



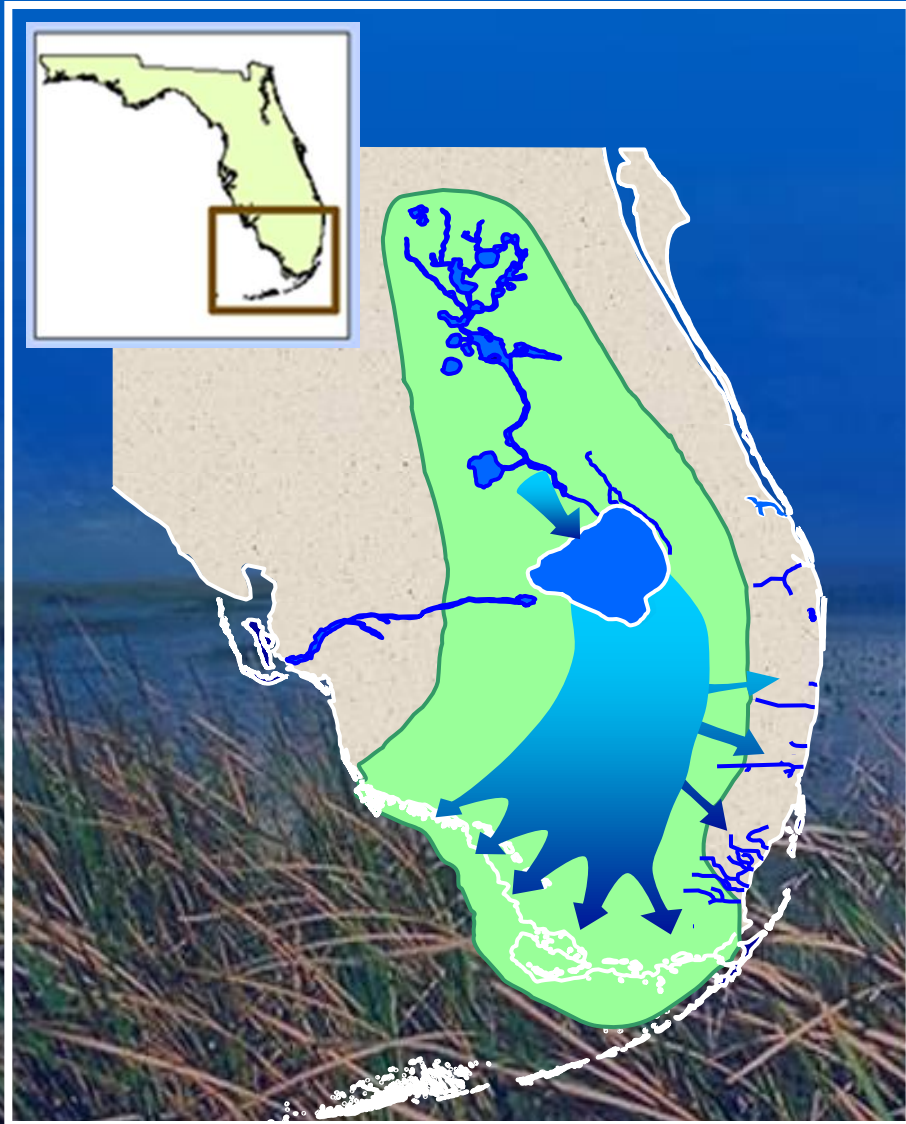
Real-time evaluation of the water-control plan and its impacts on tree islands in the Florida Everglades

Pamela Telis, Bryan McCloskey and Paul Conrads
Presented by Heather Henkel

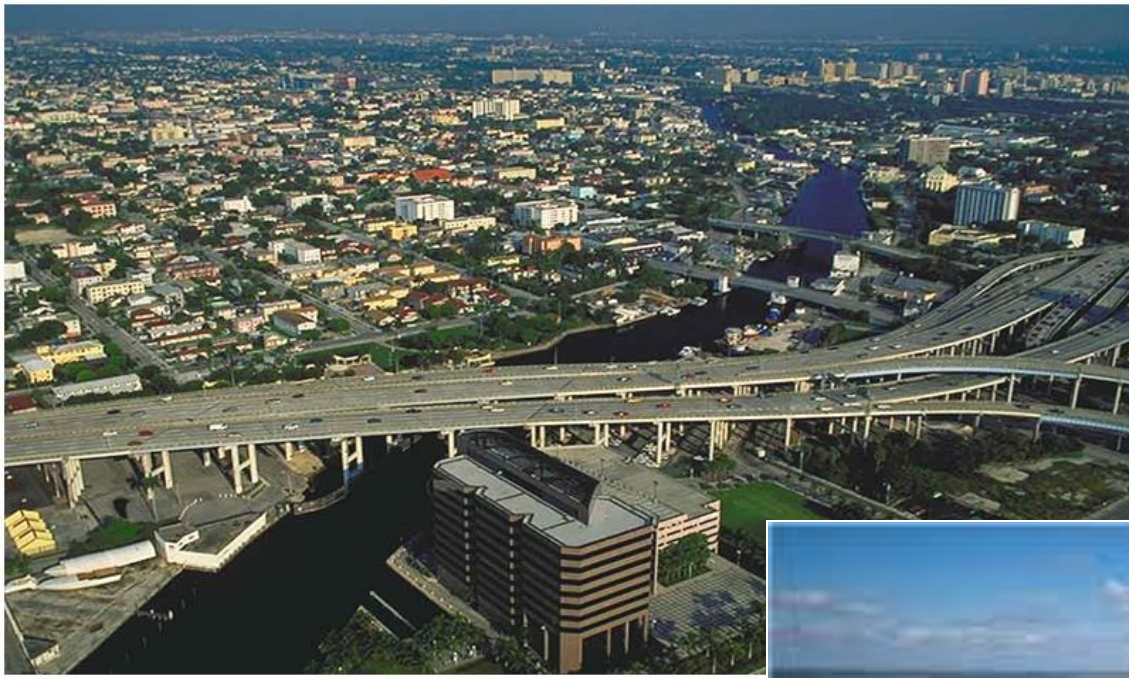


The Historic Everglades Ecosystem

“River of Grass”



- Water connected the natural system, from top to bottom
- 9 million acres of wetlands providing a variety of wildlife and habitat
- Diverse mosaic of landscapes and seascapes



South Florida Today



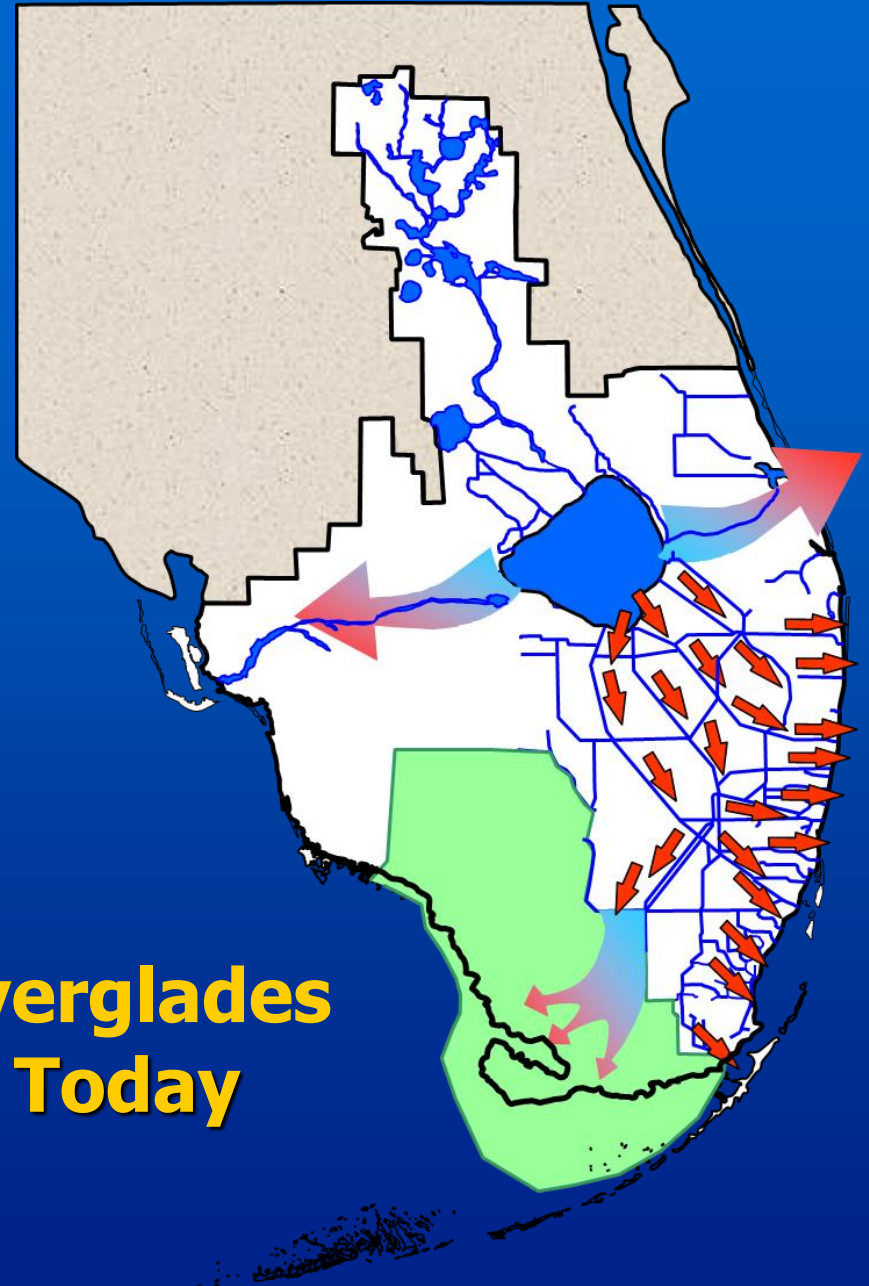
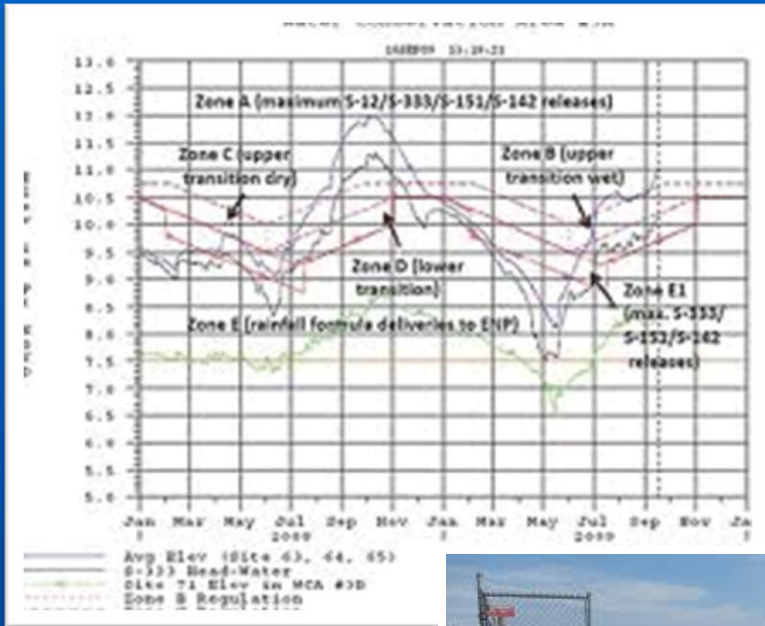


Sloughs, sawgrass ridges, and tree islands





Historical Museum of Southern Florida



Everglades Today

Everglades Restoration Transition Plan (ERTP) initiated in 2012

EVERGLADES RESTORATION TRANSITION PLAN FINAL ENVIRONMENTAL IMPACT STATEMENT

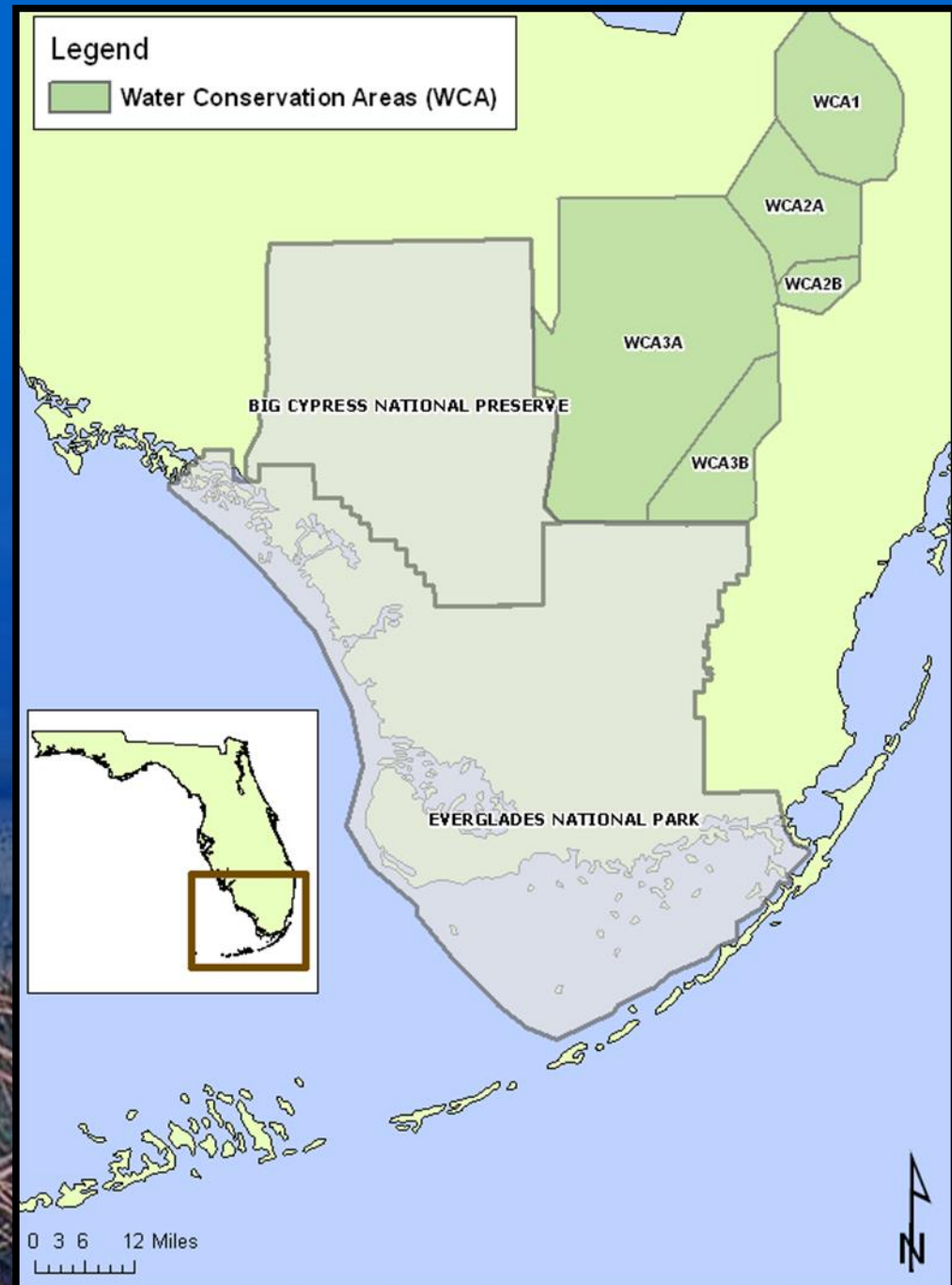


December 2011

Volume 1
Main Document & Appendix A-D



**US Army Corps
of Engineers** ®
Jacksonville District



SIGNATORIES TO THE EVERGLADES RESTORATION TRANSITION PLAN
PROGRAMMATIC AGREEMENT

U.S. Army Corps of Engineers, Jacksonville District

By: _____ Date: _____
Alan M. Dodd
Colonel, U.S. Army
District Commander

Florida Division of Historical Resources

By: _____ Date: _____
Robert F. ~~Beard~~
State Historic Preservation Officer

Advisory Council on Historic Preservation

By: _____ Date: _____
John M. Fowler
Executive Director

Miccosukee Tribe of Indians of Florida

By: _____ Date: _____
Fred ~~Dayhoff~~
NAGPRA Section 106 Representative

Seminole Tribe of Florida

By: _____ Date: _____



Everglades Depth Estimation Network (EDEN) for Support of Biological and Ecological Assessments

EVERGLADES DEPTH ESTIMATION NETWORK EDEN

Providing real-time hydrologic tools for biological and ecological assessments for adaptive management

What's New @ EDEN

- [2013 Q1 Provisional water surfaces](#)
- [2012 Q4 Provisional water surfaces](#)
- [Coastal EDEN now available](#)
- [DataViewer updated](#)
- [Depth&DaysSinceDry revised](#)
- [2012 Q3 Provisional water surfaces](#)
- [xylocator \(Version 2.0.1\) updated - PC and Mac](#)
- [Daily Water Level](#)

The Everglades Depth Estimation Network (EDEN) is an integrated network of real-time water-level monitoring, ground-elevation modeling, and water-surface modeling that provides scientists and managers with current (1991-present), on-line water-depth information for the entire freshwater portion of the Greater Everglades. Presented on a 400-meter by 400-meter grid spacing, EDEN offers a consistent and documented dataset that can be used by scientists and managers to: (1) guide large-scale field operations, (2) integrate hydrologic and ecological responses, and (3) support biological and ecological assessments that measure ecosystem responses to the implementation of the Comprehensive Everglades Restoration Plan (CERP) (U.S. Army Corps of Engineers, 1999). The target users are biologists and ecologists examining trophic level responses to hydrodynamic changes in the Everglades.

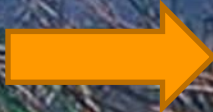
For more information:

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- xylocator
- TransectPlotter
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- NetCDFtoGrid
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- Learn About EDEN

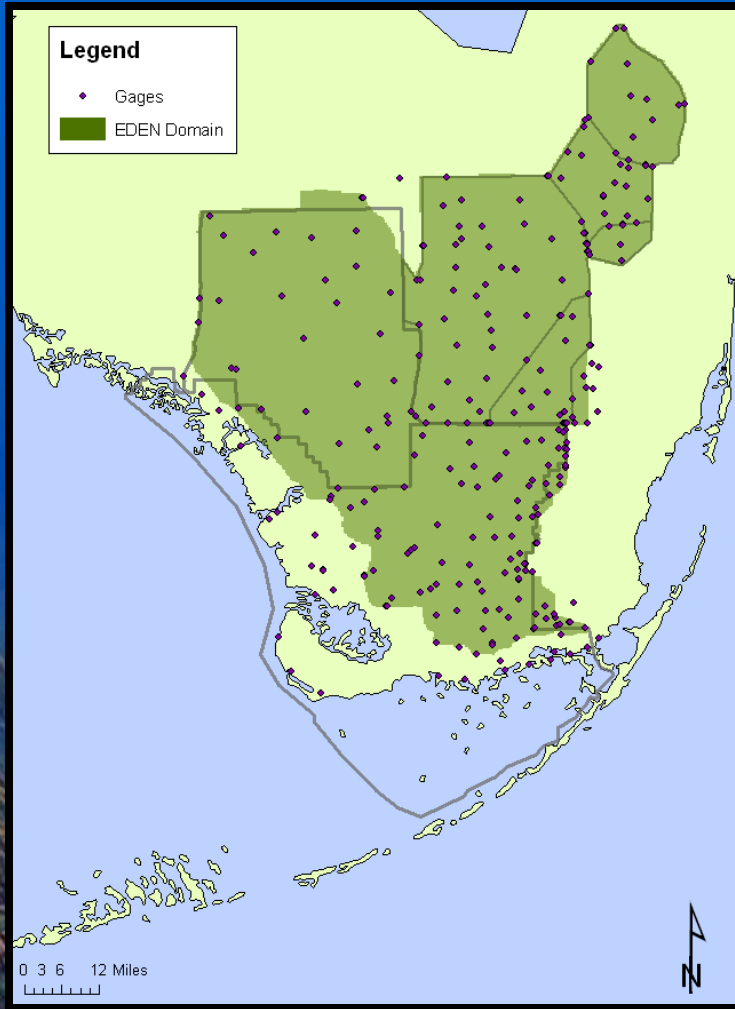
<http://sofia.usgs.gov/eden>

**IOP
Interim
Operational
Plan 2002 -
2012**

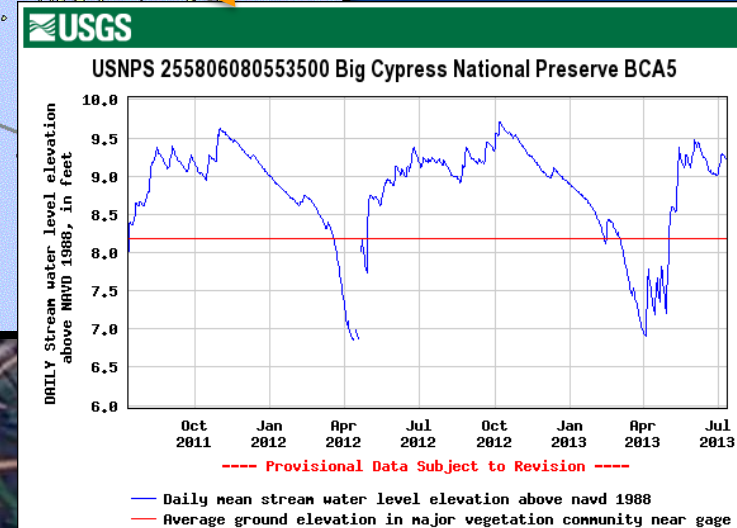
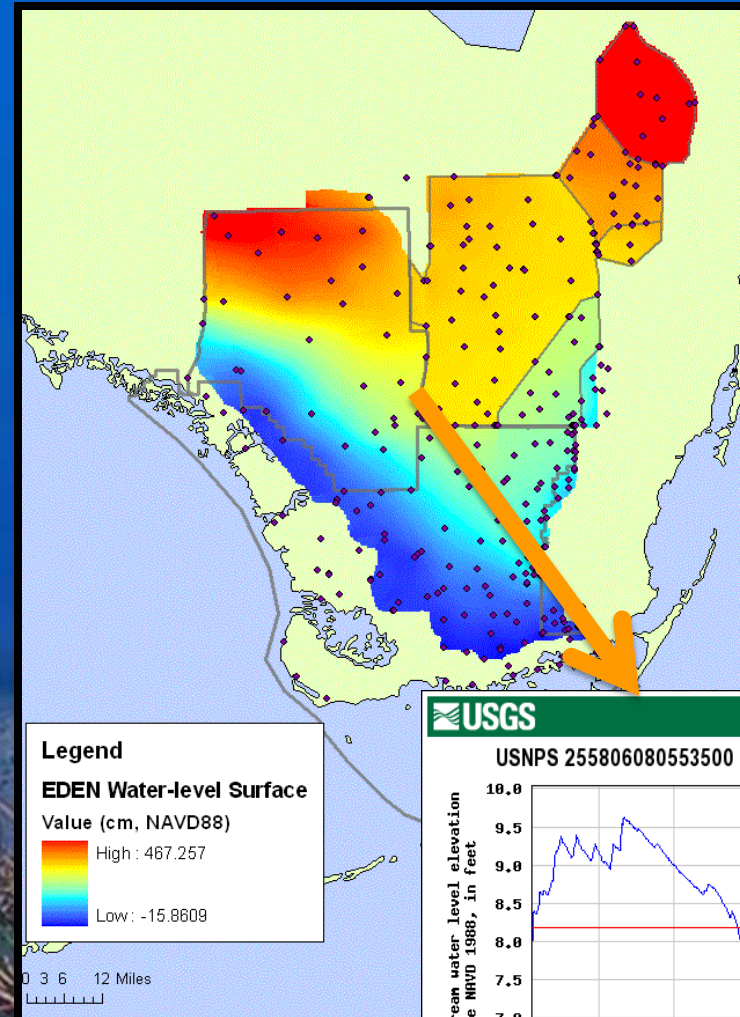


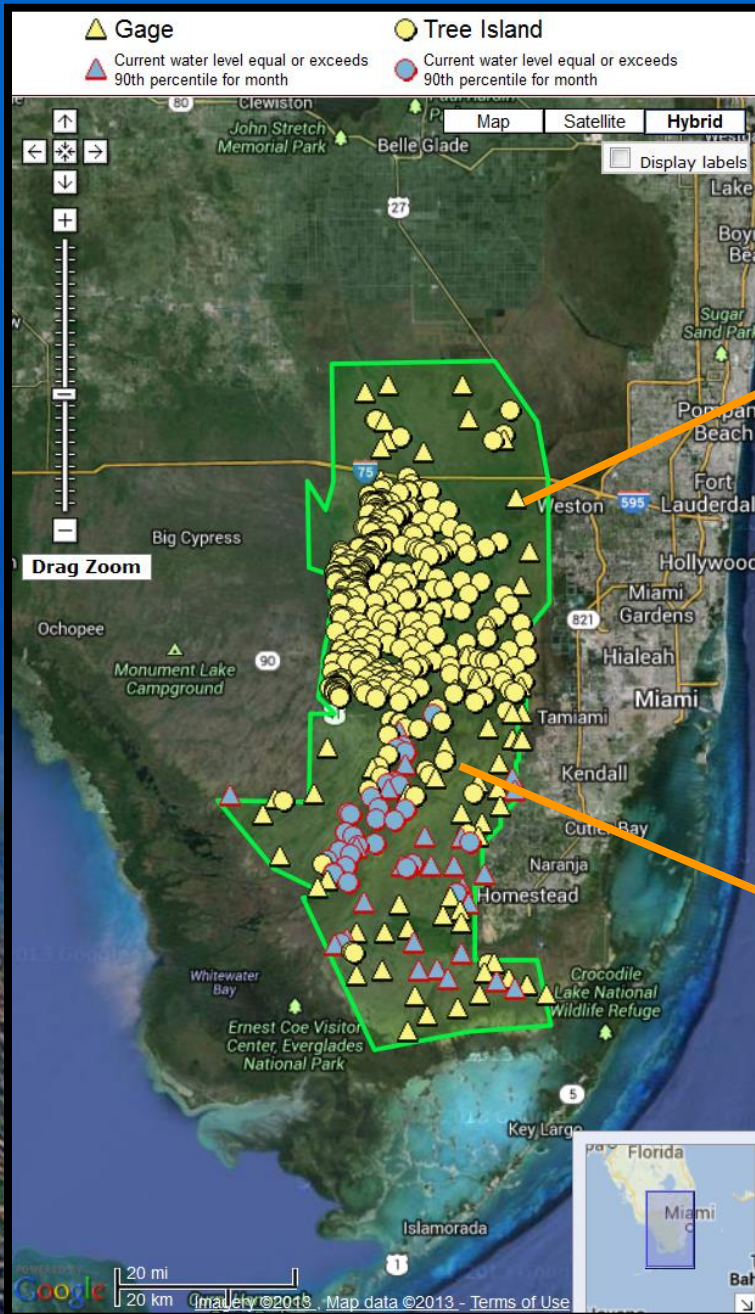
**ERTTP
Everglades
Restoration
Transition Plan
- Initiated
2012**

EDEN Water-Level Gages

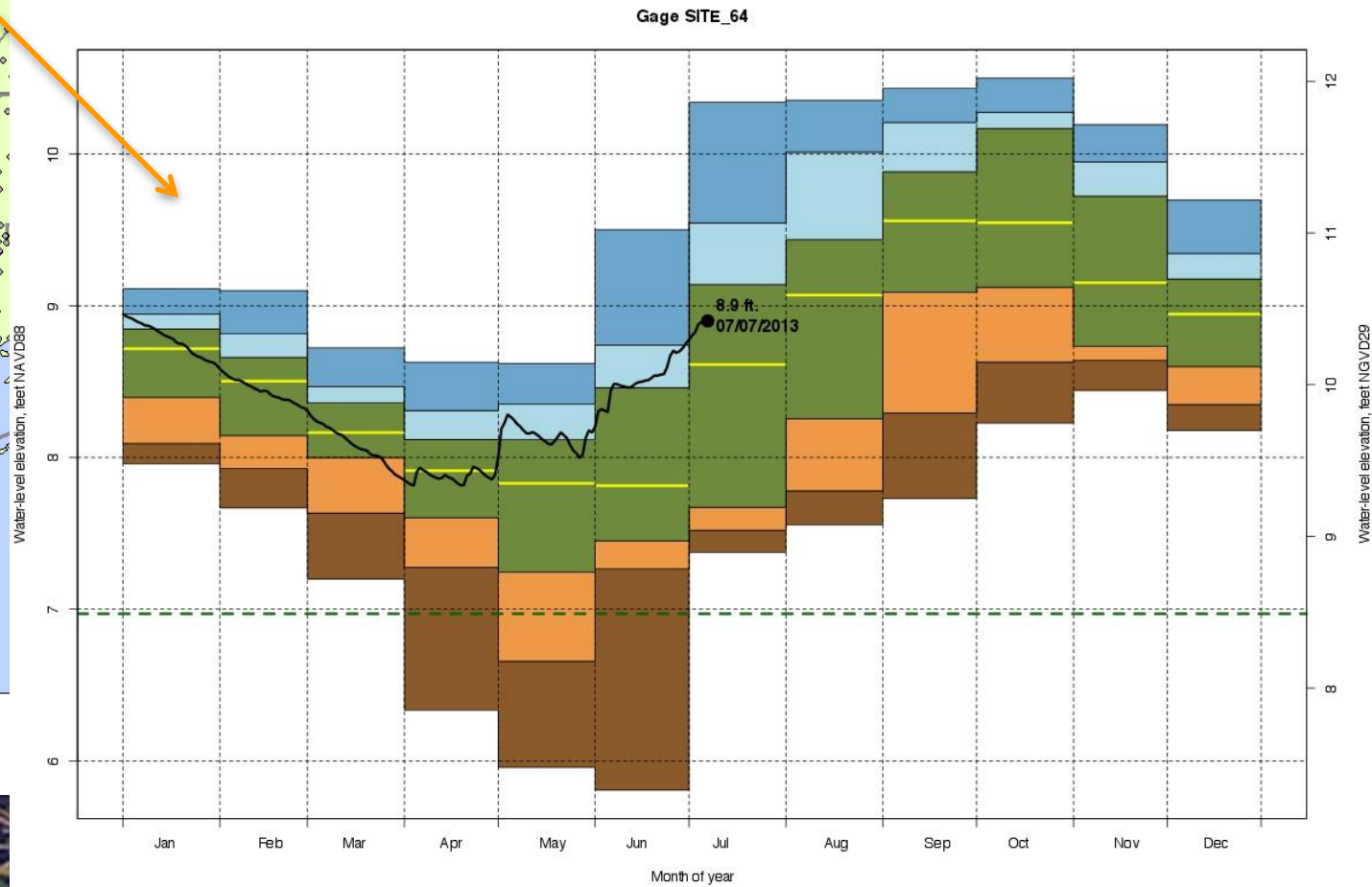
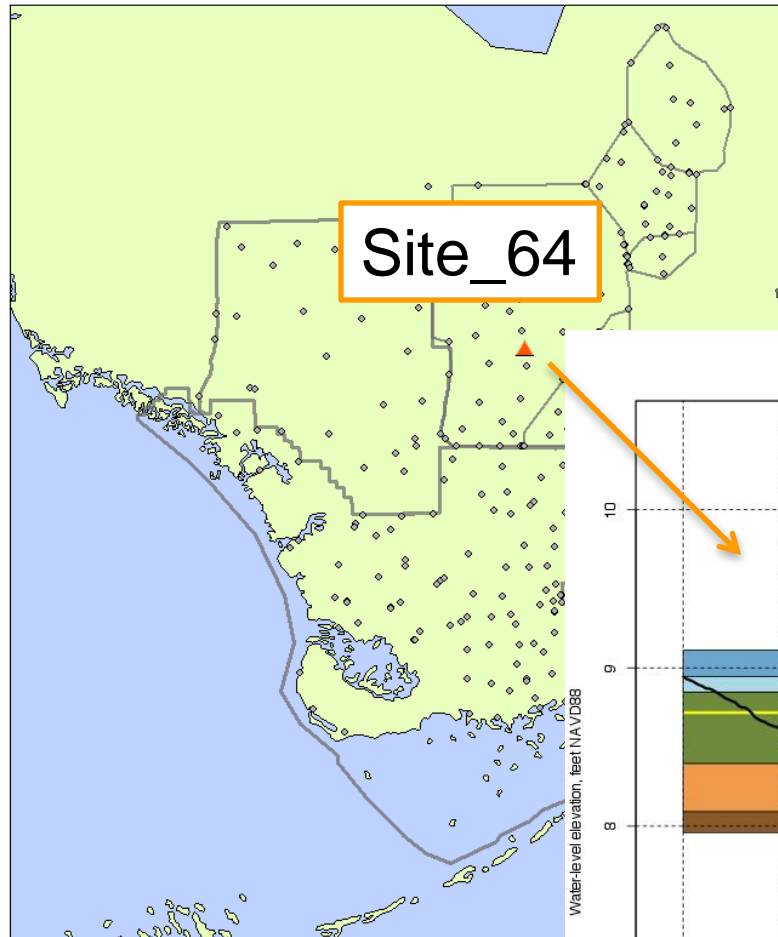


EDEN Daily Water-Level Surface





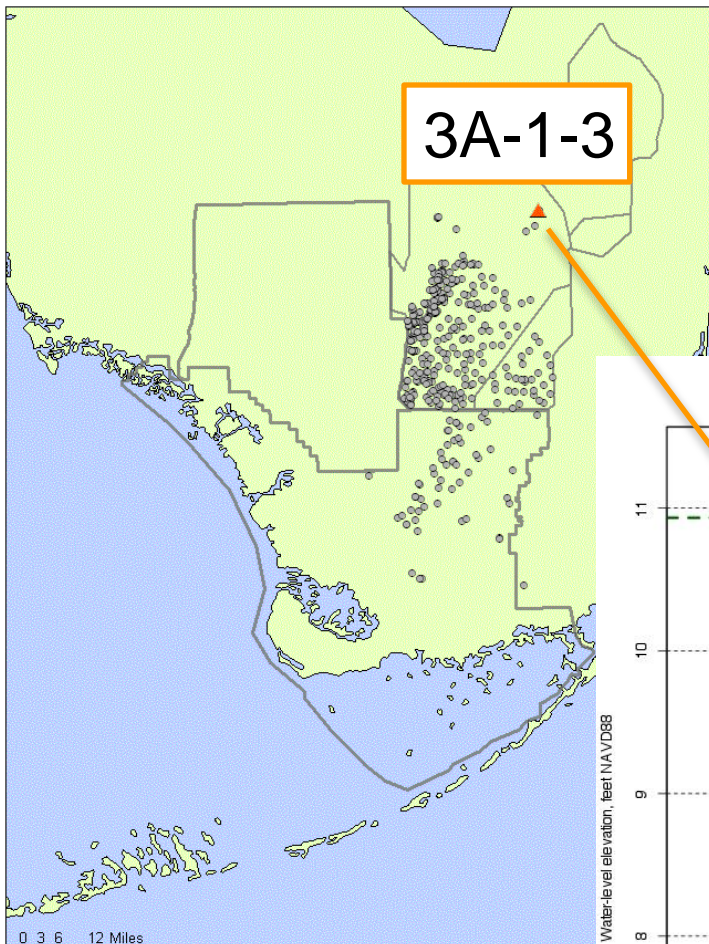
Monitoring water-level data at gages



EXPLANATION FOR ALL GRAPHS

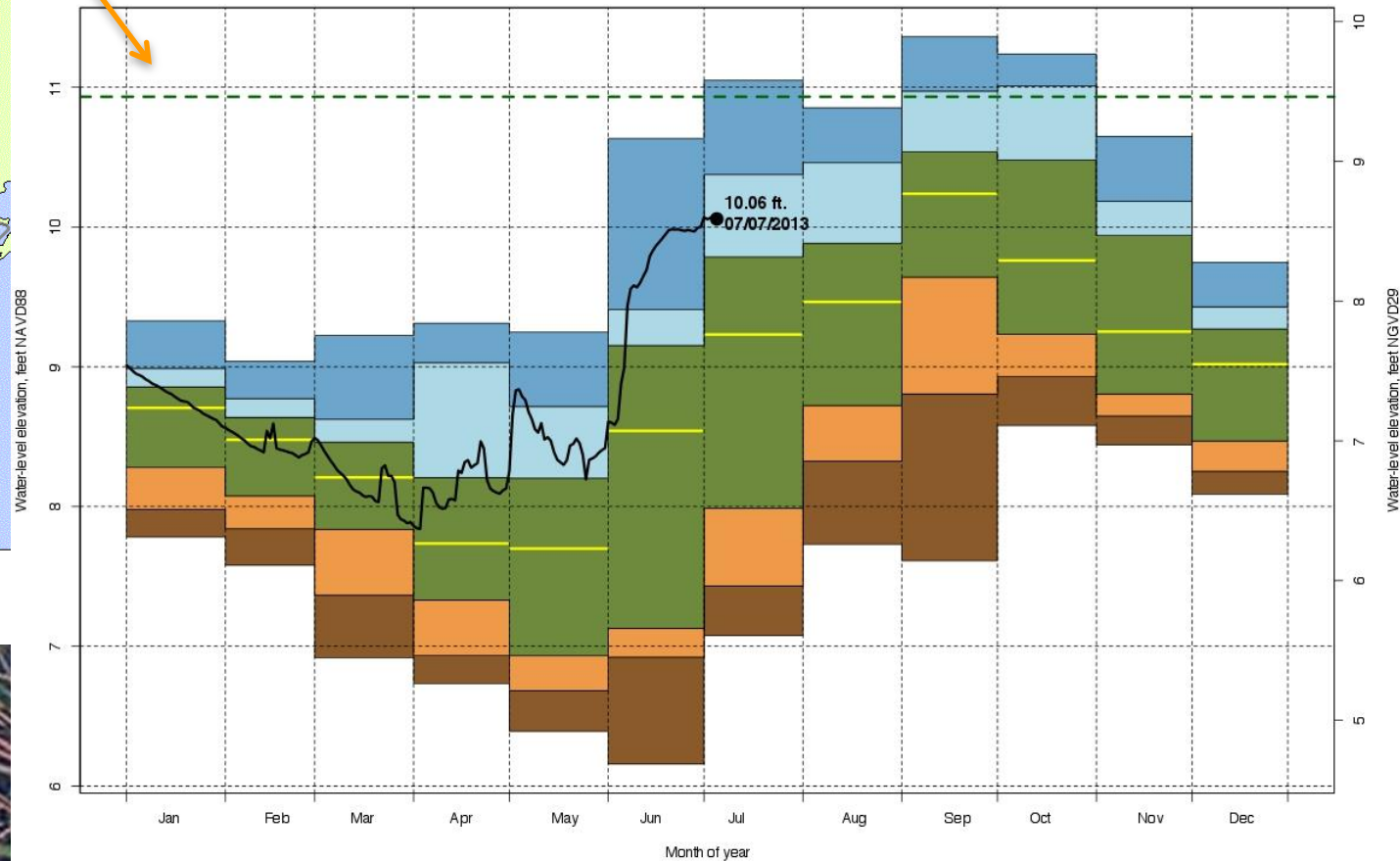
- 90th Percentile to Maximum
- 75th to 90th Percentile
- 25th to 75th Percentile
- 10th to 25th Percentile
- Minimum to 10th Percentile
- Median water level
- 2013 water level
- Maximum ground elevation at tree island

Monitoring water-level data at tree islands



3A-1-3

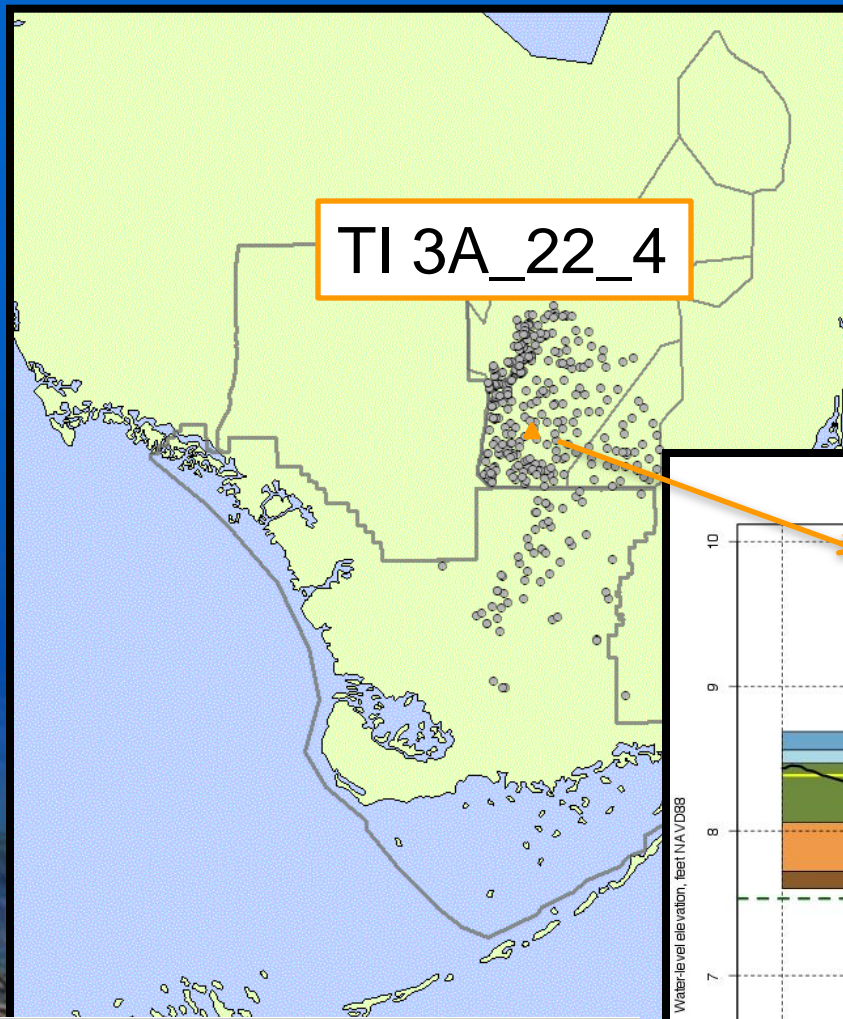
Tree Island 3A-1-3



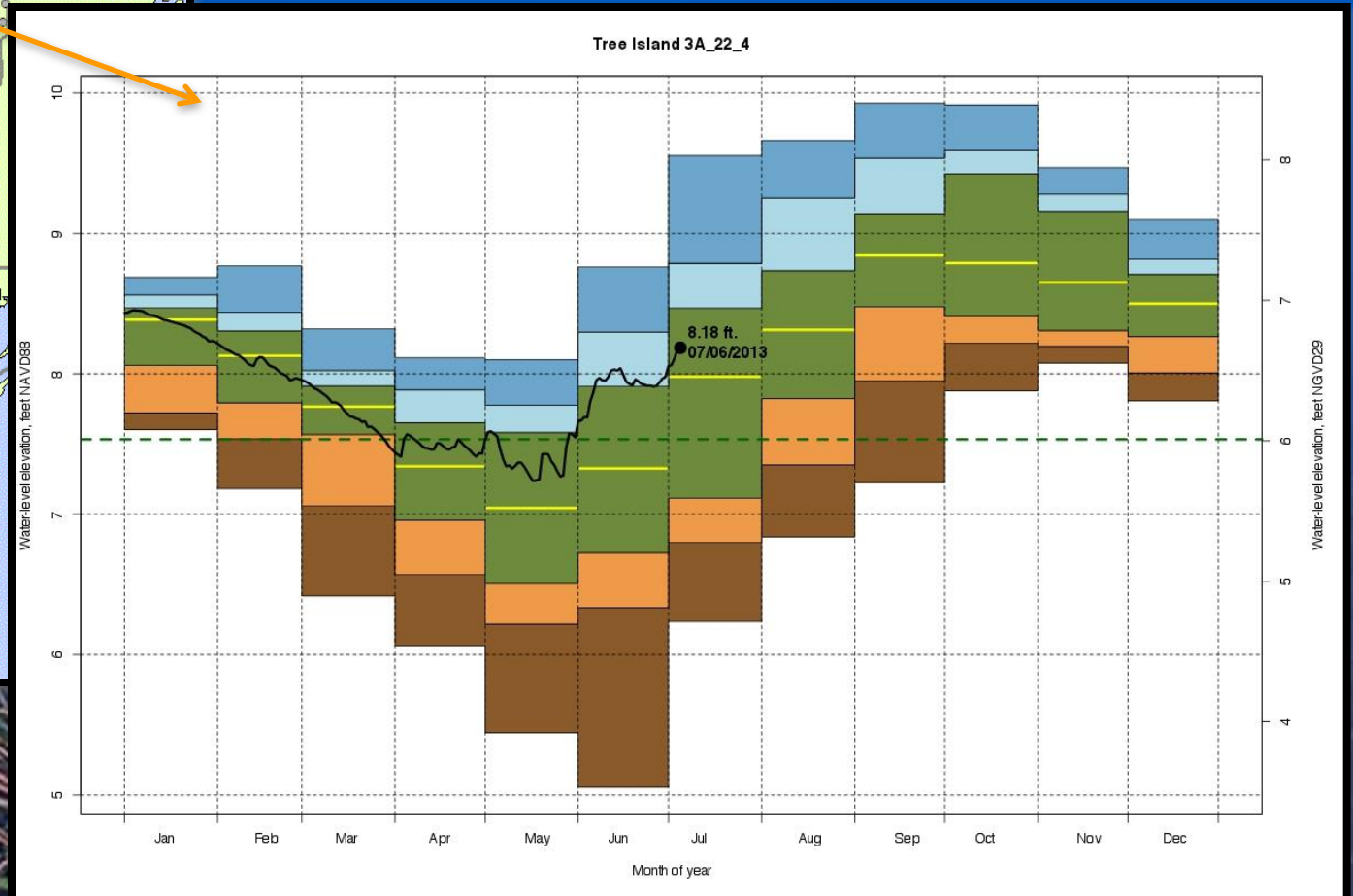
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- 90th Percentile to Maximum
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Monitoring water-level data at tree islands



TI 3A_22_4





Everglades Depth Estimation Network (EDEN) for Support of Biological and Ecological Assessments



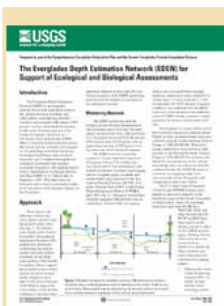
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- Coastal EDEN now available
- DataViewer updated
- Depth&DaysSinceDry revised
- 2012 Q3 Provisional water surfaces
- xyLocator (Version 2.0.1) updated - PC and Mac
- Daily Water Level Percentiles by Month for monitoring water levels during the Everglades Restoration Transition Plan (ERTP)
- WY11 FINAL water surfaces

To be notified when major updates or additions are made to the EDEN site, enter in your email address below:

The Everglades Depth Estimation Network (EDEN) is an integrated network of real-time water-level monitoring, ground-elevation modeling, and water-surface modeling that provides scientists and managers with current (1991-present), on-line water-depth information for the entire freshwater portion of the Greater Everglades. Presented on a 400-meter by 400-meter grid spacing, EDEN offers a consistent and documented dataset that can be used by scientists and managers to: (1) guide large-scale field operations, (2) integrate hydrologic and ecological responses, and (3) support biological and ecological assessments that measure ecosystem responses to the implementation of the Comprehensive Everglades Restoration Plan (CERP) (U.S. Army Corps of Engineers, 1999). The target users are biologists and ecologists examining trophic level responses to hydrodynamic changes in the Everglades.



For more information:

USGS Fact Sheets on EDEN: "The Everglades Depth Estimation Network (EDEN) for Support of Ecological and Biological Assessments" and "Everglades Depth Estimation Network (EDEN) Applications: Tools to View, Extract, Plot, and Manipulate EDEN Data." Or visit our "Learn About EDEN" page

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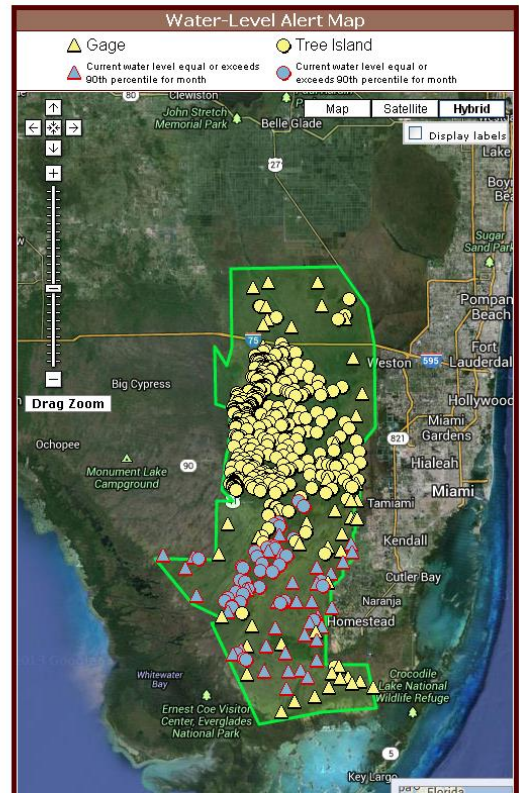


• A list of gages and tree islands is available below.
 • Download a Google Earth (KML) file or view a list of gages and tree islands in Google Maps

EDEN-domain WCA3A, WCA3B, and ENP Tree Island and Gage Listing

Click on radio button to locate on map. (Gages and tree islands with current water levels above 90th percentile for the month in bold.)

<input type="radio"/> Tree Island	<input type="radio"/> Gage
<input type="radio"/> 3A-1-1	<input type="radio"/> 3A10
<input type="radio"/> 3A-1-2	<input type="radio"/> 3A11
<input type="radio"/> 3A-1-3	<input type="radio"/> 3A12
<input type="radio"/> 3A 10 1	<input type="radio"/> 3AN1W1
<input type="radio"/> 3A 10 2	<input type="radio"/> 3ANE_GW
<input type="radio"/> 3A 10 3	<input type="radio"/> 3ANW_GW
<input type="radio"/> 3A 10 4	<input type="radio"/> 3AS
<input type="radio"/> 3A 10 5	<input type="radio"/> 3AS3W1
<input type="radio"/> 3A 11 1	<input type="radio"/> 3ASW
<input type="radio"/> 3A 11 2	<input type="radio"/> 3B-SE
<input type="radio"/> 3A 11 3	<input type="radio"/> 3BS1W1
<input type="radio"/> 3A 11 4	<input type="radio"/> A13
<input type="radio"/> 3A 11 5	<input type="radio"/> ANGEL
<input type="radio"/> 3A 11 6	<input type="radio"/> CP
<input type="radio"/> 3A 11 7	<input type="radio"/> CR2
<input type="radio"/> 3A 11 8	<input type="radio"/> CR3
<input type="radio"/> 3A 11 9	<input type="radio"/> CT27R
<input type="radio"/> 3A 11 10	<input type="radio"/> CTSOR
<input type="radio"/> 3A 11 11	<input type="radio"/> CV5NR
<input type="radio"/> 3A 11 12	<input type="radio"/> CY2
<input type="radio"/> 3A 11 13	<input type="radio"/> CY3
<input type="radio"/> 3A 11 14	<input type="radio"/> DQ1
<input type="radio"/> 3A 11 15	<input type="radio"/> DQ2



EDEN Water Level Alert during ERTTP -- High Water Conditions

 EDEN Water Level Alert

Jul 9 (2 days ago)

to

(Mailing list information, including unsubscription instructions, is located at the end of this message.)



EDEN Water Level Alert during [Everglades Restoration Transition Plan \(ERTP\)](#) -- High Water Conditions

Under the ERTTP on 07/05/2013 (conditions delayed by 4 days for real-time data processing),

Water levels at the following water-level gages equal or exceed the 90th percentile for the month:

[A13](#)
[CR2](#)
[CR3](#)
[CY2](#)
[CY3](#)
[D01](#)
[D02](#)
[EDEN_3](#)
[G-3626](#)
[G-3628](#)

To sign up:

http://sofia.usgs.gov/eden/water_level_percentiles_alert.php

This real-time monitoring application of EDEN:

- Allows water managers, like the USACE, to assess the impacts of ERTTP
- Allows the native American tribes to monitor their cultural resources
- Informs scientists and researchers about near-real-time conditions in the remote marshes of the Everglades



“There are no other Everglades in the world. They are, they have always been, one of the unique regions of the earth, remote, never wholly known”

-Marjory Stoneman Douglas

The Everglades: River of Grass (1947)





[http://sofia.usgs.gov/
eden](http://sofia.usgs.gov/eden)

Thank
you!

