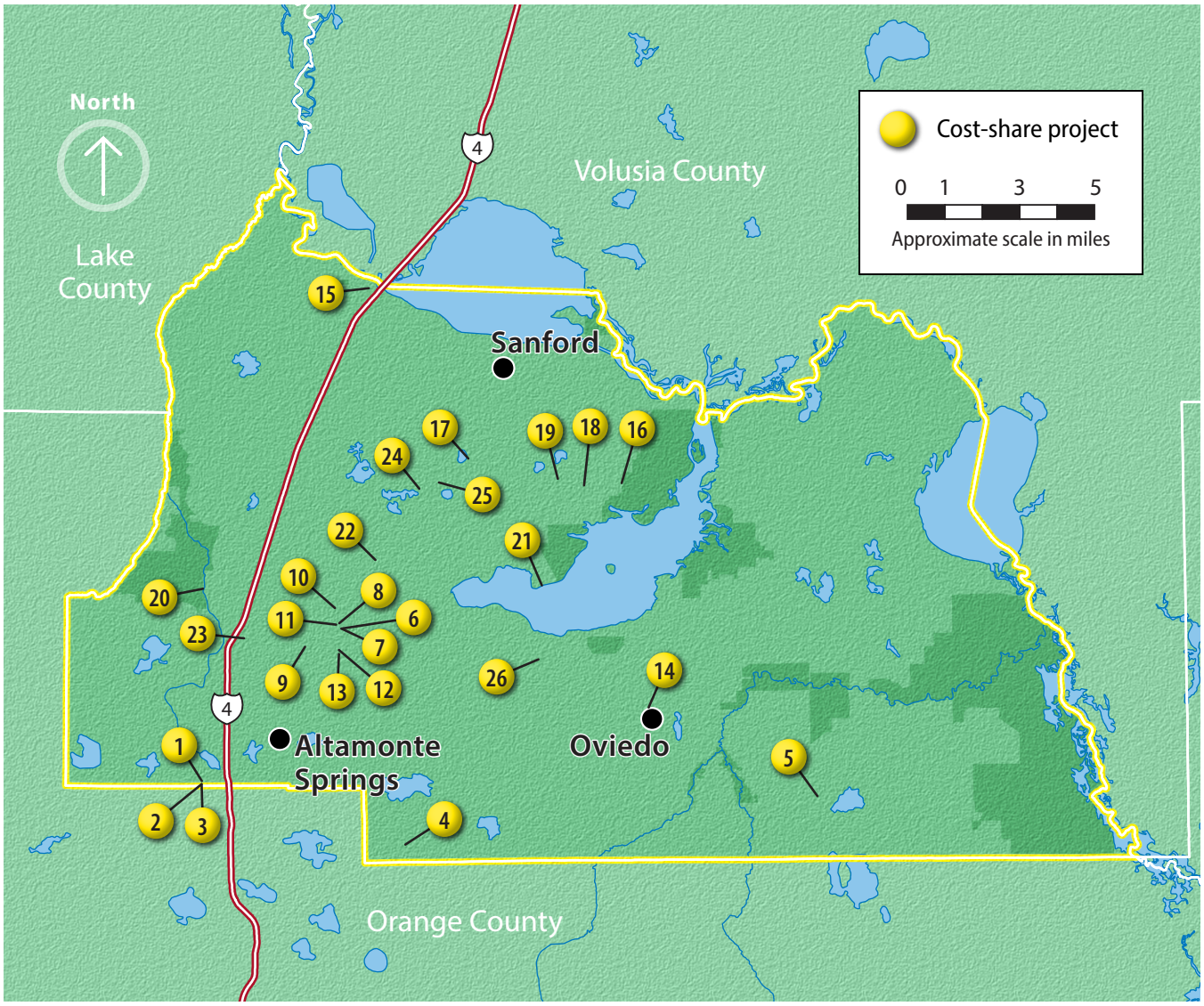
St. Johns River Water Management District

Cost-share and District-led projects in Seminole County

The St. Johns River Water Management District (District) implements a wide variety of projects aimed at protecting water supplies, improving water quality, restoring natural systems, and providing flood protection. A summary of the cost-share projects benefiting Seminole County are described on the following pages. The summary includes a description of benefits for each project, including nutrient load reduction (total phosphorus [TP], total nitrogen [TN] pounds per year [lbs/yr]), alternative water supplied (million gallons per day [mgd]), water conserved (mgd), alternative water storage capacity created (million gallons [MG]), or acres protected from flooding.

Also listed at the end of this document are District-led projects and other efforts benefiting the communities in Seminole County.



Cost-Share Program:

Through the Cost-Share Program, the District and Florida Department of Environmental Protection (DEP) together have awarded approximately $19.8 million for projects in communities throughout Seminole County beginning in fiscal year 2014, leveraging approximately $51 million when combined with local matching funds. Seminole County cost-share projects have provided an estimated benefit of 7 mgd of alternative water supply, 0.5 MG of storage capacity, 0.4 mgd of water conserved, 45,500 lbs/yr TN reduction, 82,000 lbs/yr TP reduction, and 20 acres of wetlands improved.

1. **Altamonte Springs Direct Potable Reuse Pilot Project** — The project included construction of a potable reuse pilot project (pureALTA), including a side stream treatment train to the current wastewater treatment process. Project Status: Complete.
2. **Altamonte Springs Regional Water Reclamation Facility Advanced Wastewater Treatment** — The project consisted of treatment process improvements at the Altamonte Springs Regional Wastewater Reclamation Facility from secondary to advanced wastewater treatment (AWT) standards to provide a higher treatment level. The estimated nutrient load reduction water quality benefit to the Wekiwa-Rock Spring is 10,274 lbs/yr of TN and 54,794 lbs/yr of TP. Project Status: Complete.
3. **Altamonte Springs Regional Water Reclamation Facility Improvements: Phase 2** — This project involved the conversion of three rectangular clarifiers into secondary anoxic and reaeration treatment basins, and construction of two 90-foot diameter circular clarifiers and related appurtenances that will result in more efficient performance and greater overall treatment. The project will provide an additional 3.5 mgd of alternative water supplied. The estimated nutrient load reduction water quality benefit to the Wekiwa-Rock Spring is 6,153 lbs/yr of TN and 21,309 lbs/yr of TP. Project Status: Complete.
4. **Casselberry South Water Treatment Plant Well #1 Modification** — The project included the conversion of one existing Upper Floridan aquifer well at the city's South Water Treatment Plant to the Lower Floridan aquifer. The estimated alternative water supply benefit to the Wekiwa-Rock Spring is 1 mgd. Project Status: Complete.
5. **Florida Governmental Utility Authority (FGUA) Chuluota Reclaimed Water Storage Tank** — The project consisted of the construction of a 0.5 MG reclaimed water ground storage tank and modification and reactivation of the existing pond and pump station at the Chuluota Wastewater Treatment Plant site. The estimated water supply benefit is 0.5 MG reclaimed water storage capacity created. Project Status: Complete.
6. **Longwood East Longdale Septic-to-Sewer** — This project involved abandoning 218 septic tanks and connecting the properties to an existing central sewer line. The estimated nutrient load reduction water quality benefit to lakes Evergreen and Wildmere is 2,438 lbs/yr of TN. Project Status: Complete.
7. **Longwood East Septic: Phase 1** — The project included abandoning 190 septic tanks and connection to a central sewer system. The estimated nutrient load reduction water quality benefit to lakes Evergreen and Wildmere is 1,874 lbs/yr of TN. Project Status: Complete.
8. **Longwood East Septic-to-Sewer Phase 2** — The project includes abandoning 132 septic tanks and installation of a central sewer system. The project is estimated to provide an alternative water supply benefit of 0.033 mgd. The estimated nutrient load reduction water quality benefit to lakes Evergreen and Wildmere is 1,525 lbs/yr of TN. Project Status: Complete.

9. **Longwood Florida Central Commerce Park (FCCP) Stormwater Pond** — The project included expanding an existing stormwater treatment area to augment irrigation sources, decommissioning a small water treatment plant, and rerouting the untreated wastewater to a Seminole County plant to provide a higher level of treatment and to maximize reuse availability, and subsequently abandoning existing irrigation wells. The project is estimated to provide an alternative water supply benefit of 0.05 mgd. The estimated nutrient load reduction water quality benefit to Wekiwa-Rock Spring is 3,204 lbs/yr of TN and 830 lbs/yr of TP. Project Status: Complete.
10. **Longwood North County Road 427 and Lake Ruth Septic Tank Removal** — The project included abandoning 103 septic tanks and installing central sewer to connect the properties. The project is estimated to provide an alternative water supply benefit of 0.03 mgd. The estimated nutrient load reduction water quality benefit to lakes Evergreen and Wildmere is 3,193 lbs/yr of TN and 515 lbs/yr of TP. Project Status: Complete.
11. **Longwood Septic Tank Abatement Program Transmission Main** — This project included construction of a reclaimed water transmission main to connect to the City of Altamonte Springs' Regional Wastewater Reclamation Facility to provide treatment capacity for Longwood's existing and future septic tank connection projects. This project provides additional water for recharge for the Wekiva system through the City of Apopka storage area, and this will add a reuse source to the regional system between Apopka, the City of Altamonte Springs and the A-FIRST system, Orange County Utilities, and others in the Central Florida Water Initiative (CFWI). The estimated alternative water supply benefit is 0.7 mgd. Project Status: Complete.
12. **Longwood Septic Tank Abatement: Phase 1** — The project included abandoning 240 septic tanks and constructing a central sewer line. The estimated nutrient load reduction water quality benefit to Lake Wildmere, Lake Jane and Little Lake Wildmere is 6,270 lbs/yr of TN and 1,200 lbs/yr of TP. Project Status: Complete.
13. **Longwood South Septic Tank Abatement: Phase 2** — This project included abandoning 68 septic tanks in the south portion of Longwood. The project is estimated to provide an alternative water supply benefit of 0.01 mgd. The estimated nutrient reduction water quality benefit to Lake Wildmere, Lake Jane and Little Lake Wildmere is 1,550 lbs/yr of TN and 250 lbs/yr of TP. Project Status: Complete.
14. **Oviedo Reclaimed Water Infill Initiative** — The project included installing meters for reclaimed water service to 519 residential units. The estimated alternative water supply benefit is 0.25 mgd. Project Status: Complete.
15. **Sanford and Volusia County Reclaimed Interconnect (Sanford Portion)** — The project included construction of an interconnect between the reclaimed water distribution systems for the City of Sanford and Volusia County. The estimated alternative water supply benefit is 0.2 mgd. Project Status: Complete.
16. **Sanford Brackish Reverse Osmosis (RO) Wastewater Treatment Plant Pilot** — The project was a feasibility study to determine if groundwater from brackish supplies can be used as an alternative water supply. It included construction of monitoring wells and testing to evaluate the possibility of using brackish groundwater as an alternative water supply. An RO pilot unit was installed to treat the brackish groundwater. The data and information collected during the pilot study will assist in the design of a full-scale brackish groundwater treatment plant to meet future potable water demand. Project Status: Complete.
17. **Sanford Enhancement to Aquifer Storage and Recovery (ASR) System** — The project included modification to the existing ASR system to allow the use of two additional water

sources, individually or blended. The estimated alternative water supply benefit is 0.66 mgd. Project Status: Complete.

18. **Sanford Reclaimed Water Orlando-Sanford Airport Expansion: Phase 1** — The project included construction of a reclaimed water main extension along Lake Mary Boulevard from Sanford Water Resource Center to the Brisson West Development and the Silvestry Development. The estimated water supply benefit is 0.277 mgd of alternative water. Project Status: Complete.
19. **Sanford Reclaimed Water Orlando-Sanford Airport: Phase 2** — The project involved the installation of a reclaimed water main along the Lake Mary Boulevard extension. The estimated alternative water supply benefit is 0.103 mgd. The project is also estimated to provide a nutrient load reduction water quality benefit of 4,245 lbs/yr of TN and 597 lbs/yr of TP. Project Status: Complete.
20. **Seminole County Little Wekiva Restoration Project** — The project consists of harvesting invasive plant islands, removal of deposited sediments within the Little Wekiva River, recontouring of historic meanders, and replanting with beneficial native plant species. The project is located within the Wekiva River, Rock Springs Run, and Little Wekiva Canal. The estimated natural systems benefit will be 20 acres of restored wetlands. Project Status: Complete.
21. **Seminole County Conservation Tool** — The project involved the purchase of the University of Florida's Program for Efficient Communities (UF/PREC) GeoViz tool and integration with the county's existing conservation program. Using this tool will provide information that allows the county to inform higher water use customers of their conservation potential and conservation programs or educational sessions that could help them reduce water consumption. The water conservation benefit is 0.3 mgd. Project Status: Complete.
22. **Seminole County Lake Jesup Nutrient Removal Facility** — The project included the retrofit of an existing stormwater facility for a portion of County Road 427, diverting runoff from Soldiers Creek (a basin of 5,765 acres) into the stormwater pond and using alum injections to remove nutrients and suspended solids prior to discharge. The estimated nutrient load reduction water quality benefit to Lake Jesup is 4,675 lbs/yr of TN and 2,137 lbs/yr of TP. Project Status: Complete.
23. **Seminole County Passive Onsite Treatment System** — The project included retrofitting two residential homes with existing conventional septic system by adding a passive onsite treatment system to remove additional nutrients from the drain field effluent. The estimated nutrient load reduction water quality benefit is 96 lbs/yr of TN and 17 lbs/yr of TP. Project Status: Complete.
24. **Seminole County Toilet Rebate Program: Phase 1** — The project included a toilet rebate program to incentivize replacement of existing high-volume toilets (3.5 gallons per flush [gpf] or greater) or malfunctioning 1.6 gpf toilets. The estimated water conservation benefit is 0.009 mgd. Project Status: Complete.
25. **Seminole County Toilet Rebate Program: Phase 2** — The program includes a toilet rebate program to incentivize replacement of existing high-volume toilets (3.5 gallons or greater per flush) with low-flow toilets (1.6 gpf or less). The estimated water conservation benefit is 0.04 mgd. Project Status: In Progress.
26. **Winter Springs Tuskawilla Crossing Reclaimed Water Extension** — This project included connecting the city's reclaimed water main to the reclaimed residential distribution system installed in the Tuskawilla Crossings area to eliminate the groundwater withdrawal associated with approximately 379 residential parcels. The estimated alternative water supply benefit is 0.2 mgd. Project Status: Complete.

District-led projects and other efforts

The District constructs large, regional projects that often benefit multiple counties and benefit more than one of the District's core missions. Some of the efforts in Seminole County include:

Intact Cellular Algae Harvesting with Simultaneous Nutrient Export in Lake Jesup — This is a pilot project that employs innovative technology to remove intact cellular algae, suspended solids and associated nutrients directly from the lake's water column. Data was collected to evaluate the technology's efficiency and the cost effectiveness of a full-scale system that can help achieve the Lake Jesup Total Maximum Daily Load and Basin Management Action Plan goals.

Lake Jesup Nutrient Reduction and Flow Enhancement — The goal of the project is to design, construct, and operate a nutrient removal system, using biosorption activated media-based technology, that cost-effectively removes TN and TP from Lake Jesup. The project will pump raw water from the lake, treat influent using media-based technology, and discharge water treated to state water quality criteria back to the lake. The full-scale treatment technology will be designed to remove TN and TP at rates at or above 50,000 and 5,000 pounds/year, respectively. The project location is a 9.7-acre upland property on the larger District-owned Lake Jesup east tract. Design of the full-scale nutrient removal system began in January 2024. Part of the design work will be a pilot-scale study to evaluate the best media-based technology.

Central Florida Water Initiative (CFWI) — The District works in partnership with the South Florida Water Management District, Southwest Florida Water Management District, DEP, Florida Department of Agriculture and Consumer Services, local utilities and other stakeholders in the central Florida region to implement effective and consistent water resources planning, development, and management. Learn more about this planning region and its adopted regional water supply plan at *www.cfwiwater.com*.

Minimum flows and levels (MFLs) program — The District establishes MFLs for priority water bodies within its boundaries. MFLs define the limits at which further water withdrawals would be significantly harmful to the water resources or ecology of an area. MFLs is an effective tool to assist in making sound water management decisions and preventing significant adverse impacts due to water withdrawals.

Hydrologic and water quality data collection — The District operates a network of data collection sites for hydrologic conditions and water quality in many lakes, wetland restoration areas, streams, springs, and wells.

District conservation areas

The District buys land in the course of its work to protect and preserve water resources. These lands also protect plant and wildlife habitat and provide areas for public recreation and environmental education. Virtually all District property is open to the public for activities that are compatible with conservation, though some may be closed during ongoing construction or restoration projects. In Seminole County, District properties include Lake Jesup Conservation Area, Seminole Ranch Conservation Area and Wekiva River Buffer Conservation Area. For a current listing of District conservation areas, visit *www.sjrwmd.com/lands*.

Project status as of February 2025