

Governing Board Meeting September 13, 2018

Caloosahatchee River near Shell Point

Minimum Flows and Levels Criteria for the Caloosahatchee River

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Background

- MFL Rule initially adopted in 2001
- Mean monthly flow of 300 cfs at S-79
- Rule included planned recovery strategy (CERP)
- MFL exceedances based on salinity criteria of a single species – tape grass
- A petition was filed in 2010 requesting Governing Board initiate rulemaking to amend MFL rule
- Petition denied, but Board approved and funded implementation of MFL studies



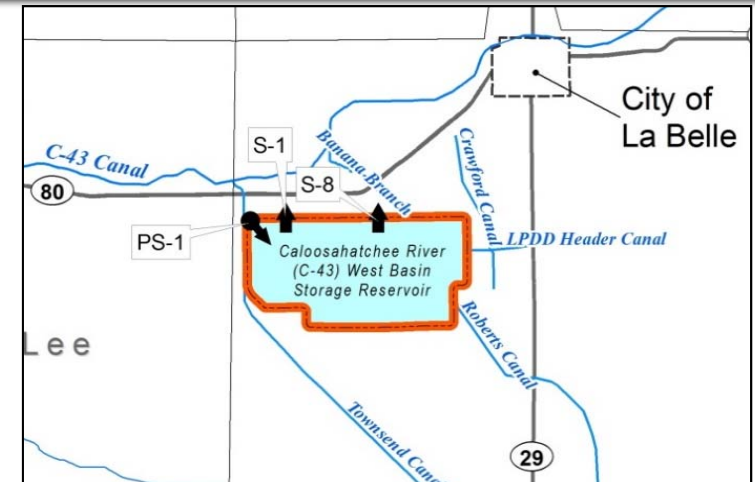
Caloosahatchee MFL Recovery Strategy

1. Caloosahatchee River (C-43) West Basin Storage Reservoir

- Currently under construction
- 170,000 Ac-Ft. storage
- New water solely for environmental purposes

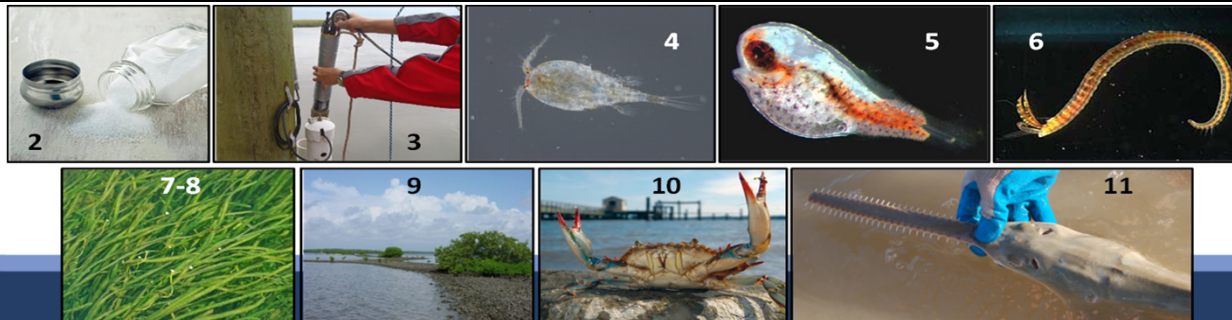
2. Water Reservation Rule

- Adopted in 2014
- Water in reservoir protected for fish and wildlife



Comprehensive Science Studies Completed 2011-2016

	Component	Method
1	Hydrodynamics	Influence of alterations on hydrodynamics
2	Inflow vs. Salinity	Monthly freshwater-salinity relationships
3	Water Quality	Relationships between inflow, salinity, and water quality
4	Zooplankton	Inflow, zooplankton and habitat compression
5	Ichthyoplankton	Relationships between ichthyoplankton and inflow
6	Benthic Fauna	Macrofauna-salinity patterns relative to inflow
7	<i>Vallisneria</i> data	Empirical relationships between tape grass, S, and inflow
8	<i>Vallisneria</i> model	Model exploration of tape grass, S, light, and inflow
9	Oyster Habitat	Salinity patterns for oyster habitat in lower CRE
10	Blue Crabs	Relationships between blue crab landings, rainfall, and inflow
11	Sawfish	Dry season inflow, hydrodynamics, and habitat extent



Science Advanced Through a Transparent and Open Public Process

- 2011 - Technical Issues Workshop
- 2013 - 2-Day Science Workshop – FL Gulf Coast Univ.
- 2016 - Completed comprehensive science assessment based on 11 different component studies
- 2016 - 2-Day Science Symposium
- 2017 - Science Document finalized
- 2017 - Draft MFL Technical document completed
- 2017 - Public Peer Review Session with panel of experts
- 2017 - Peer Review Report supports science basis for rule
- 2018 - Rule development process begins



Rule Development Public Process

- Oct 2017 – Governing Board approved Annual Regulatory Plan with Caloosahatchee rulemaking
- Nov. 2, 2017 – WRAC Updated
- Dec. 14, 2017 – Governing Board authorized Rule Development
- Feb. 15, 2018 – Public Workshop #1
- May 7, 2018 – West Coast Technical Meeting held
- June 1, 2018 – Public Workshop #2
- June 7, 2018 – WRAC Meeting
- July 12, 2018 – Notice of Proposed Rule



Caloosahatchee MFL Draft Rule Criteria

Proposed revision to Caloosahatchee MFL rule based on “Best Available Information”, including scientific studies, modeling and peer review conducted over the past 6 years

- **Magnitude:** 30-day moving average flow of 400 cfs at S-79
- **Duration:** An MFL exceedance occurs during a 365-day period when the 30-day moving average flow at S-79 is below 400 cfs and the 30-day moving average salinity exceeds 10 at the Ft. Myers salinity monitoring station
- **Return Frequency:** An MFL violation occurs when an exceedance occurs more than once in a five-year period

Note: MFL exceedances are expected until the recovery strategy is completed and operational

Recommended Action

Adopt amendments to Rule 40E-8.221, Florida Administrative Code, to revise the minimum flows and levels (MFL) criteria for the Caloosahatchee River

THANK YOU

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