

## 2013 Annual River Accord Report Snapshot

*The River Accord is a Partnership for the St. Johns*, a 10-year, \$700 million initiative to begin restoring the health of the Lower St. Johns River Basin. This is a summary of the 6th year of the Accord.

Based on decades of research about river restoration programs, the Accord committed to reduce the amount of nitrogen discharged into the river by:

- Phasing out older technology wastewater treatment plants;
- Improving other wastewater treatment plants and building pipelines necessary to reuse treated wastewater for irrigation of lawns, parks, and golf courses;
- Eliminating failing septic tanks;
- Capturing and treating stormwater before it enters the river.

In addition to specific efforts to reduce nitrogen discharges into the river, The River Accord has four general areas of interest (AOI):

- Program accountability
- Improving water quality
- Tracking the river's sedimentation
- Improving public access to the river

### AOI #1: PROGRAM ACCOUNTABILITY

The River Accord features a steering committee composed of representatives from partnering agencies which meets quarterly and produces The River Accord Annual Status Report on construction, regulation and outreach. An independent State of the River Report, by the University of North Florida and Jacksonville University describes the health of the river ecosystem biologically and chemically.

### AOI #2 IMPROVING WATER QUALITY

#### Wastewater Upgrades

To date, SJRWMD has contributed \$50 million toward wastewater reductions at basin utilities:

Clay County Utility Authority — \$30.7 million. Project will redirect water from the Miller Street wastewater treatment plant and the town of Orange Park to the high-growth area to the west. These projects will reduce the amount of total nitrogen discharged to the St. Johns River by an estimated 107,396 lbs./yr.

City of Palatka – Wastewater Treatment Facility (WWTF) project in the freshwater reach was completed with a reduction of 4,774 kilograms per year (kg/yr) of TP and 21,844 kg/yr of TN.

,600 lbs/yr. and phosphorous reductions are estimated to be 21,100 lbs./yr.

Town of Orange Park — \$5.5 million. Project includes upgrades to the existing wastewater treatment plant, which will allow for expanded use of reclaimed water for use on parklands and commercial lands. The expected average annual nitrogen reduction to the river is 47,940 pounds.

St. Johns County — \$8.3 million. Project will be to install a trunk line to support a planned unit development in which the developer will be required to install a dual water line system. The project is anticipated to reduce nutrient loadings to the river by 10,000 lbs./yr. at build-out.

Neptune Beach — \$2.3 million. Wastewater treatment improvements to advanced secondary nutrient reduction standards and installation of facilities to provide reclaimed wastewater to municipal properties. This work will reduce total nitrogen entering the river by 17,380 lbs./yr.

City of Atlantic Beach — Wastewater project was completed in the marine reach for a total reduction of 22,119 (kg/yr) of TN.

City of Jacksonville Beach — \$15 million. This wastewater treatment project will improve the city's discharge to advanced wastewater treatment standards. Nutrients (nitrogen) removed from the river per year: 65,000 pounds.

JEA is in the last phase of construction of numerous committed wastewater treatment related projects totaling over \$150 million. The final treatment project, a \$22 million improvement to the Buckman regional treatment plant and the last of 5 phase-outs of older technology plants should be completed by the end of this year. Once complete, the total projects are expected to result in a total reduction of over 1,600,000 lbs./yr of total nitrogen entering the River.

City of Atlantic Beach – Wastewater project was completed in the marine reach for a total reduction of 22,119 (kg/yr) of TN.

### **Wastewater Reuse**

NAS Jacksonville (U.S. Navy) — \$4.2 million. This project will remove all discharge from the river and apply it to reuse sites on the military base. Discharge of 44,525 lbs./yr. of total nitrogen eliminated. Status: Phase 1 in progress. NAS Jacksonville is aiming to reuse 100 percent of its wastewater thereby eliminating the need to withdraw approximately 37 million gallons per year of potable water from the Florida aquifer and 315 million gallons annually of treated wastewater to the St. Johns River by the end of 2014.

JEA has completed 168 miles of reclaimed water lines. JEA placed into service this year a \$2 million project to provide an additional 2-3 MGD of reclaimed water from the District II wastewater plant to our power generating facilities at Northside and St. Johns River Power Park.



Buckman upgrades

### **Nonpoint Source Successes**

There have been many successes in Accord implementation and pollutant reduction during the year:

- WSEA and JEA extended sewer lines to phase out septic tanks in Oakwood Villas Phase 2 and Lincoln Villas Estates Phase 1, using \$12 in state funding. The majority of the homes in the area will be connected by 2014. One municipal separate storm sewer system (MS4) project was completed in the marine reach for a reduction of 5,533 (kg/yr) of TN.
- The Waste Water Treatment Facilities (WWTFs) and MS4s in the fresh-water reach have achieved their portion of the TN and TP required reductions. Those reductions are reflected below:
  - WWTF Progress Towards the TP Freshwater TMDL has a reflected reduction of 94,895 lbs/yr TP.
  - WWTF Progress Towards the TN Freshwater TMDL has a reflected reduction of 372,000 lbs/yr TN.
  - MS4 Progress Towards the TP Freshwater TMDL has a reflected reduction of 537 lbs/yr TP.
  - MS4 Progress Towards the TN Freshwater TMDL has a reflected reduction of 2,300 lbs/yr TN.

### **Duval County Health Department (DCHD) Septic Tank Enforcement**

During the course of this project, DCHD provided monthly progress reports to FDEP which indicate a total of

3,269 sites were investigated. It was discovered that approximately 150 of the properties inspected were connected to a centralized sewerage system and were forwarded to JEA for further review. It was also determined that approximately 207 of the parcels were vacant property and 46 property owners refused access to DCHD inspectors. 64 property owners received an official notice due to violations discovered during the project period. Violations included a variety of sanitary nuisance conditions such as direct laundry discharge and sewage on the ground surface, unsealed and broken septic tank lids, damaged drainfields, collapsed septic tanks, plumbing back-up and illicit discharge pipes. Enforcement continued until all sanitary nuisances were corrected.

The outreach and education provided as part of this project increased public awareness of the many nutrient (i.e. TN and TP) and fecal coliform sources and their impacts on water quality. The effects of such awareness should result in an increased number of homeowners having their septic systems pumped out and inspected on a regular basis, more efficient water usage, a decrease in hazardous chemicals being discarded into septic systems, and better maintenance of septic systems in general. It is expected that these effects will be observed long after the end of this project which should aid in further reductions of fecal coliform bacteria from septic systems.

### **Agricultural Projects**

The SJRWMD has constructed two regional stormwater treatment (RST) facilities in the Tri-County Agricultural Area (Putnam, St. Johns, and Clay counties) to capture runoff from agricultural watersheds and remove nutrients prior to discharging to tributaries leading to the river. The areas each have filled with water to make wetlands and a deep pond, which filter pollutants from the rain and irrigation runoff from the agricultural farms before they flow into the St. Johns River.

County is utilizing state funding (with the assistance of the SJRWMD) to develop an additional agricultural runoff treatment facility near Hastings, Fla. This facility will treat 1,425 acres of agricultural runoff also draining to Deep Creek.

Additionally, FDACS, FDEP and the SJRWMD have initiated a program in conjunction with the TCAA growers and other stakeholders to cost share the implementation of certain BMPs. This program, named the TCAA Water Management Partnership is being led by FDACS with funding support of \$1.5 million from the SJRWMD and approximately \$3.5 million from the FDEP., plus an additional \$75,000 from the State in 2011.

### **Irrigation**

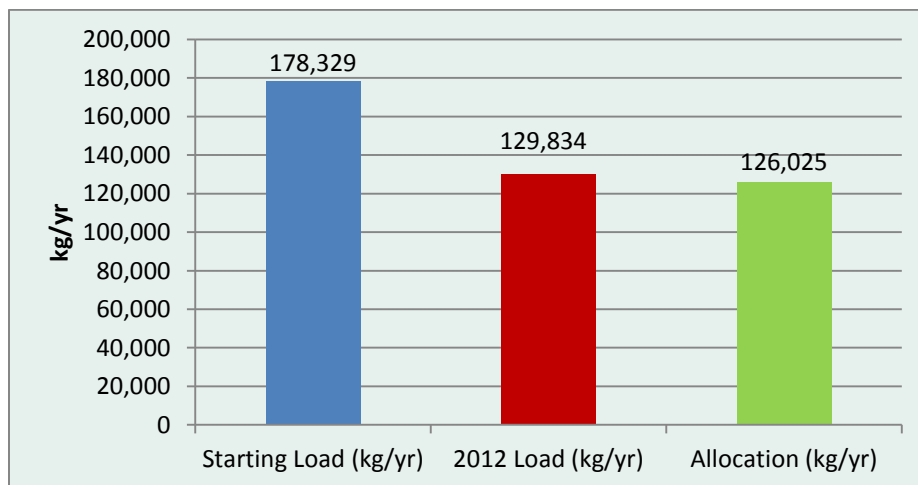
Since March 2009, SJRWMD limits irrigation to 2 days/week during DST and one day during EST. COJ also enforces watering restrictions in Duval County.

### **Other BMAP Progress**

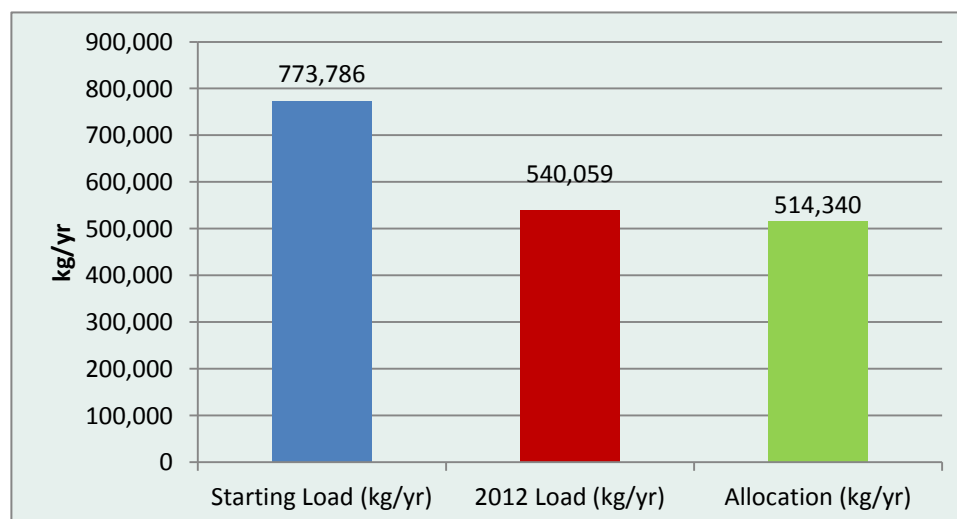
The fifth annual BMAP progress report will encompass the period of January 1, 2013 through December 31, 2013. During this time,

- The City of Jacksonville Beach will complete the upgrades to their WWTF
- JEA will complete the Royal Lakes WWTF phase out, San Jose WWTF phase out, Buckman WWTF process improvements, and the reuse expansion projects in the marine reach.
- The City of Jacksonville will continue to phase-out septic tanks and design stormwater projects to meet their marine reach MS4 allocation, or pursue alternate projects or water quality credit trades.
- The City of Palatka will start construction on their stormwater treatment project in the freshwater reach.
- Camp Blanding will complete the maintenance and repair of their swales in the marine reach.
- FDACS will continue to enroll agricultural producers in BMP programs.

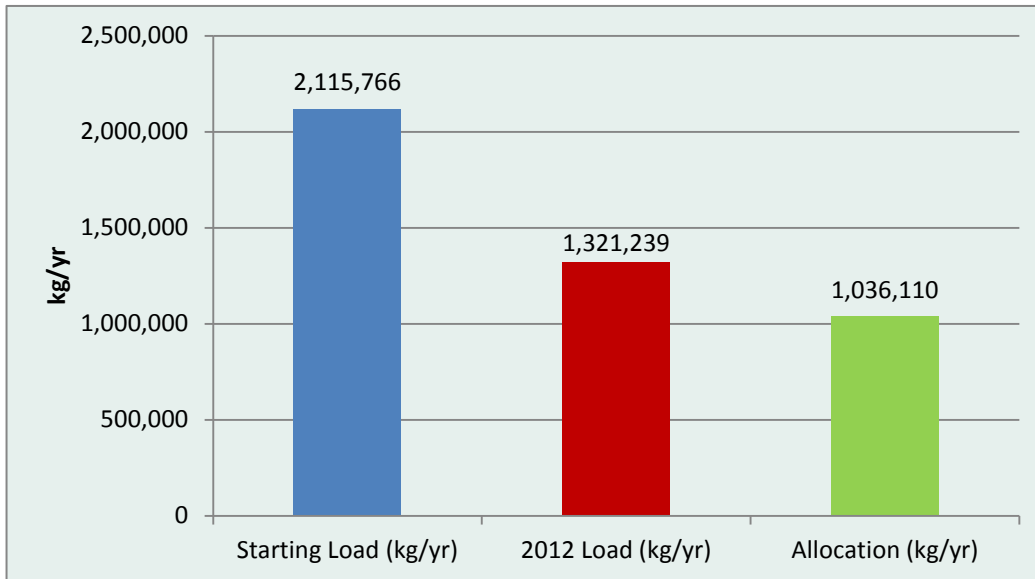
*Progress Towards the TP TMDL in the Freshwater Reach:*



*Progress Towards the TN TMDL in the Freshwater Reach*



*Progress Towards the TN TMDL in the Marine Reach*



**AOI #3 TRACKING SEDIMENTATION**

COJ Stormwater Utility attributes include:

- 840 sq miles
- 44,000 Catch Basins/Inlets
- 7500 Manholes
- 1000 miles of pipe
- 134 ponds
- 2000 miles of major outfalls
- 4000 miles of ditches
- 8 pump stations
- \$15 million annual budget

Construction Projects	
Completed	
Melba/Green Street	LSJR Trout River
Smith Broward Pond	LSJR Trout River
Woodland Acres/Oakwood Villa Area Drainage Ph I	Arlington River
Hugh Edwards Road Drainage	Ortega River
Pine Forest/Larsen Acres	LSJR Trout River
Upper Deer Creek Phase 3	LSJR Trout River
Venetia Terrace Drainage	Ortega River
McCoy's Creek Pond C	LSJR Trout River
Phase I Completion	
Newtown Drainage main trunkline (Myrtle & Beaver)	LSJR Trout River

<b>Under Construction</b>	
Air Liquide Pond Retrofit	LSJR Trout River
Miruelo Circle	LSJR Trout River
City-Wide Drainage System Rehabilitation	LSJR - Countywide
Paul Avenue Outfall	LSJR Trout River
<b>Design</b>	
Hamilton Jersey Outfall – in progress	LSJR Trout River
Pinedale Area – in progress	Ortega River
Country Creek Area Drainage Improvements - Pending	Ortega River
Avenue “B”/Zinia Outfall	Trout River
Crystal Springs Area	Ortega River
Bunche Rd. Drainage	Ortega River
Noroad/Lambing Drainage	Ortega River
Mandarin Area Drainage (Grand Cirque)	LSJR Upstream of Trout River
County Creek Area	Ortega River
Messer Area Drainage	LSJR
Septic Tank Phase-Out	LSJR

### **Erosion and Sediment Enforcement**

SJRWMD and COJ both inspect complaints of erosion and sedimentation from construction sites. There were 6 enforcement cases last year in Duval County.

### **AOI #4 IMPROVING PUBLIC ACCESS**

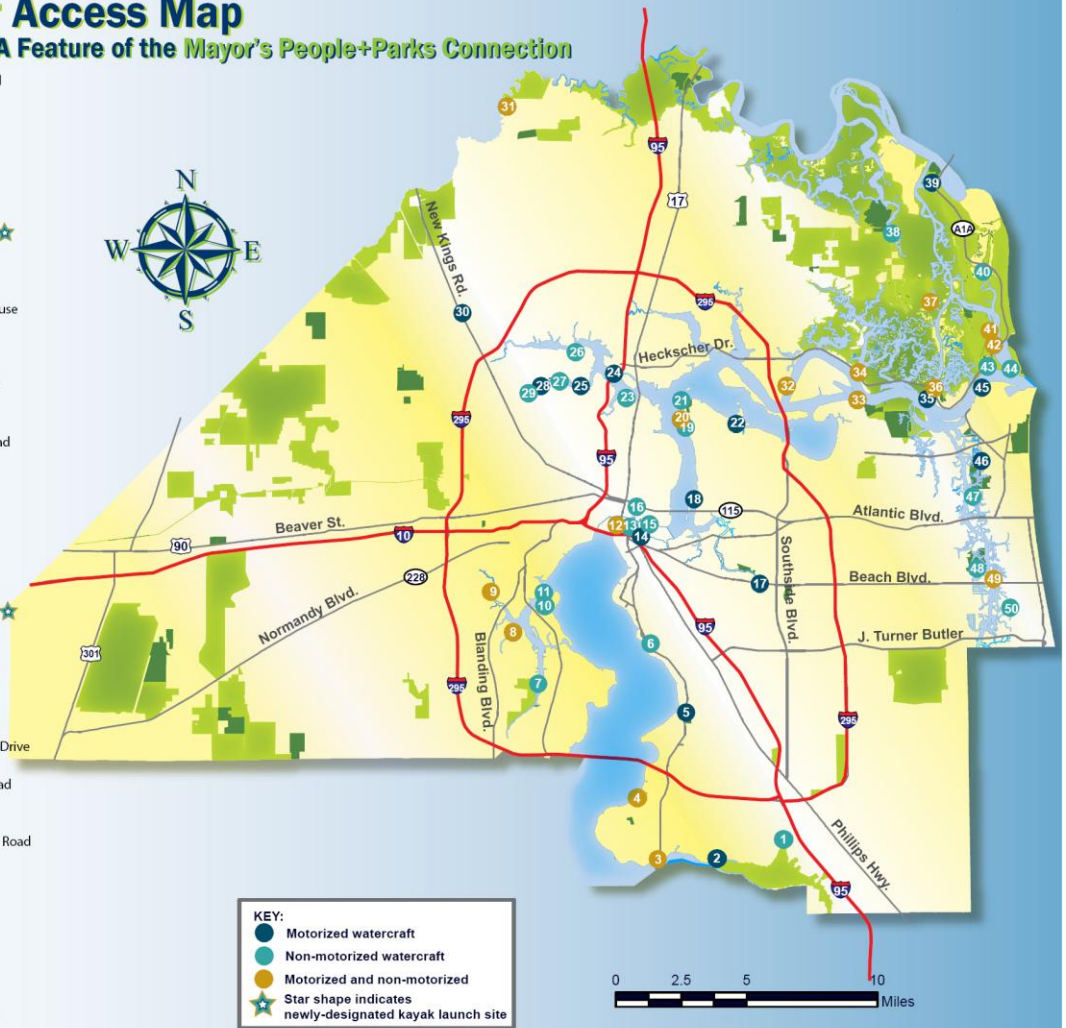
The River Accord, along with its Preservation Project partners, continues working to improve public access to the St. Johns River and its tributaries. Below is a map showing current public access areas with the past year’s improvements described in the text which follows. More information is available at [www.JaxParks.com](http://www.JaxParks.com)



# JaxParks Water Access Map

A Feature of the Mayor's People+Parks Connection

- 1 Palmetto Leaves Park, 13799 Old St. Augustine Road
- 2 Hood Landing, 12804 Hood Landing Road
- 3 Mandarin Park, 14780 Mandarin Road
- 4 County Dock, 2403 County Dock Road
- 5 Goodby's Lake, 9021 San Jose Blvd.
- 6 Nathan Krestul Park, 2001 LaVaca Road
- 7 Ringhaver Park, 5198 118th St.
- 8 Wayne B. Stevens, 4555 Ortega Farms Blvd.
- 9 Curtis Lee Johnson Marina Park, 5434 San Juan Ave.★
- 10 Seminole Park, 4170 McGirts Blvd.★
- 11 Stinson Park, 4050 San Juan Ave.
- 12 St. John's Marina, 901 Museum Circle
- 13 Southbank Riverwalk, Water taxi dock near Chart House
- 14 Bee Street Park, Bee St. and Utah Ave.★
- 15 Metro Park Marina, 4110 Gator Bowl Drive
- 16 Catherine Street, north end of Catherine St.★
- 17 Pottsbury Creek/Beach Boulevard, 8540 Beach Blvd.
- 18 Arlington Road, 5103 Arlington Road
- 19 Blue Cypress Park, 4012 University Blvd. N.
- 20 Arlington Lions Club Park, 4322 Richard D. Gatlin Road
- 21 Reddie Point Preserve, 4499 Yachtsman Way
- 22 Lonnie Wurn, 4131 Ferber Road
- 23 North Shore Park, 7901 Pearl St.
- 24 Bert Maxwell, 680 Broward Road
- 25 T.K. Stokes, 2120 Riverview Ave.
- 26 Riverview Park, 9620 E. Water St.
- 27 Ribault River Preserve, 2617 Ribault Scenic Drive
- 28 Harborview, 4100 Harbor View Drive
- 29 Charles Reese Memorial Park, 1200 Ken Knight Drive★
- 30 Dinsmore, 11001 New Kings Road
- 31 Thomas Creek Preserve, 17198 Ethel Road★
- 32 New Berlin, 9002 Frederick St.★
- 33 Fulton Road Landing, 5099 Fulton Road★
- 34 Palms Fish Camp, 6359 Heckscher Drive
- 35 Joe Carlucci, 8414 Heritage River Road
- 36 Sister's Creek Marina/Jim King Park, 8203 Heckscher Drive
- 37 Cedar Point Preserve, 9023 Cedar Point Road
- 38 Pumpkin Hill Creek Preserve, 13990 Pumpkin Hill Road
- 39 Big Talbot Island State Park, 15500 Heckscher Drive
- 40 Kayak Amelia, 13030 Heckscher Drive
- 41 Fort George Island (Ribault Club), 11241 Fort George Road
- 42 Alimacani, 11080 Heckscher Drive
- 43 Haulover Creek, 10980 Heckscher Drive★
- 44 Huguenot Memorial Park, 10980 Heckscher Drive
- 45 Mayport (Michael B. Scanlon), 4870 Ocean St.
- 46 Oak Harbor, 2428 Seaway St.
- 47 Dutton Island Preserve, end of Dutton Island Drive
- 48 Castaway Island Preserve, 2921 San Pablo Road S.
- 49 Intracoastal Waterway, 2510 2nd Ave. N.★
- 50 Cradle Creek Preserve, 15th St. South & Fairway Lane



## Michael B. Scanlan Mayport Boat Ramp

- Completed design for expanding this heavily used boat ramp in Mayport. The project will result in doubling the floating docks and adding one launch lane. Construction is now pending.

## Ortega River Channel Markers

The Ortega River is a popular waterway with boat traffic and boat moorings. Some boats are currently moored within the unmarked channel thus resulting in navigation challenges and potential hazards. The City has taken the following steps in the past year:



- Completed the design and permitting for channel markers and mooring buoys within the Ortega River which involved hydrographic surveys, public meetings and obtaining a submerged land lease from the State.
- Applied for a FIND grant to install eight new channel marker buoys and replace three existing buoys within the Ortega River.



*Boat moorings within channel of Ortega River.*

### **St. Johns River Blueway/Exchange Club Island Park**

- Supporting the St. Johns River Alliance's request to the State to officially designate the entire 310-mile river as a paddling trail or "blueway." Designation will lead to economic development of nature-based tourism for communities along the river.
- As a component of the blueway effort, the City has been working with the National Park Service to develop a conceptual plan for Exchange Club Island Park, located under the Matthews Bridge. A public workshop was held to solicit input and a FIND grant has been submitted for design/permitting of a small floating dock, a kayak landing area, two picnic shelters and a nature trail on the island.



*Exchange Club Island Park*

### **DEP grant for Bakersfield Drive**

- Awarded a grant from DEP to develop a professional design to restore a few vacant properties, which the city obtained from FEMA along Bakersfield Drive, to a functional riparian wetland to improve localized

flood management, water quality and wildlife habitat. The project will also involve the development of a new kayak launch at this site.

### **2013 Greater Jacksonville Kingfish Tournament**

- Successfully completed another year of the Greater Jacksonville Kingfish Tournament, the largest of its kind in the country. The main tournament included 208 boats. Youth participation included 164 junior anglers in the Off-Shore Tournament, 97 in the Dock Tournament and an additional 56 children were introduced to fishing in partnership with JaxParks Summer Camp program.

### **Greater Jacksonville Paddling Guide**

Developed a new paddling guide in partnership with the Public Trust Environmental Legal Institute of Florida. The guide covers the St. Johns River from Julington Creek to the Trout River and identifies all public canoe/kayak launches, points of interest, caution areas and provides recommendations for paddling routes. The guide is available for download at [www.GreaterJacksonvillePaddlingGuide.org](http://www.GreaterJacksonvillePaddlingGuide.org)

