2014 SYSTEM STATUS REPORT

Key Findings

THE SYSTEM STATUS REPORT

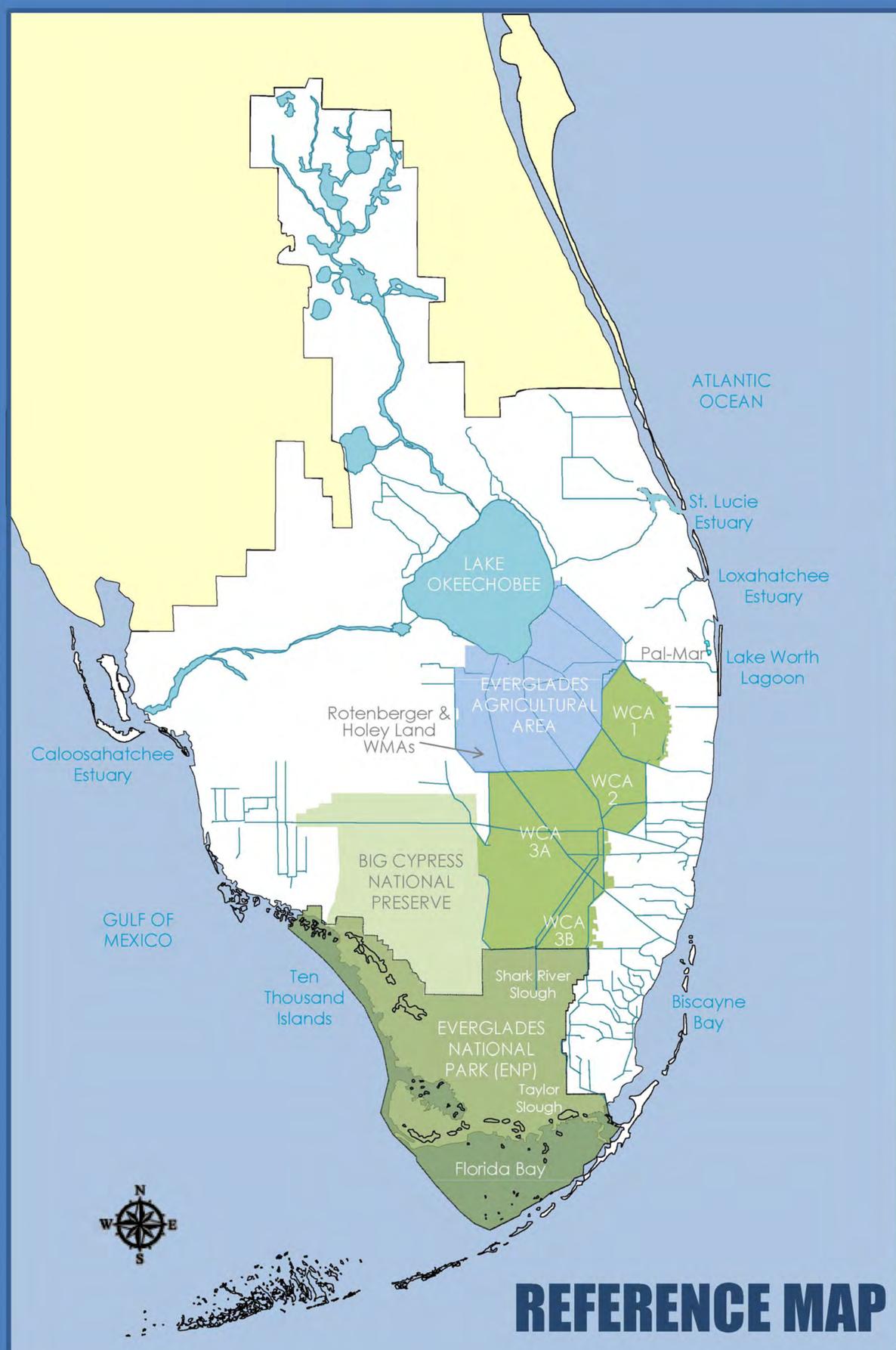
AND THE COMPREHENSIVE EVERGLADES RESTORATION PLAN

The 2014 System Status Report (SSR) provides an in-depth assessment of the monitoring data provided through the Restoration Coordination and Verification (RECOVER) Monitoring and Assessment Plan (MAP) (RECOVER 2009) in conjunction with historical data and data from partner agencies.

RECOVER monitoring data assess the status and trends in hydrology and water quality affected by restoration projects, as well as in ecological parameters (e.g., wading birds) that respond to changes in the quantity, quality, timing and distribution of water. This information is measured against established pre-Comprehensive Everglades Restoration Plan (CERP) reference conditions and ultimately helps to determine if the goals and objectives of CERP are being met.

OVERALL KEY FINDINGS

Although, the CERP program has demonstrated a number of small restoration successes, continued trends in altered hydrology and degraded ecology necessitate further authorizing, constructing, and operating of more CERP restoration projects to achieve system-wide goals and objectives.



REFERENCE MAP

REGIONS

Lake Okeechobee

Northern Estuaries

- St. Lucie Estuary
- Caloosahatchee Estuary
- Loxahatchee Estuary
- Lake Worth Lagoon

Greater Everglades

- Water Conservation Areas (WCA) 1, 2 and 3
- Everglades National Park
- Holey Land and Rotenberger Wildlife Management Areas (WMA)
- Pal -Mar

Southern Coastal Systems

- Biscayne Bay
- Florida Bay
- Southwest Florida Coast
- Ten Thousand Islands

PUBLIC REVIEW PERIOD FOR DRAFT REPORT:

March 17 through April 15, 2014

Final Report Available June 30, 2014 (anticipated date)

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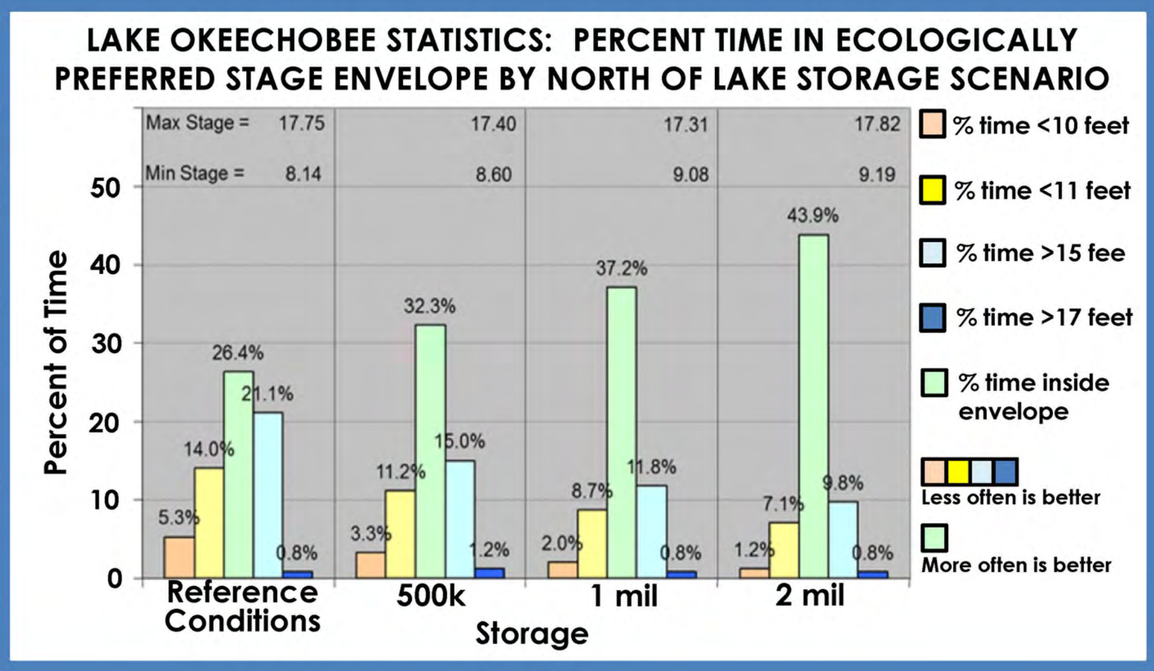
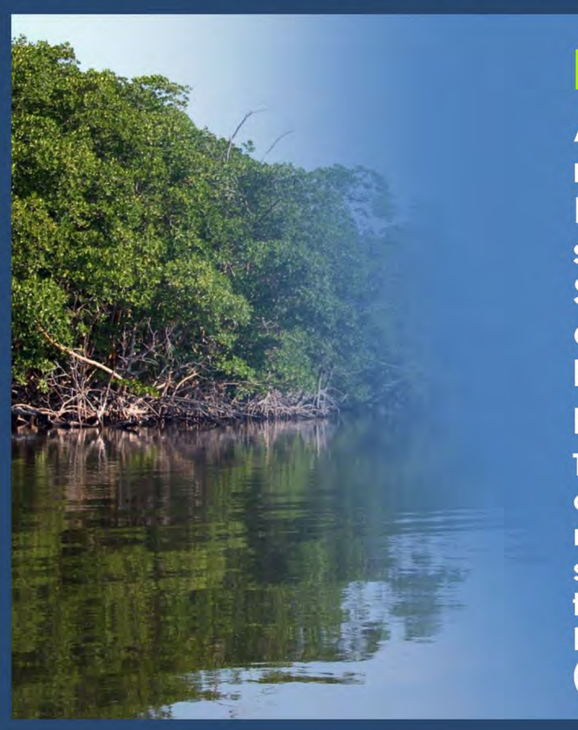
REGIONS

LAKE OKEECHOBEE

Lake Okeechobee ecology has improved over the 2009-2013 period compared to 2004-2008 due to favorable climatic conditions and the Lake Okeechobee Regulation Schedule reducing high lake stages (no high stage exceedence).

Modeling of three storage scenarios north of the lake indicated that all three scenarios incrementally improved lake conditions (over the existing 41-year baseline) by increasing the amount of time the lake was within the "stage envelope" (i.e., ecologically preferable range).

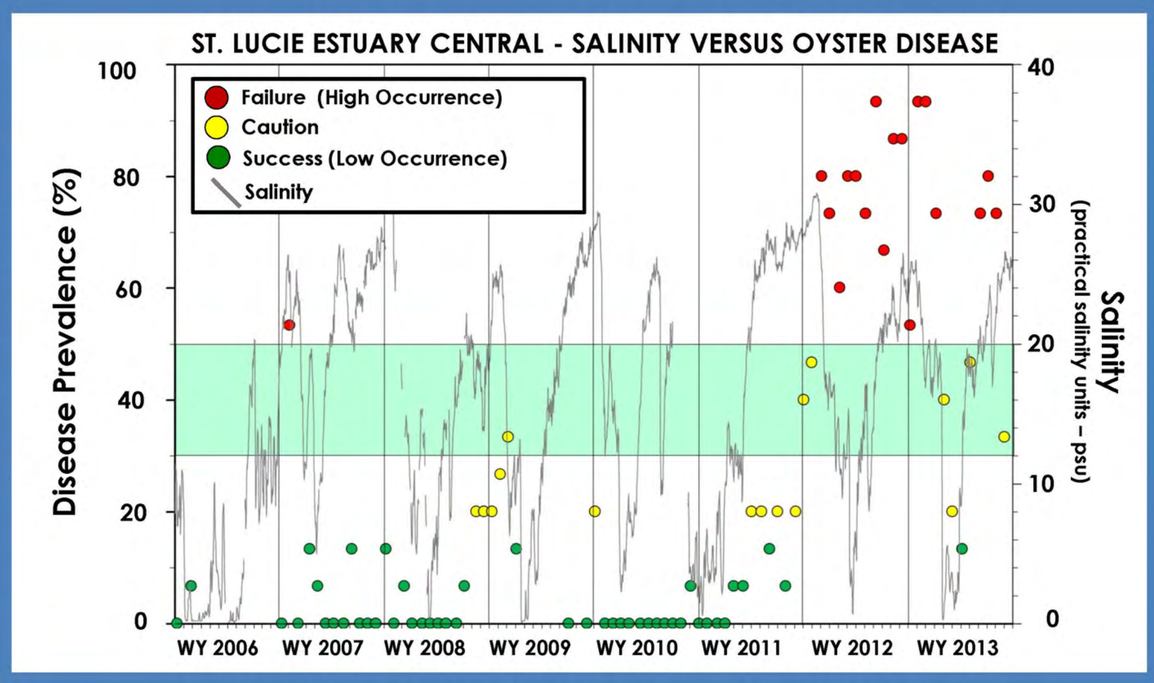




NORTHERN ESTUARIES

Although high flows cause the most severe damage to the Northern Estuaries, new data suggests supplemental freshwater inflows to the St. Lucie Estuary during extreme dry events (back to back dry years) may be needed to maintain healthy oyster populations in the middle estuary.

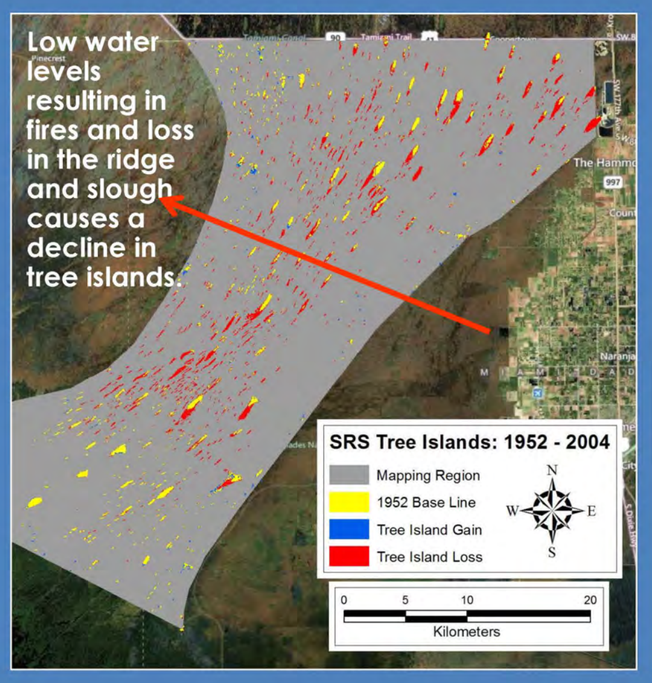
The graph to the right depicts the percent of oysters infected with disease in the St. Lucie middle estuary; daily salinity (from the surface) at the U.S.1 Roosevelt Bridge; and the favorable salinity range (wide colored band) at the same location from water years (WY) 2006 – 2013.

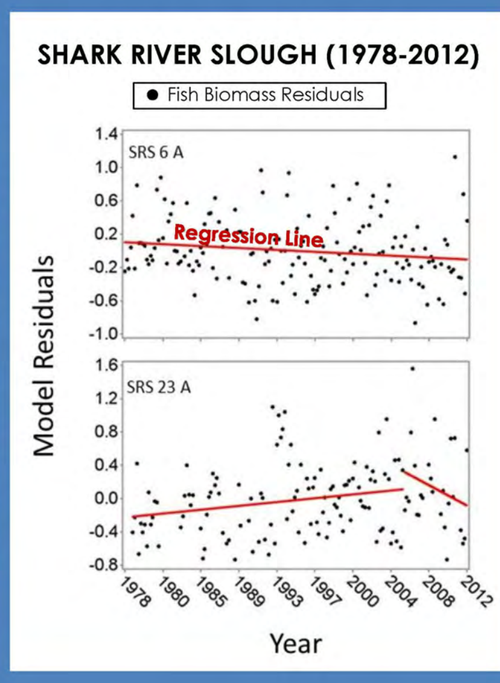


GREATER EVERGLADES

Between 1954 and 2004, Shark River Slough (SRS) exhibited a 50% loss in tree islands (image to the right), similar to WCA 3 trends. Yellow indicates the 1954 baseline and Red indicates the tree island loss.

Outputs of two models (far right) illustrate the trend in fish biomass (decreasing) in Shark River Slough, Everglades National Park (ENP). The same trend is seen in WCA 3A and 3B.

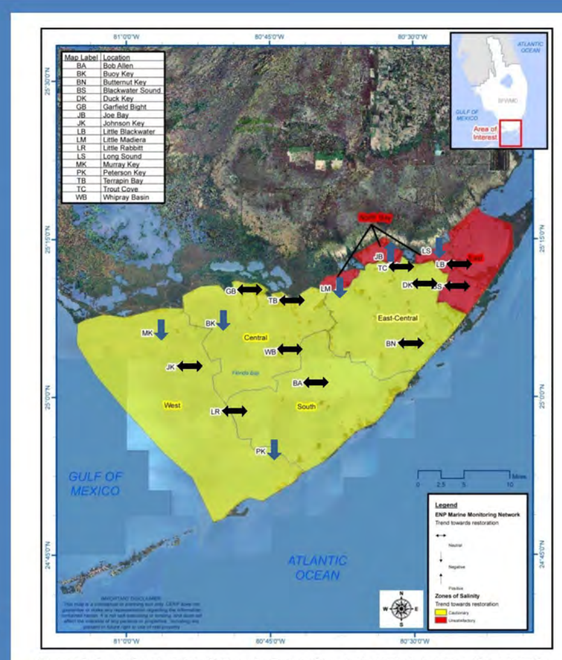




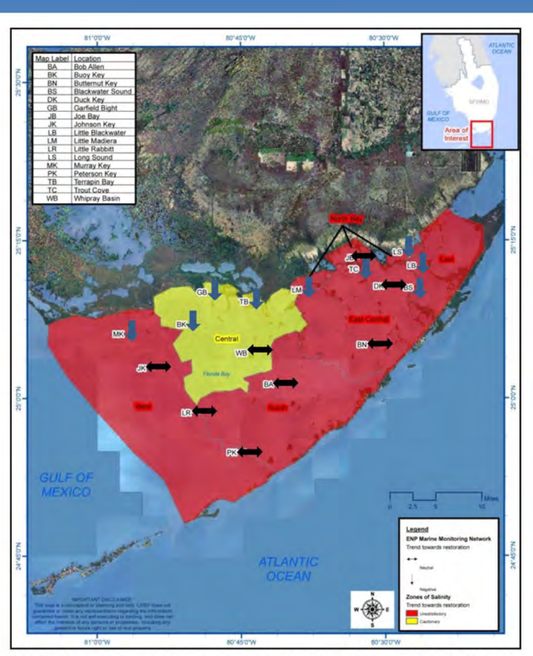
SOUTHERN COASTAL SYSTEMS

Overall, Florida Bay salinity conditions have moved further away from the restoration target over the past 4 years (compared to the last Systems Status Report) – this and other contributing factors have led to large patches of dead seagrass in Florida Bay.

The figures to the right illustrate salinity conditions in water years 2009-2013 based on the RECOVER salinity performance measure for Florida Bay. Red indicates that performance is far away from targets, yellow indicates it is between 33 and 66% of the target, and trend arrows reflect whether the results have moved further away (down arrow), closer to (up arrow), or have not changed when compared to 2000 - 2008 data.



WY09-13 **DRY** SEASON SALINITY MEASURES



WY09-13 **WET** SEASON SALINITY MEASURES