

Dona Bay Watershed Management Program November 19, 2013 Update



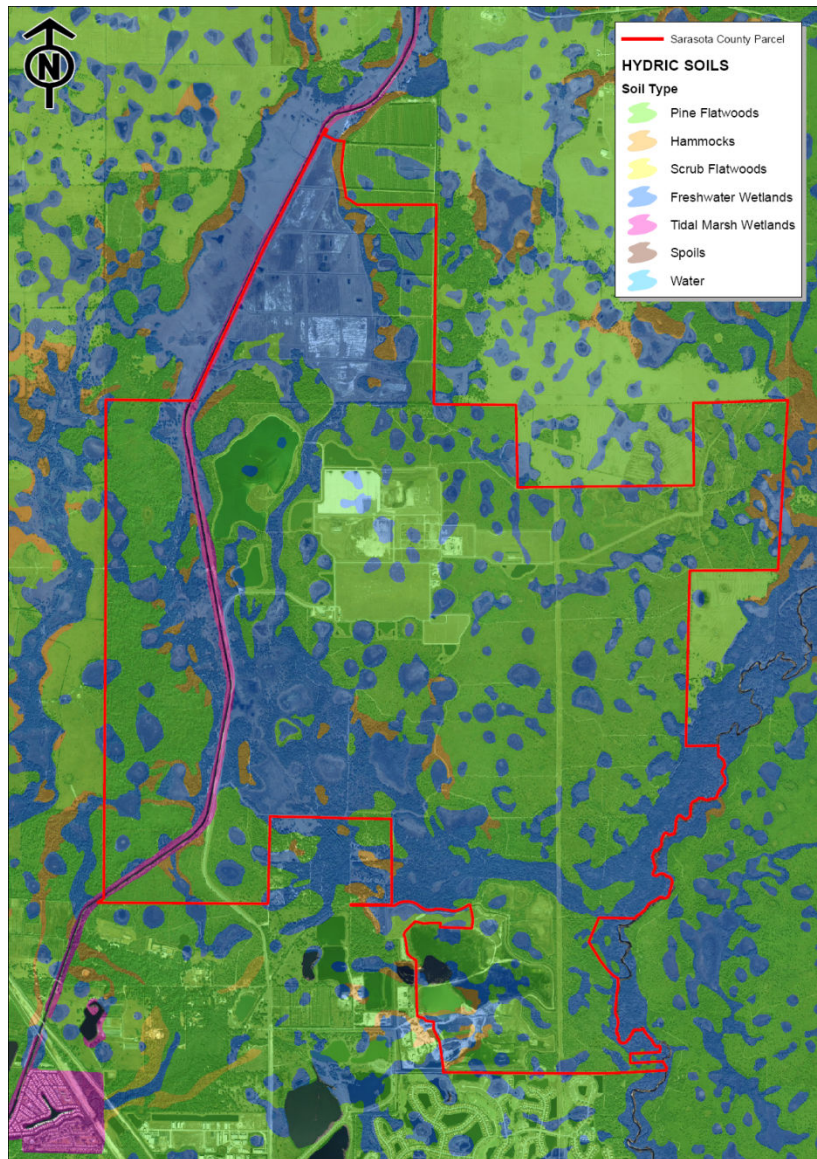
Project Update

- **North Pinelands Storage, Conveyance and Treatment System (Amendment 1)**
- **South Pinelands Storage System (Amendment 2)**

Next Update in February

- **Approve cooperative funding agreement with SWFWMD for the South Pinelands Storage System**
- **Approve Memorandum of Understanding with SWFWMD to collaborate on FARMS program**

Nature's Storage, Conveyance and Treatment



Objectives

Provide a more natural freshwater/saltwater regime in the tidal portions of Dona Bay

Provide a more natural freshwater flow regime pattern for the Dona Bay watershed

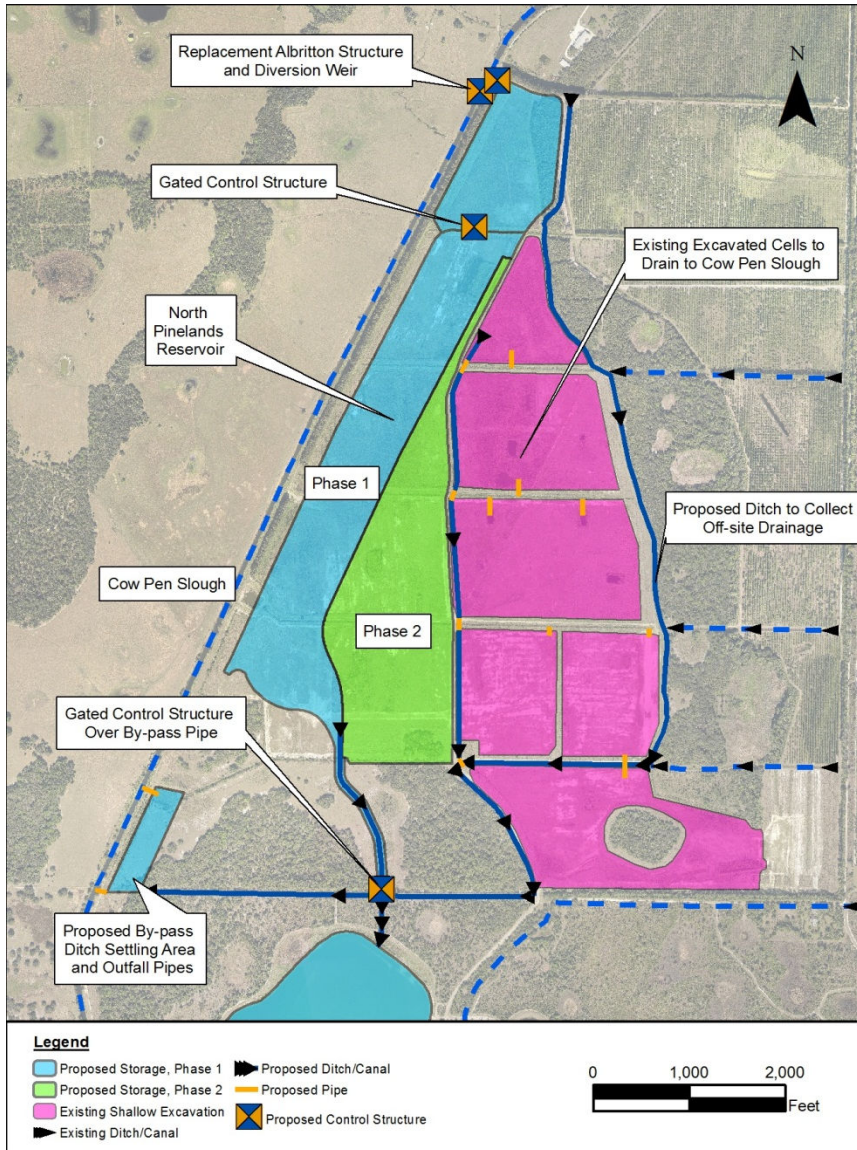
Protect existing and future property owners from flood damage

Protect or improve existing water quality and avoid or mitigate water quality impairment

Develop potential alternative water supply options that are consistent with, and support other plan objectives

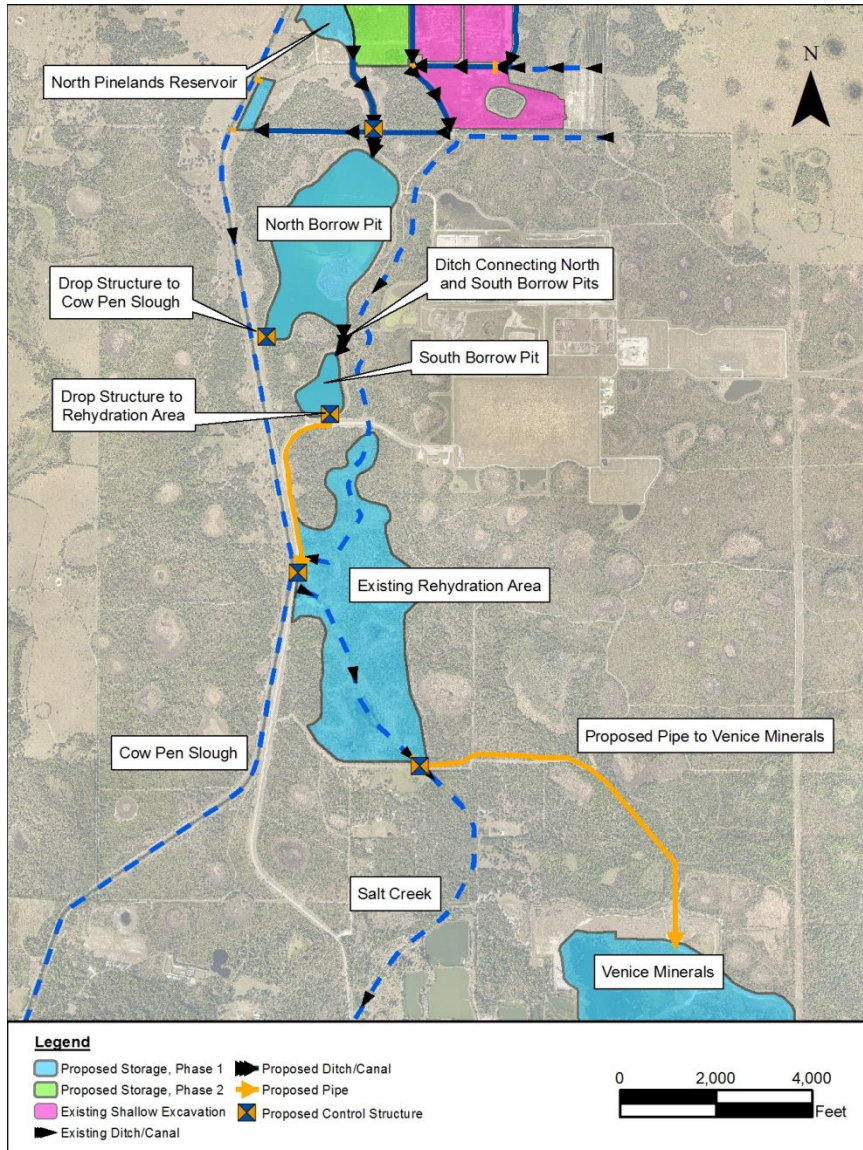
Indicators of Success	Targets
Restore Live Oysters in Dona Bay	> 75% Live Oysters
Acres of wetlands restored % of wetland flow path restored	300 acres 75%
Acres of floodplain enhanced without impacting private property	400 acres
Pollutant Load Reduction to Dona Bay	TN Reduction – 38% to 57% TP Reduction – 56% to 70% TSS Reduction – 82% to 88%
Gallons of excess surface water beneficially used to meet or offset documented demands	5 to 15 mgd

Amendment No. 1 Update



- **Proposed North Pinelands diversion weir**
- **Proposed North Pinelands storage, conveyance and treatment area**
- **Proposed connection to Central Pinelands storage, conveyance and treatment area**
- **Overflow to Pinelands rehydration area**
- **Flood-stage relief to canal**
- **Overflow to South Pinelands Storage System**

Amendment No. 1 Update

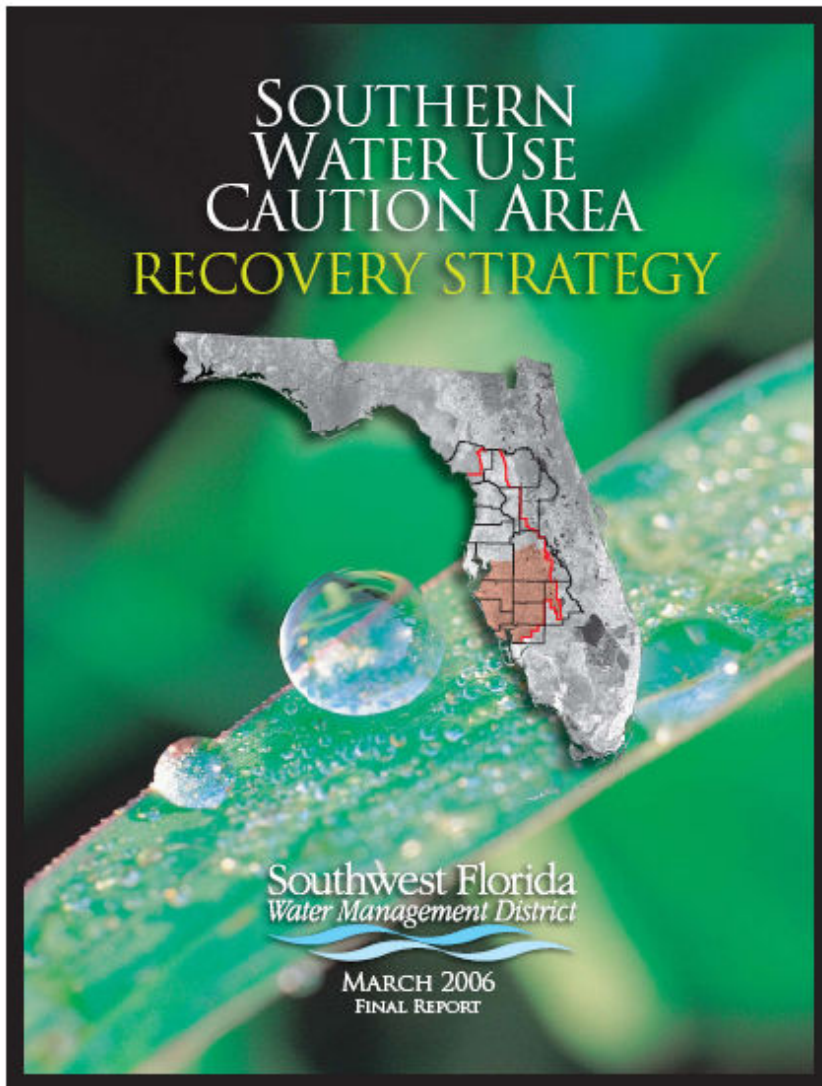


- **Revised plan to divert water to County owned lands using existing weir location**
- **Re-focused North and Central Pinelands areas to provide storage, conveyance and treatment of surface water**
- **Plan will divert over 50% of water and reduce total nitrogen loads to Dona Bay by over 15%**

- **Albritton Weir replacement (Upper Pinelands Area)**
- **Open gravity conveyance to Central Pinelands Lakes**
- **Control structures between Central Pinelands Lakes & Pinelands Rehydration Area**
- **Flood-stage relief back to Cow Pen Slough**
- **Modify existing control structure near Salt Creek to allow future gravity flow to Venice Minerals via pipe**

Benefits:

- **Greater nutrient removal due to increased volume**
- **Potential alternative water supply**
- **Increased safe storage for larger flood events**



- **Dona Bay Watershed area is within the Southern Water Use Caution Area (SWUCA)**
- **SWFWMD adopted SWUCA Recovery Plan to reduce groundwater withdrawals**
- **SWFWMD promotes use of surface water an alternative to groundwater in SWUCA**
- **Currently over 12 million gallons a day of permitted groundwater withdrawals for agriculture in the Dona Bay Watershed area**

Facilitating Agricultural Resource Management Systems (FARMS)

- **FARMS provides up to 75% funding assistance to reduce groundwater withdrawals and provide water quality benefits**

- **North Pinelands system could ALSO qualify as a FARMS project:**
 - **could provide an alternative water supply source to offset groundwater,**
 - **will reduce freshwater and nutrient loads to Dona Bay, and**
 - **does promote local agriculture**

- **Have met with SWFWMD staff and have prepared draft MOU**

Authorized design of South Dona Bay Storage Facility (Venice Minerals site)

- **Evaluate water stages, berms and control levels**
- **Joining the Northern and Southern components**
- **Improving water quality benefits**

Supports the Comprehensive Plan Water Goals and Objectives

Planning for future alternative water supply development

Next Steps

- **Submit 60% plans to SWFWMD with ERP application**
- **Stakeholder meeting in January**
- **Return to the Board in February for an update**
- **Seek Board approval for the Dona Bay Storage Facility conveyance system (N484)**

