

Governing Board Meeting
November 10, 2010

Item #33

Proposed Timeline to Complete Technical Tasks for Caloosahatchee MFL Update

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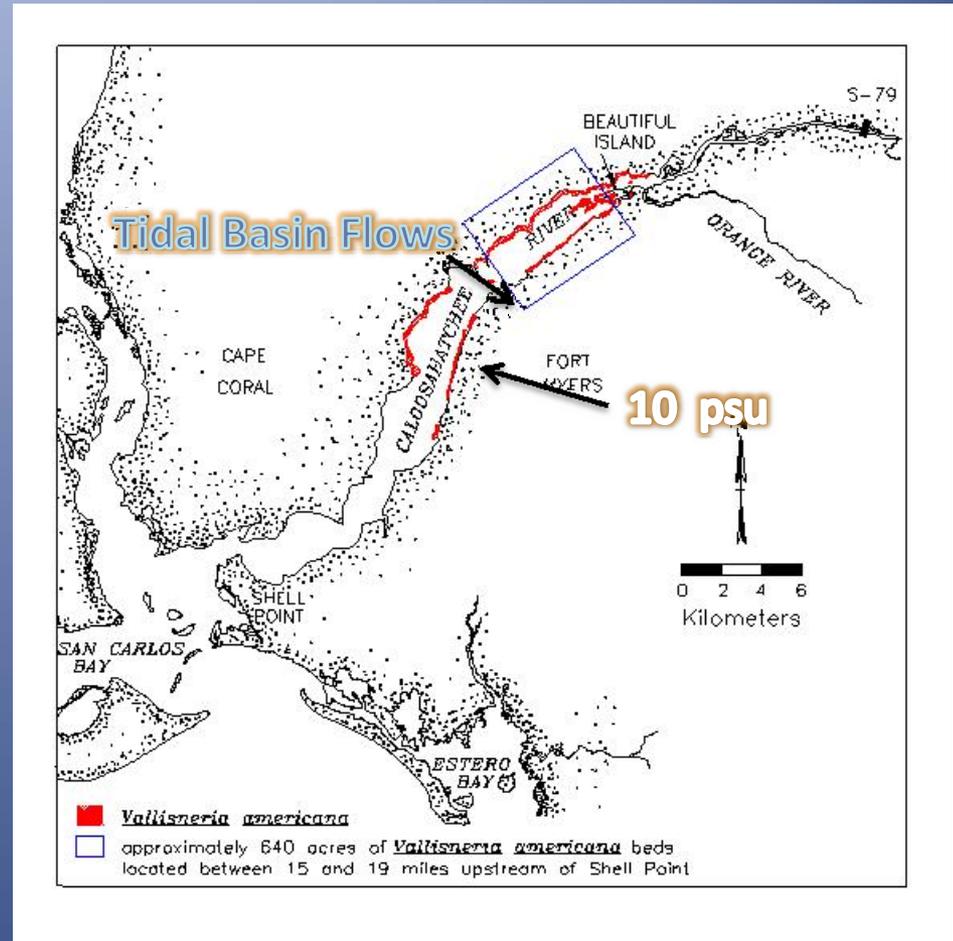
CONCEPTUAL RELATIONSHIP AMONG HARM, SIGNIFICANT HARM AND SERIOUS HARM STANDARDS

Water Resource Protection Standards

		Permittable Water	<u>Observed Conditions</u>
Drought severity increasing		Reservation of Water Restricted Allocation Area (1-in-10 level of certainty)	NO HARM Normal Permitted Operations Environmental Restoration
		Phase I Water Shortage Phase II Water Shortage	HARM Temporary loss of water resource functions taking 1 to 2 years to recover
		MINIMUM FLOWS & LEVELS	
		Phase III Water Shortage	SIGNIFICANT HARM Water resource functions require <u>multiple years to recover</u> (e.g. 300 cfs)
	Phase IV Water Shortage	SERIOUS HARM Permanent or irreversible loss of water resource functions	

WHERE DID 450 CFS COME FROM?

- 450 cfs is a planning target for CERP to meet desired salinities for tapegrass approximately 90% of the time, assuming 150-200 cfs from tidal basin
- Focus on a sustainable population of tape grass, not “significant harm.”



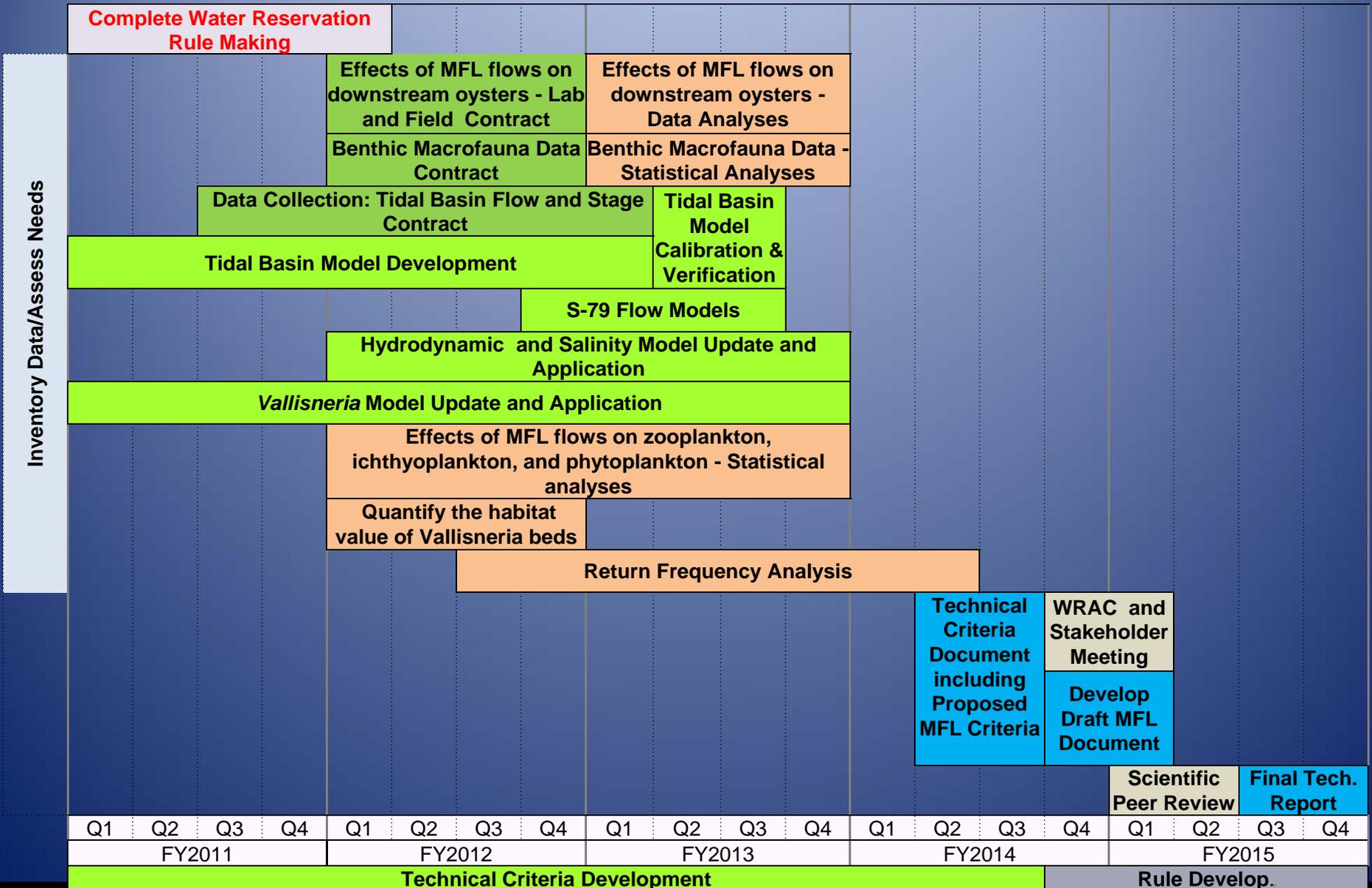
PETITIONER'S REQUEST FOR IMMEDIATE UPDATE OF MFL RULE IS NOT POSSIBLE

- **Cannot fulfill petitioner's request to immediately update the MFL rule:**
 - Need to continue District's support for the C-43 Reservoir by completing the water reservation rule
 - Need to collect and analyze additional data (2-3 years) to address deficiencies identified by peer review panel in 2001
 - Need to prepare technical report and complete independent, scientific peer review as required by rule (1+ year)

MAJOR TECHNICAL TASKS TO UPDATE A DEFENSIBLE MFL FOR PEER REVIEW (2-3 YEARS)

- ★ 1) Collect flow data from the Caloosahatchee Tidal Basin (at least 5 years) to develop models (watershed, flow and hydrodynamic) to properly simulate inflows and salinity responses
- ★ 2) Update and apply a *Vallisneria* (tape grass) population model
- 3) Quantify the habitat value of *Vallisneria* beds
- 4) Determine effects of MFL flows on downstream estuarine organisms (e.g. oysters and benthic macrofauna)
- 5) Analyze return frequency for the MFL

PROPOSED TIMELINE TO COMPLETE MFL UPDATE



RECOMMENDED PATH FORWARD TO ASSURE IMPLEMENTATION

- Add to DEP MFL Priority List - **December 2010**
- Add MFL Update to Strategic Plan – **Spring 2011**
- Work with DEP to continue tidal inflow monitoring contract for another 2.5 years (\$100-200K annual funding requirement) – **April 2011 – September 2013**
- Invite Caloosahatchee interests to work with District staff on developing technical criteria for MFL Update
- Conduct semi-annual Gov. Board updates on work effort throughout process
- Actively support prompt authorization and appropriation of C-43 Reservoir by Congress through coordinated legislative efforts

RECOMMENDED PATH FORWARD TO ASSURE IMPLEMENTATION (CONT.)

- Begin majority of tasks to define MFL Technical Criteria – **October 2011**
- Begin MFL Rule Development – **July 2014**

CONSEQUENCES OF PROPOSED PATH FORWARD

Between 1-3 years of delay:

- Water resource protection rules for
 - Estero Bay
 - Rookery Bay / Naples Bay
 - Biscayne Bay

Staff “Level of Effort” Impacts:

- Estuarine Numeric Nutrient Criteria Assessment
- TMDL/BMAP Support
- Loxahatchee River Issues Coordination
- CERP Projects(Biscayne Bay Coastal Wetlands, C-111 Spreader Canal) Technical Support
- RECOVER Technical Support

TO AVOID THESE CONSEQUENCES

- Begin majority of tasks to define MFL Technical Criteria – **October 2011 - 2014**
- Begin MFL Rule Development – **July 2014 - 2017**