



COASTAL DUNE LAKES OUTFALL PROPERTIES

Walton County Board of County Commissioners

The 'Coastal Dune Lakes Outfall Properties' Land Acquisition (W-3) was submitted to the State of Florida Trustee as a restoration project through the Natural Resources Damage Assessment (NRDA) process in response to the April 20, 2010 Deepwater Horizon Oil Spill.

Walton County
Public Works
117 Montgomery Circle
DeFuniak Springs, FL 32435
Phone: 850-892-8108



OUTLINE

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TAB 1

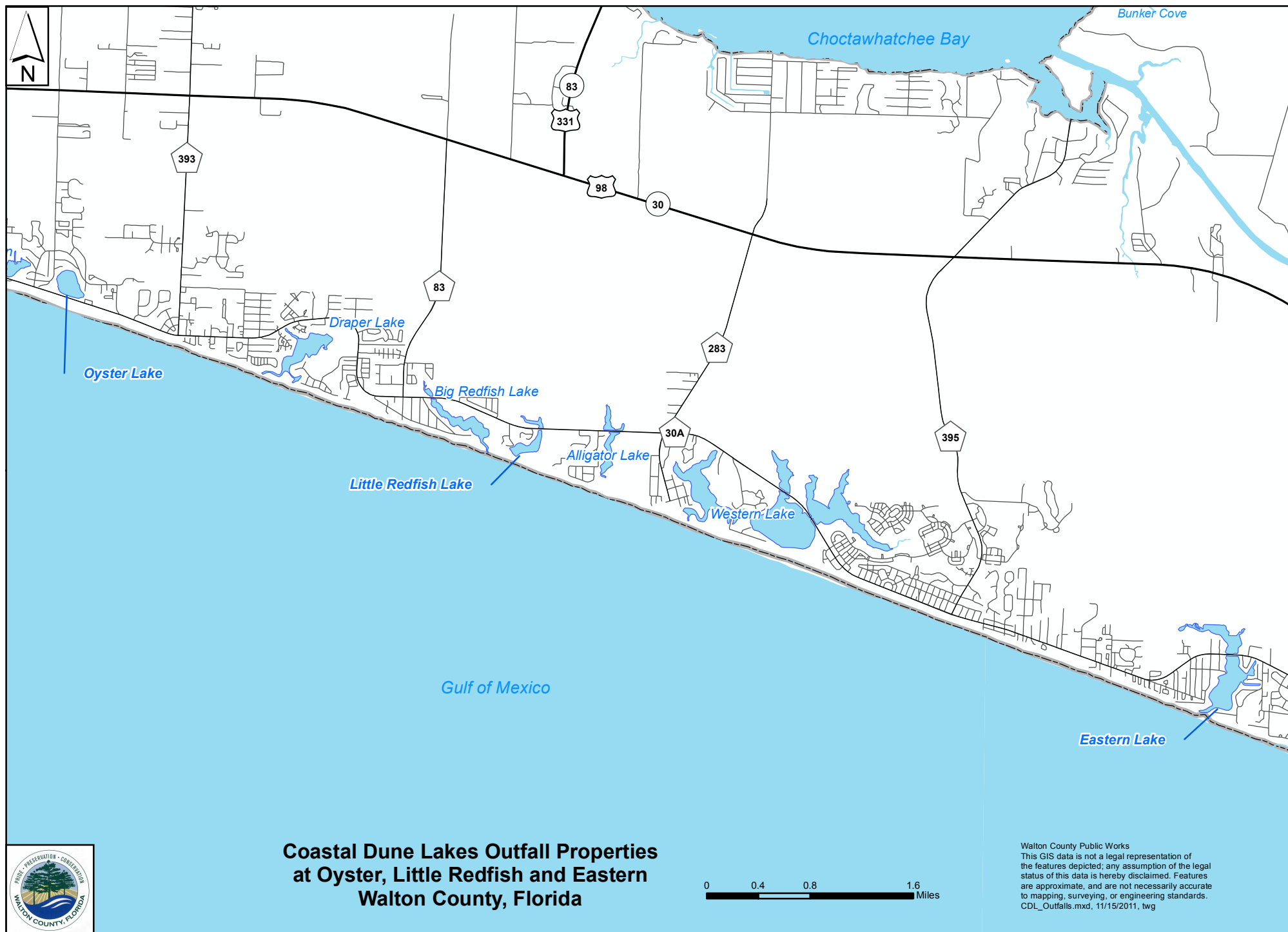


OVERVIEW

Coastal dune lakes are rare worldwide. In the U.S., they are almost exclusively found along the Gulf Coast. Most coastal dune lakes have passes that open to the Gulf, as do the three lakes in this project proposal, that allow salt water and fresh water to continually exchange and flush out the lakes, creating some of the most distinct ecosystems in the world. These coastal features are recognized by the Florida Natural Areas Inventory as globally rare and critically imperiled throughout the state of Florida. The acquisition of these properties in the outfall areas will serve to protect the environmentally sensitive outfalls and associated beach dunes and habitat for endangered and threatened species such as piping plover and Choctawhatchee beach mice.

Research has shown that the outfalls have migrated east and west for thousands of years. Development restrictions at the coast have reduced but not eliminated the threat of structural damage due to migration of the outlet. The Walton County Land Development Code now enforces a 300 foot zone of protection for coastal dune lakes (Section 4.02.06(B)) and a 50-foot buffer around each of the coastal dune lake outlets. However, the identified sweep area for many of the dune lakes exceeds these protection areas. The purchase of these lands will not only help minimize future structural damage but permit the outlets to function more naturally without the need to be mechanically opened/closed.

In the days following the Deepwater Horizon Oil Spill, Walton County constructed sand berms at the coastal dune lake outfalls to protect the lakes. The environmental impact from the oil and related construction activity around the lakes has yet to be determined, but this activity resulted in loss of use by humans and wildlife. With loss of recreational opportunities for both local residents and tourists, this proposal is made to offset that loss and provide for additional public access to the coastal dune lakes and adjacent beach while protecting and preserving important habitat and the natural processes of these rare coastal dune lakes.



COASTAL DUNE LAKES OUTFALLS



Little Redfish Lake Outfall

COASTAL DUNE LAKES OUTFALLS



Eastern Lake Outfall



Oyster Lake Outfall

TAB 2



HABITAT AND RESIDENT SPECIES

COASTAL DUNE LAKES

The coastal dune lakes of Walton County are scientifically interesting because of their intermittent connection to the Gulf of Mexico. This periodic connection serves as control from flood-level waters (relative to structures and associated infrastructure) by opening a conduit to the Gulf. When a lake reaches a critical pre-flood level, breaching water forms an outlet (channel) through the dune system and empties the lake water into the Gulf. The drainage of the lake and potential exchange with the Gulf continues until equilibrium is reached and the opening closes. Depending on the exchange, an estuarine ecosystem may be created. The changing condition of water chemistry in the coastal dune lakes makes them dynamic, biologically diverse ecosystems.



Florida Natural Areas Inventory (FNAI) describes coastal dune lakes as “important breeding areas for many insects that form the base of numerous food chains. They may also be important watering holes

for many mammals and birds inhabiting the surrounding xeric and coastal communities. Wading birds and ducks may also use these lakes as feeding and resting areas.”

HABITAT AND RESIDENT SPECIES

BEACH DUNE

Coastal dune lakes naturally occur within two miles of the coast, mostly surrounded by beach dune communities. Florida Natural Areas Inventory (FNAI) describes a **Beach Dune** as a wind-deposited foredune and wave-deposited upper beach that are sparsely to densely vegetated with pioneer species, especially sea oats. Beach dune, especially along its ecotone with the unvegetated beach, is also the primary nesting habitat for numerous shorebirds and marine turtles, including many rare and endangered species.

Beach Dunes are very dynamic communities and occur in mobile and extremely harsh environments. Taking the brunt of storm surge, intact Beach



Dunes are essential for protection of inland biological communi-



Lupine is a protected plant, as are sea oats.

ties. FNAI further describes the vulnerability of Beach Dune to development: In spite of their ability to withstand the harsh maritime environment, plants of the Beach Dunes are extremely vulnerable to human impacts. Because of their vulnerability, Beach Dunes require protection from trampling (i.e., boardwalks for beach access) and off-road vehicles. Coastal developments which affect the sand sources that are necessary for Beach Dune replenishment should be strongly discouraged.

TAB 3



OYSTER LAKE



The outfall at Oyster Lake has had significant impact from development as homes have increasingly encroached into the historic sweep area of the lake. The outfall on the south side of County Road 30A has come dangerously close to a residence on private property.

There are three properties at this outfall, for a total of 1.37 acres and an estimated value of \$1.67 million. These values were approximated from current Walton County Property Appraiser data.

TAB 4



LITTLE REDFISH LAKE



The outfall at Little Redfish Lake encompasses one parcel with one property owner. Even though this parcel is approximately 7 acres, only 2.5 acres would be need to protect the outfall. It is adjacent to state-owned property on the east. The value of the 2.5 acres is estimated to be \$890,000 from current Walton County Property Appraiser data.

TAB 5



EASTERN LAKE



The Eastern Lake outfall is divided among four property owners, Walton County being one of them. The value of the three remaining properties was approximated from current Property Appraiser data. The total area needed for protection of the outfall is 4 acres, and the value is estimated to be \$2,000,000 for the three properties.

TAB 6



LAKE MANAGEMENT PLAN

In 2008, as a cooperative effort among CBA, UF/IFAS' LAKEWATCH and a group of citizen stakeholders, the Coastal Dune Lakes Management Plan was developed. This plan was written to provide the participating stakeholders, appropriate policy makers, the overall public and any future interested parties with documentation when considering issues associated with Walton County's coastal dune lakes.

One of the recommendations on page 29 of the Lake Management Plan is an option for Outlet Management:

"Issue 2: Outlet Management – Option 2: Walton County staff should identify property adjacent to the coastal dune lakes outlets and located in the historical sweep distance. The Walton County Commission should be advised to buy and preserve these properties if it is possible to leverage monies with existing conservation groups, private individuals or state/federal government. Where money is not available, Walton County should strive to prohibit any additional building of major permanent structure in the historical sweep area. This may require legal adjustments to building restrictions and strict enforcement of permitting that is already outlined in the County's Land Development Code. However, private property rights must always be considered."

TAB 7





Walton County
Planning and Development Services Division

Environmental Department

Walton County Courthouse Annex

31 Coastal Centre Boulevard, Suite 100, Santa Rosa Beach, Florida 32459

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November 29, 2006

Mr. Scott A. Brannon, Chairman
Walton County Board of Commissioners
P.O. Box 1355
DeFuniak Springs, FL 32435

Dear Chairman Brannon:

The Walton County Coastal Dune Lake Advisory Board recommends the following to the Board of County Commissioners.

A. Eastern Lake

1. The Board of County Commissioners continue efforts with the Florida Department of Environmental Protection to seek approval for the Preble-Rish plan to remove sand from the south end of the lake and from part of the lake's natural outfall corridor.
2. To reject any requests to permit any part of the natural outfall corridor to be fenced or otherwise obstructed.
3. To reject all requests to abandon the San Roy Rd. 33 ft. right-of-way that crosses the historical outfall corridor and the 33 ft. right-of-way/easement from the San Roy Rd. right-of-way to the Gulf of Mexico.
4. Pursue a long term solution for protecting the outfall corridor by acquiring the ownership and/or control of the land constituting the historical outfall corridor to the Gulf of Mexico.

B. All Coastal Dune Lakes

1. The County pursue a special status by the Florida DEP recognizing the unique quality of Coastal Dune Lakes to better protect the Lakes through the State Permitting Process.
2. The County pursue the purchase or obtain control of the historical outfall corridor of all the Coastal Dune Lakes.

Thank you for your consideration and opportunity to serve.

Sincerely,

Michael H. D'Autilia, Chairman
Walton County Coastal Dune Lake Advisory Board

cc: Commissioners, Ronnie Bell, Shirl Williams, Pat Blackshear, David Hallman, Billy McKee