



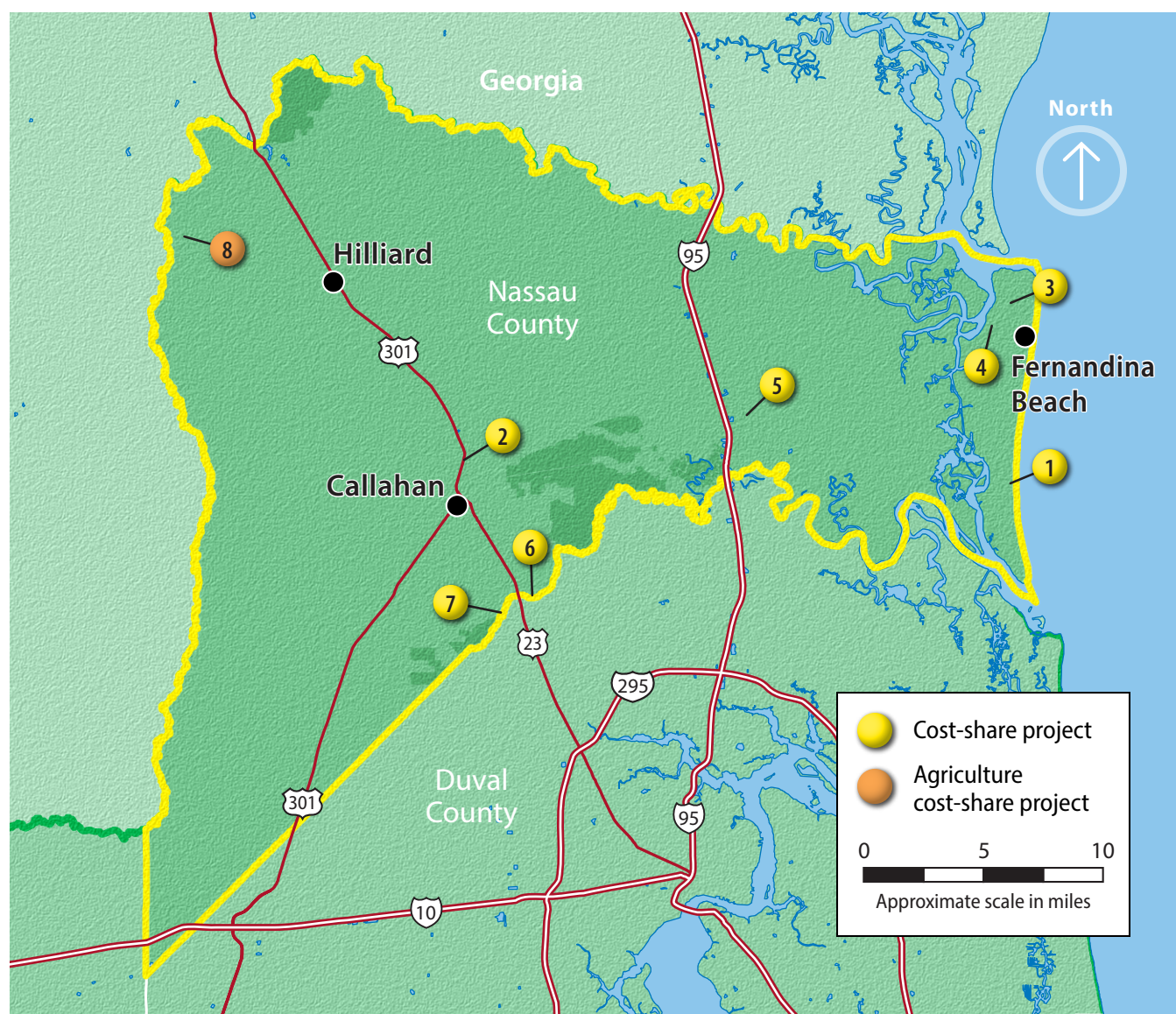
St. Johns River Water Management District

Cost-share and District-led projects in Nassau 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 Nassau 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 Nassau County.



Cost-Share Program:

Through the Cost-Share Program, the District and Florida Department of Environmental Protection (DEP) together have awarded approximately \$4.4 million for projects in communities throughout Nassau County beginning in fiscal year 2016, leveraging approximately \$5.9 million when combined with local matching funds. Nassau County cost-share projects have provided an estimated benefit of 0.5 mgd of alternative water supply, 44,000 lbs/yr TN reduction, 6,300 lbs/yr TP reduction, and 563 acres of flood protection.

- 1. American Beach Water and Sewer District Well and Septic Tank (REDI)** — The project includes the abandonment of a minimum of 79 septic tanks, the construction of sewer laterals to parcels or stubbed out, and returning the property to pre-construction status within the American Beach Water and Sewer District. The estimated nutrient load reduction water quality benefit to the Amelia River is 941 lbs/yr of TN and 123 lbs/yr of TP. Project Status: In Progress.
- 2. Callahan Force Main Extension to Fairgrounds (REDI)** — The project includes the construction of a wastewater force main to extend the existing wastewater collection system from the county's fairgrounds to the Town of Callahan's Advanced Wastewater Treatment Facility. The estimated nutrient load reduction water quality benefit is 325 lbs/yr of TN. Project Status: Complete.
- 3. Fernandina Beach Area 1 Drainage Improvements** — The project included construction of a wet detention pond, a floating wetland system, and inlet skimmers to reduce sediment and nutrient content to upgrade the existing drainage system in the North 15th Street area where no stormwater treatment existed. The estimated nutrient load reduction water quality benefit to Egans Creek (which drains to the Fort Clinch Aquatic Preserve) is 50 lbs/yr of TN and 10 lbs/yr of TP. Project Status: Complete.
- 4. Fernandina Beach Swale Program** — The project included creation of shallow swales

along existing city streets (within right-of-way) to provide local drainage, flood protection and stormwater treatment. The estimated nutrient load reduction water quality benefit is 358 lbs/yr of TN and 72 lbs/yr of TP. The estimated flood protection benefit is 48 acres. Project Status: Complete.

- 5. JEA William Burgess Road** — The project involved the construction of a reclaimed water main to serve a major planned development named East Nassau Community Planning Area (ENCPA). The estimated nutrient load reduction water quality benefit is 42,617 lbs/yr of TN and 6,088 lbs/yr of TP. The project also provides an estimated alternative water supply benefit of 0.5 mgd. Project Status: Complete.
- 6. Nassau County Thomas Creek Restoration: Phase 7** — The project consisted of the de-snagging of Thomas Creek, including removing dead trees, uprooted trunks, limbs, and parts of trees from Thomas Creek. This project will alleviate flooding issues previously experienced on properties adjacent to the creek. Project Status: Complete.
- 7. Nassau County Thomas Creek Restoration: Phase 8** — The project consisted of the de-snagging of Thomas Creek, including removing dead trees, uprooted trunks, limbs, and parts of trees from Thomas Creek. The estimated flood protection benefit is 515 acres. Project Status: Complete.

Agricultural Cost-Share Program:

The Agricultural Cost-Share Program provides funding to agricultural operations to conserve water and reduce offsite nutrient loading. Beginning in fiscal year 2015, the District provided over \$31,000 in funding for an agricultural project in Nassau County. Nassau County agricultural cost-share projects have provided an estimated alternative water supply benefit of 0.07 million gallons per day (mgd).

- 8. Traders Hill Farms Rainwater Harvesting** — This project involved capturing rainwater from greenhouse roofs for use in approximately 5 acres of an aquaponics operation benefitting

the St. Marys River Basin. The estimated water conservation benefit is 0.07 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 Nassau County include:

Northern Coastal Basins — The District, local, regional, state and federal agencies have come together to address issues such as flooding, water quality (particularly in shellfish harvesting areas) and protection of coastal saltmarsh resources. Interagency work groups are guiding efforts to develop and monitor resource baselines and to coordinate resources and funding for development and implementation of regional watershed management initiatives, which includes a watershed-based Surface Water Improvement and Management (SWIM) Plan to enhance, restore and manage the water quality and wetland resources within the basin's estuaries. Adopted in 2002, the District implements the plan through activities that include a water quality monitoring network, tracking and evaluating stormwater management to provide technical assistance to help guide local government stormwater retrofit projects, work with local leaders to collect and evaluate compliance with permitted stormwater treatment systems, and collect, map and evaluate datasets for resources and habitats used to develop and implement restoration activities.

St. Marys River Management Committee — This committee is an intergovernmental advisory board of elected and appointed members from four counties along the St. Marys River in Florida and Georgia, including Baker and Nassau counties (Florida) and Charlton and Camden counties (Georgia). The committee develops and implement plans and programs for the St. Marys River. The committee is made up of individuals who are involved because of a personal commitment to the use and protection of

the St. Marys River. The District has participated on the committee as a non-voting member, in a technical support role, since its inception in 1991. For more information, visit <https://saintmarysriver.org>.

North Florida Regional Water Supply Partnership

— The District is working in partnership with the Suwannee Florida Water Management District, DEP, local utilities and other stakeholders in north Florida to develop joint water resource protection strategies, sharing data and technology, and effective communication with stakeholders across district boundaries. For more information, visit www.northfloridawater.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 Nassau County, District properties include Thomas Creek Conservation Area. For a current listing of District conservation areas, visit www.sjrwmd.com/lands.

