



*Florida Department of
Environmental Protection*

Central Indian River Lagoon Basin Management Action Plan

Briefing to the Indian River County Board of
County Commissioners

October 16, 2012

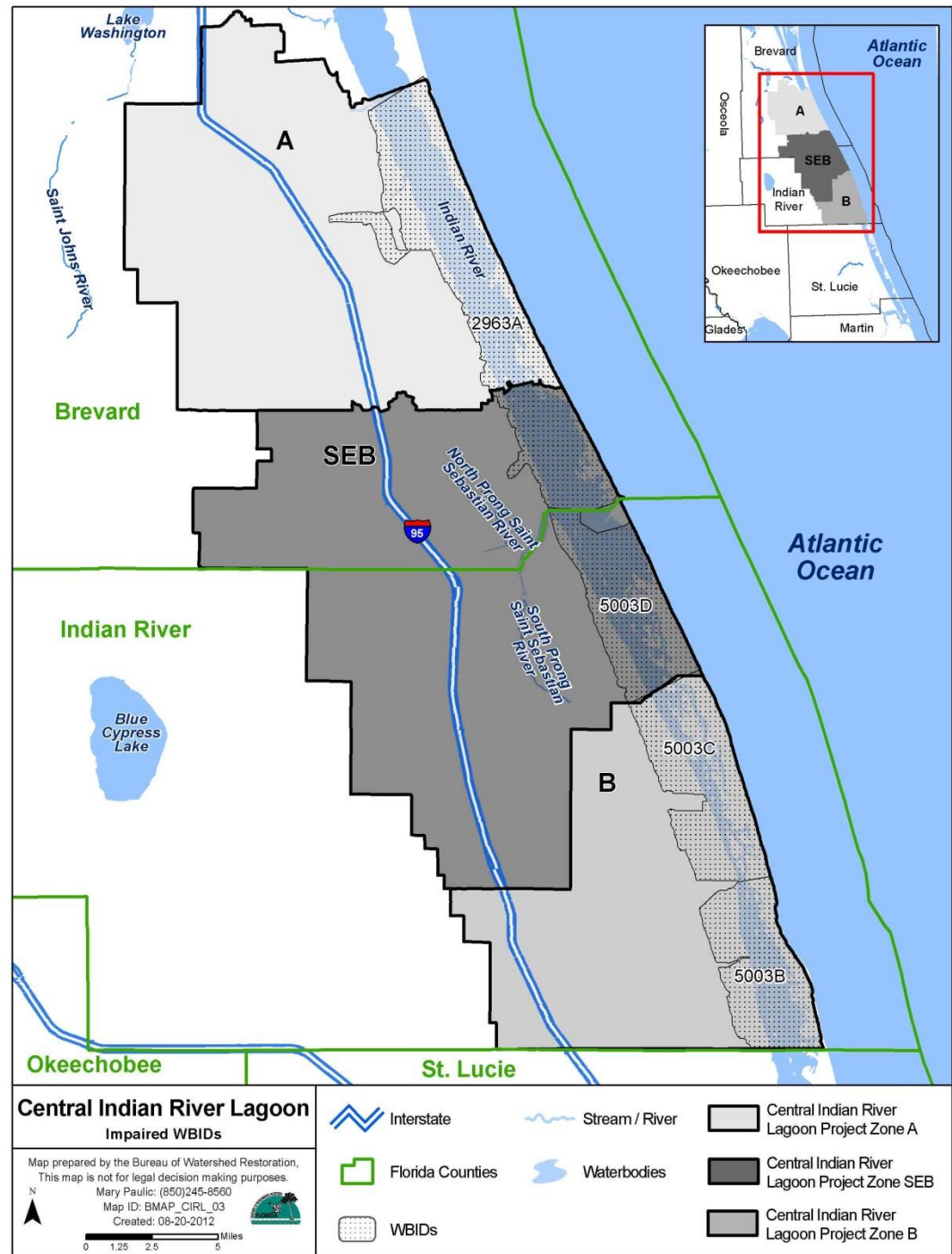


Central Indian River Lagoon (IRL) Subbasin

- Listed as impaired due to seagrass loss in the lagoon compared to historical depths. Nutrient loadings identified as cause.
- FDEP adopted total maximum daily loads (TMDLs) in March 2009 that require reductions of total nitrogen (TN) and total phosphorus (TP).
- Basin Management Action Plan (BMAP) meetings with stakeholders began in June 2009.



- The Central IRL subbasin extends from the Melbourne Causeway (U.S. 192) to the boundary between Indian River County and St. Lucie County.
- 3 project zones – Indian River County is in Central SEB and B.





Central IRL Seagrass Evaluation

- As part of the BMAP process, FDEP evaluated the seagrass depths based on newer data than provided for the TMDLs.
 - These data were collected in 2003, 2005, 2006, 2007, and 2009.
- The Central IRL is meeting seagrass depth targets for 2003-2007 and 2005-2009.
- Therefore, nutrient reductions beyond planned activities are not required of the stakeholders for the next 5 years.
- About 2017 seagrass growth will be reevaluated.





Indian River County Projects

- Indian River County included projects in the BMAP that are ongoing, completed, or envisioned including:
 - **Education** and outreach efforts;
 - **Street sweeping** in the Central IRL subbasin;
 - **Storm drain cleaning** with vacuum trucks;
 - **Wet detention ponds** at Vero Lakes Estates, East Roseland, and East Gifford;





Indian River County Projects, continued

- **Regional treatment projects** at PC Main, Egret Marsh, and Spoonbill Marsh; and
- **Envisioned projects** for PC South and PC North aquatic plant based nutrient removal systems and floating aquatic plant islands in stormwater ponds and lakes.



Water Quality and Seagrass Success

- Seagrass success is due in large part to completed projects in the subbasin. Largely local government and water management district:
 - Local stormwater projects;
 - Baffle boxes;
 - Wastewater treatment facility upgrades;
 - Street sweeping; outreach; ordinances; and
 - Regional projects (C-54 and C-1 projects).
- However, the recent algal blooms indicate that water quality problems still may exist.





Importance of Seagrass in the IRL

- Seagrass are an important part of the lagoon's ecology; foundation of food web for many of the animals that live in the lagoon.
- Based on a study for the IRL National Estuary Program, seagrass value was estimated as \$329 million (for 72,400 acres in 2007).
- The IRL is a valuable economic, recreational, and ecological asset for state and local governments.
 - Therefore, improvements in water quality and seagrass are not only environmentally important but economically important as well.





Economic Value

- The IRL provided over \$3 billion in benefits to residents and visitors for 2007.
- This is broken out to the county level as:

County	Value
Volusia	\$658,000,000
Brevard	\$1,251,360,000
Indian River	\$438,342,000
St. Lucie	\$545,041,000
Martin	\$370,240,000



Source: Hazen & Sawyer, 2008, *"Indian River Lagoon Economic Assessment and Analysis Update"*



First 5 Years of the BMAP

- At least one annual meeting will be held to track status of projects.
- A monitoring plan will be implemented to measure water quality and seagrass.
 - New seagrass data will be collected in 2013.
- The county is encouraged to apply for grants for water quality improvement projects:
 - 319 grants; and
 - TMDL water quality restoration grants.
- Agriculture will implement best management practices (BMPs) on their lands – largely citrus and pasture.





BMAP Process

- A commitment by Indian River County to complete projects proposed in the BMAP would help the adoption of the plan. Some local governments have used a:
 - Letter of support; or
 - Resolution supporting BMAP.
- The BMAP should be adopted by FDEP in early 2013.
- FDEP is holding a series of briefing and public meetings on the BMAP to obtain comments.





Comments on the Draft Central IRL BMAP

- The BMAP is available on FDEP's website at:
http://publicfiles.dep.state.fl.us/DEAR/BMAP/IndianRiverLagoon/BMAP_Documents/Central_BMAP/.
 - Local projects are outlined in Appendix E.
- Comments are welcome on the draft BMAP document and can be submitted through December 7, 2012.





FDEP Contacts

- To submit questions or comments on the BMAP, please contact:
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Questions and Comments

