



St. Johns River
Water Management District

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Upper St. Johns River Basin

Florida's longest river begins its 310-mile northerly journey to the Atlantic Ocean from a drainage basin west of Vero Beach in Indian River County. The 2,000-square-mile basin — the headwaters of the St. Johns River — is perhaps the most distinctive portion of river. Known as the Upper St. Johns River Basin, the area features a mosaic of marsh, sawgrass and cypress domes, and is visually similar to the Florida Everglades.

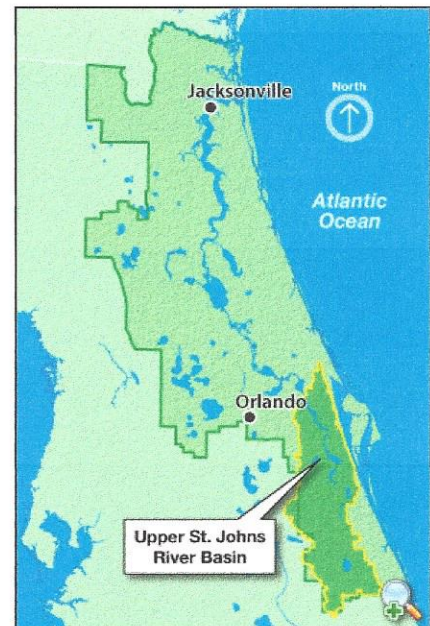


The basin extends from the headwaters of the St. Johns River in Indian River and Brevard counties to the confluence of the St. Johns and Econlockhatchee rivers in Seminole County, and originally contained more than 400,000 acres of floodplain marsh.

In the early 1900s, the upper basin was diked and drained for agricultural purposes. By the early 1970s, 62 percent of the marsh was gone and canals were constructed to divert floodwaters from the basin to the Indian River Lagoon to the east. The alterations diminished water quality in the lagoon and degraded the upper basin's remaining marshes.

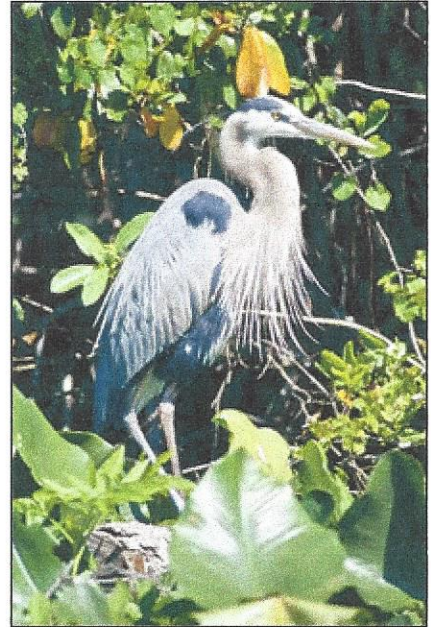
Solutions

In 1977, the St. Johns River Water Management District and the U.S. Army Corps of Engineers embarked on an ambitious, long-term flood control project within a portion of the upper basin. The Upper St. Johns River Basin Project provides flood protection to the river's headwaters region and has revitalized the river's flow by reclaiming drained marshlands, plugging canals and building reservoirs. The project also is designed to improve water quality, reduce freshwater discharges to the Indian River Lagoon, provide for water supply, and restore or enhance wetland habitat.



The **upper basin project** is a semi-structural system of four water management areas, four marsh conservation areas and two marsh restoration areas covering approximately 166,500 acres in Indian River and Brevard counties.

- **Water management areas** — The water management areas are large manmade water bodies that capture runoff from citrus groves and livestock pastures. This runoff water is reused for farm irrigation and freeze protection. Perhaps the best known water management area is the St. Johns Water Management Area, known by anglers as the Stick Marsh/Farm 13. The others are the Blue Cypress, Fellsmere and Sawgrass Lake water management areas.
- **Marsh conservation areas** — The conservation areas are former agricultural lands restored to marsh. Blue Cypress Marsh Conservation Area and Three Forks Marsh Conservation Area resemble the original marshes of the upper basin and improve the river's hydrology and downstream flows. The other marsh conservation areas are the Fort Drum Marsh and St. Johns Marsh conservation areas.
- **Marsh restoration areas** — The restoration areas are also former agricultural lands restored to marsh, providing water storage. Six Mile Creek and Broadmoor restoration areas were within the river's floodplain that the District purchased, restored and hydraulically reconnected to the river. Restoration activities on these properties have included removal of berms, culverts, pumps, external levees and filling of ditches. These areas were not part of the original federal project.



A great blue heron is among the birds that may be found in the upper basin.

Throughout the project area, water control structures and new construction have been kept to a minimum. Dikes have been fortified and agricultural drainage routes have been re-directed to improve water quality and enhance the marsh system. The result is a flood protection strategy that relies on a more natural approach. Under maximum storm conditions, the project is designed to hold 500,000 acre-feet of water — enough water to cover the 200,000-acre project with an average of 2.5 feet of water. More information is available in the **Surface Water Improvement and Management Plan** for the basin.

Final project components

The final components of the upper basin project are under way with the construction of the **Fellsmere Water Management Area**, the second phase of the **C-1 Rediversion project** and Three Forks Marsh Conservation Area.

The **Three Forks** component will include new levees, flow-ways and an outfall structure to move water across the 13,737-acre marsh conservation area. Water discharged from the St. Johns Water Management Area into Three Forks will also begin to fill the Lake Lawton Recreation Area, a 7,000-acre lake and park west of the city of Palm Bay.

When the Three Forks and Fellsmere Water Management Area components are completed in 2014 and 2015, respectively, the Upper St. Johns River Basin Project will be substantially finished, providing many benefits to the people and wildlife that depend daily on the remote headwater marshes of the upper St. Johns River.

The Upper St. Johns River Basin Project — one of the largest wetland restoration projects in the world — is giving new life to the river's headwaters. The design of the project is on the cutting edge of environmental restoration technology and demonstrates a new level of compatibility between flood control and environmental protection.



River otters make their home in many Florida waterways, including public properties within the Upper St. Johns River Basin.

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