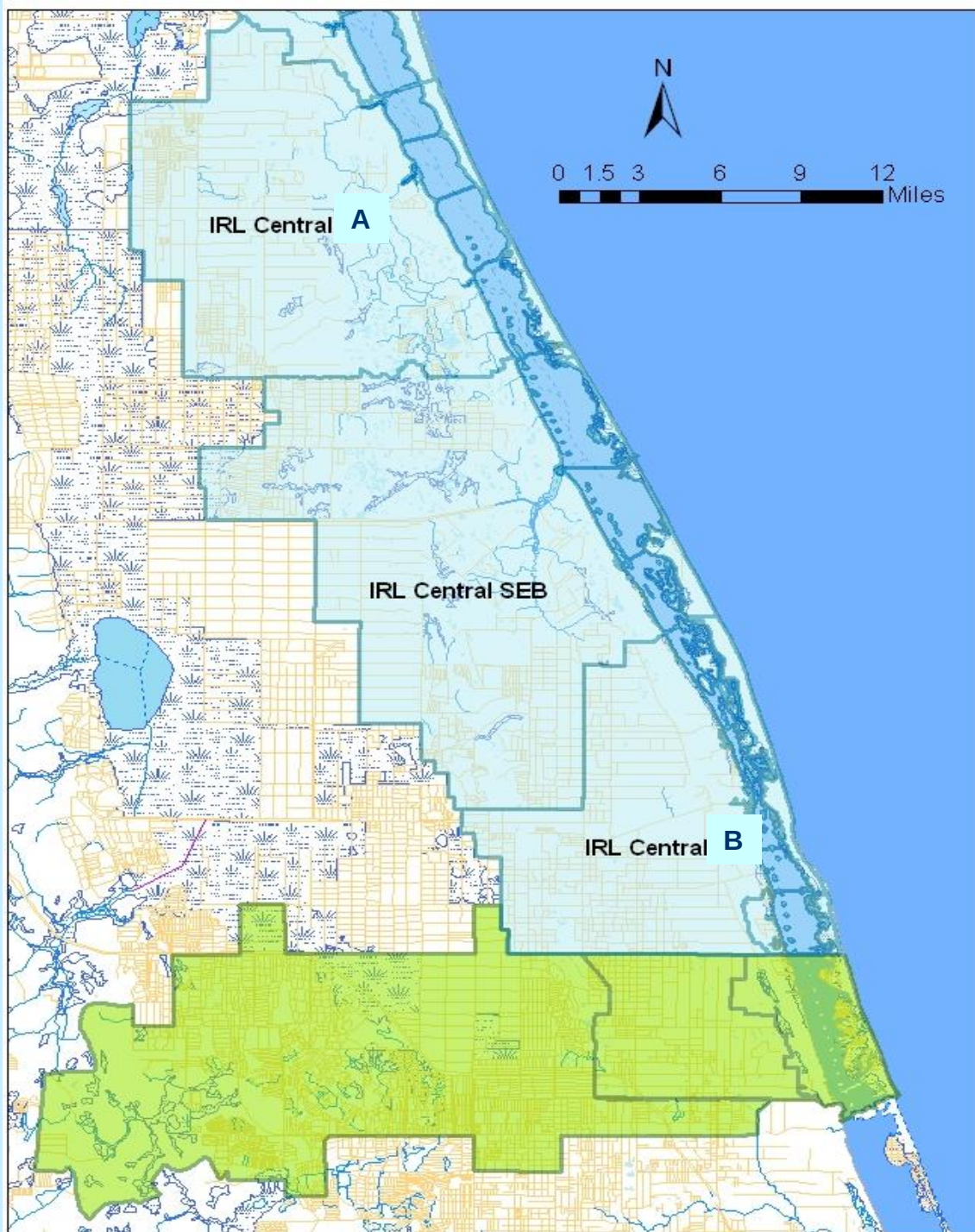
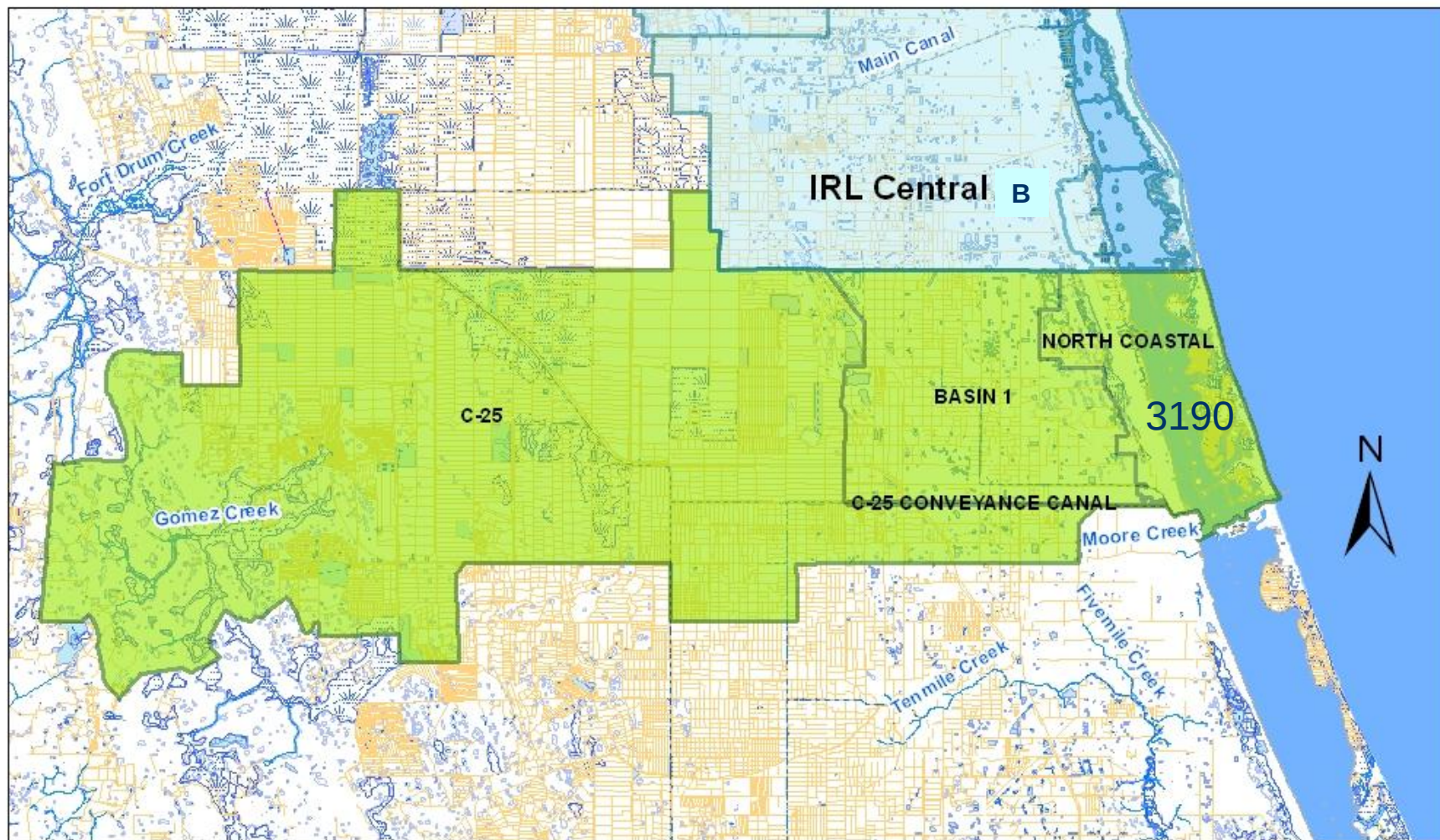


SOUTHERN BOUNDARY EXTENSION – continued

June 27, 2012







0 1.5 3 6 9 12
Miles

Background

- TMDL development by DEP for C-25 and Ft. Pierce Farm Canal in progress. Listed for DO and nutrients.
 - EPA has proposed TMDLs as a result of Consent Decree. DEP wants to improve EPA TMDL.
 - EPA deadline of March 2013.
- Listing of WBID 3190, North Coastal Basin as impaired for DO and nutrients.
 - Have observed high chlorophyll a values, > 11 ug is required for listing. Uncertain of source. More recent data may have lower chlorophyll a levels.

Background (continued)

- Central IRL as modeled stops at Indian River Co/St. Lucie Co. line. Central IRL is a BMAP area.
- EPA St. Lucie Watershed model stops at Ft. Pierce Inlet. St. Lucie River and Estuary is also a DEP TMDL and BMAP area.
- DEP prepares another list of impaired waters for the St. Lucie area in 2013 (which includes St. Lucie County).
- Numeric nutrient criteria - EPA delayed until July 20, 2012.

What We Have Learned (continued)

- SFWMD water quality – homogeneous water quality; water quality in WBID 5003b similar to WBID 3190.
- Protection of seagrasses referenced by RECOVER component of CERP and SWIM Plan.
- CERP performance measures for TP and TN median concentrations, 0.053 and 0.676 mg/l, respectively, similar to proposed TN and TP concentrations for Central IRL (0.054 and 0.7 mg/l mean).
- Proposed CERP reservoirs and other water harvesting projects expected to be beneficial to Central IRL.
- Need to make hydrologic adjustments with C-25 and St. Lucie basin boundary.

What do we do with these WBIDs?

- Should these segments be part of an existing BMAP or be in their own plan?
- Dynamics of water movement between Ft. Pierce Inlet and Sebastian Inlet suggest inclusion in Central IRL.
- Seagrasses are continuous between segment 21 and segment 22- two segments because 2 different water management districts.

What do we do?

- Option 1: Wait and see what happens with TMDLs, numeric nutrient criteria, and next year's 303(d) list. This would take the typical route of adoption of TMDLs followed by BMAP.
 - Completely separate from Central IRL.
 - BMAP implementation unknown (time frame).
 - Probable water quality target is for estuary.
 - Don't have targets for canals, but adjust model with different loading reductions to meet estuarine target.

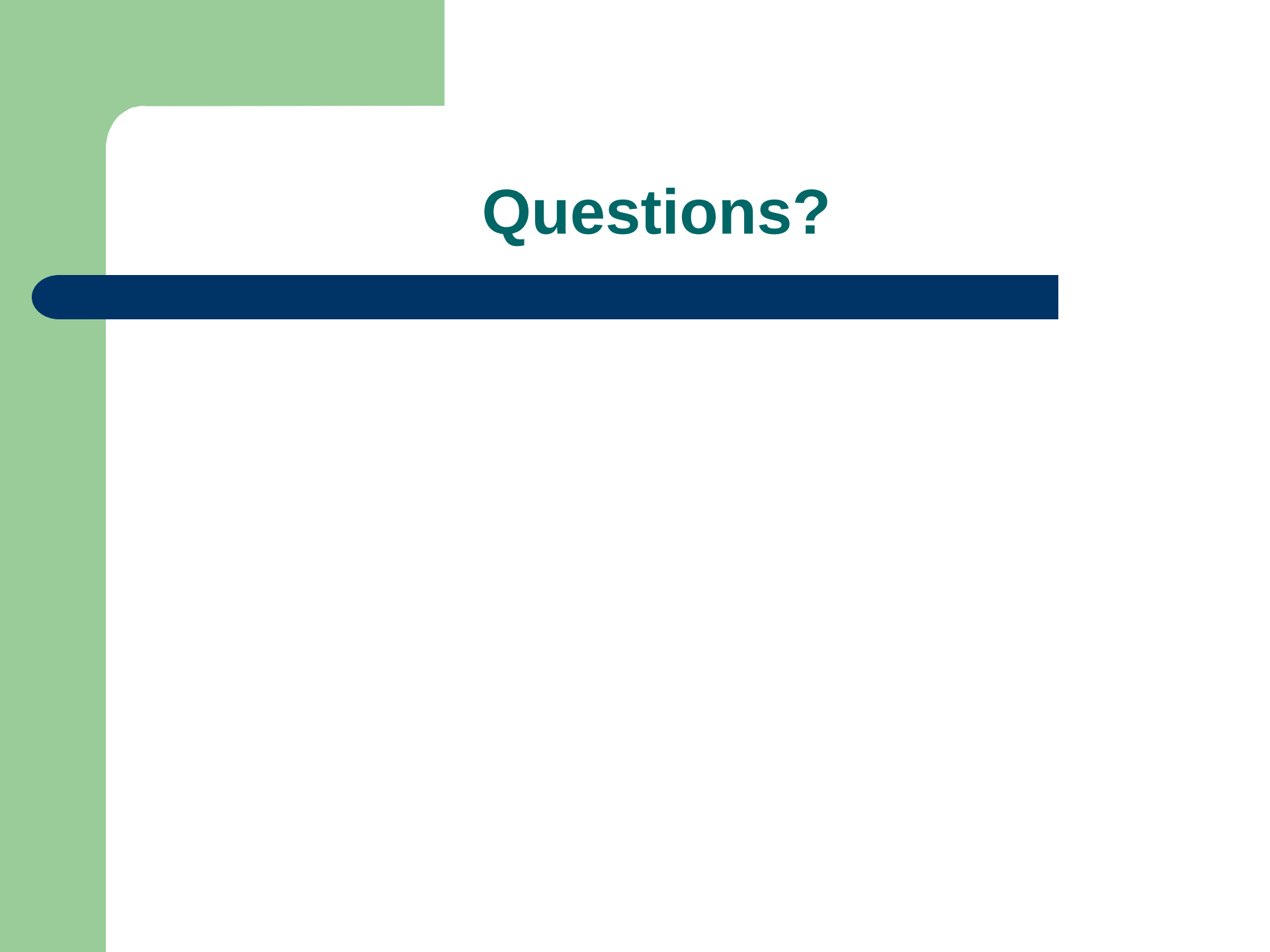
What do we do?

- Option 2: Continue to collect project information and include in Central IRL BMAP, because this area is part of the Central IRL watershed. No assigned load reductions or expectation to meet seagrass depth target.
 - *Include projects as part of the BMAP. Additional reductions as part of this BMAP cycle not required.*
 - CERP projects and other water harvesting projects will protect Central IRL.
 - TMDL development for C-25 and Ft. Pierce Farm Canal continues with stakeholder input. **BUT**

Option 2 Continued

- *BMAP provides a mechanism to outline a 5 year plan for adopting TMDL and planning for load reductions.*
- Can include evaluation of BMP implementation on agricultural lands.
- Addresses uncertainties by allowing collection of information till 2017/2018 and will know effect of numeric nutrient for next iteration of Central IRL BMAP.
- Leverages funding for projects from state sources and federal dollars.

Questions?

The slide features a light green background on the left side, which transitions into a white area. A dark blue horizontal bar with rounded ends spans across the white area, positioned below the word "Questions?".