About the Loxahatchee River - Lake Worth Creek Aquatic Preserve

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**Description of Site**

The Loxahatchee River - Lake Worth Creek Aquatic Preserve is a small dynamic estuary (where freshwater meets saltwater) in northern Palm Beach and southern Martin Counties. The Loxahatchee River consists of three forks: North, Northwest, and Southwest (C-18). These three freshwater tributaries drain into the Loxahatchee River Estuary, which opens easterly to the Indian River Lagoon and the Atlantic Ocean. Lake Worth Creek lies south of the estuary.

The Loxahatchee River - Lake Worth Creek Preserve is divided into two sections: the Wilderness and Urban Preserves. The Wilderness Preserve (Wild and Scenic River portion) is upstream of river mile 5.5 along the Northwest Fork and is managed by maintaining the existing wilderness (animals and plants) condition. The remainder of the preserve, designated Urban Preserve, is managed by restoring and enhancing the natural condition of the resources.

**Established**

The Loxahatchee River - Lake Worth Creek Aquatic Preserve was adopted under Florida Statutes Section 258 by the State of Florida on November 2, 1970 and is managed by the Florida Department of Environmental Protection, Office of Coastal and Aquatic Managed Areas (CAMA). The preserve is listed in the Aquatic Preserve Rule, Chapter 18-20 Florida Administrative Code.

**Location**

The preserve is located in Southeast Florida. A major section occurs within northern Palm Beach County, and a smaller section in southern Martin County. The Village of Tequesta and the City of Jupiter border the preserve, as does Jonathon Dickinson State Park (Division of Recreation and Parks) to the north. The preserve lies west of the US1 bridge in Jupiter and the Lake Worth Creek portion extends south to Marcinski Road.

**Size**

The Loxahatchee River - Lake Worth Creek Aquatic Preserve encompasses 9,000 acres.

**Watershed**

Cities and other water diversions have affected the drainage of the river by shrinking the drainage basin from 270 square miles to 210 square miles.

**Habitat**

The preserve area is a small dynamic estuary important in this region for its value to fishing, boating and wilderness experience. The three forks of the Loxahatchee are freshwater tributaries upstream and are characterized by riverine communities such as freshwater and tidal marshes. Near and within the estuary, mangrove communities are predominant with submerged resources including tidal flats, seagrass beds, and oyster bars. Lake Worth Creek contains mangrove fringes and seagrass beds.

**Ecological Importance**

The aquatic preserve contains various aquatic habitats such as mangroves, freshwater swamp, seagrass beds, oyster bars, and tidal flats. The marshes and associated plants along the river provide nursery habitat for juvenile fishes, crabs, shrimp, turtles, snakes, and alligators. The plant communities also reduce erosion of the sediment and produce detritus (dead organic matter), an essential food source in aquatic environments. Birds also roost and nest in riverfront trees such as mangroves.

The preserve contains recreationally and commercially important species such as blue crabs, mullet, snook, and tarpon. Visitors enjoy fishing, boating, and watching animals such as manatees and birds in their natural environment.

**Rare / Endangered Species**

**Geomorphic Features**

Jupiter Inlet historically opened and closed naturally. The inlet has been permanently opened and the lower Loxahatchee changed from a freshwater marsh system to a tidally influenced estuarine system. The Loxahatchee River cuts through the Atlantic Coastal Ridge, which separates the Eastern Flatwoods to the west from the Atlantic Ocean to the east. The C-18 canal system drains the Loxahatchee Slough and glades to the west and drains into the Southwest Fork.

**Archaeological Features**

Jonathon Dickinson State Park maintains a list of 26 sites with archeological and cultural significance associated with the Loxahatchee River basin. Sites of interest include Indian middens and battleground from the Second Seminole War. Also, the outpost of Trapper Nelson, known as the "wild man " of the Loxahatchee, is located along the Northwest Fork. The cabin and wildlife zoo remain today from this early 1900s woodsmen and the site is open to the public for a nominal fee.

**Uses**
The aquatic preserve is utilized for recreational and commercial boating, fishing, and nature watching. The adjacent state park offers hiking trails, camping, and places to launch boats and canoes. The park is also used for environmental education purposes.

Management Status

Because of the rapid residential / urban growth and input of agricultural drainage canals, the health of the Preserve has been affected. The C-18 canal causes massive amounts of freshwater to drain into the river basin and forces saltwater into the North Fork of the river, thereby altering the historical natural communities. The preserve does play host to a vast array of plant and animal species, but many are threatened by the extensive development and the freshwater drainage of the C-18 canal. Major issues in the Preserve include leaching of pollutants from local septic tanks which contributes to a documented decrease of dissolved oxygen in the River. The local state park and the Loxahatchee River Control District also provide on-site management and education about the River.

References

The Loxahatchee River - Lake Worth Creek Aquatic Preserve Management Plan