

Lake Okeechobee System Operating Manual (LOSOM)

JANUARY 23 UPDATE

BEN HOGARTH

What is LOSOM?

- Review of LORS designed to incorporate the consideration of HHD completion and other infrastructure construction already authorized and underway. (Requirement of 2018 Water Resources Development Act)
- An intervening non-CERP activity and is not designed to propose water quality improvement features or include new infrastructure beyond evaluation of already authorized projects. (Will include existing C-43 & C-44 projects)
- Goals: reduce undesirable releases to northern estuaries, improve lake ecology, increase water supply for legal users, and ensure all dam safety requirements are met. *Health and Human Safety First Priority

CERP vs WRDA and the CERP Savings Clause

Congressionally mandated priorities from CERP did not initially include health and human safety considerations relating to water quality.

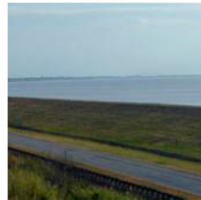
LOSOM proposes changes to the lake regulation schedule due to rehabilitation of HHD and is NOT driven by CERP implementation.



GOAL OF LOSOM



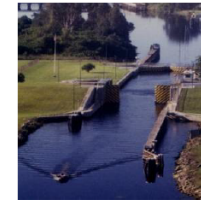
~~Maximize~~ **Incorporate** flexibility in Lake Okeechobee operations while balancing congressionally authorized project purposes.



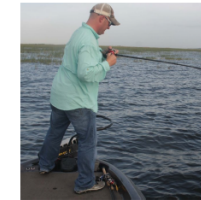
Flood Control



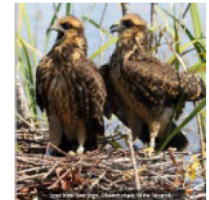
Water Supply



Navigation



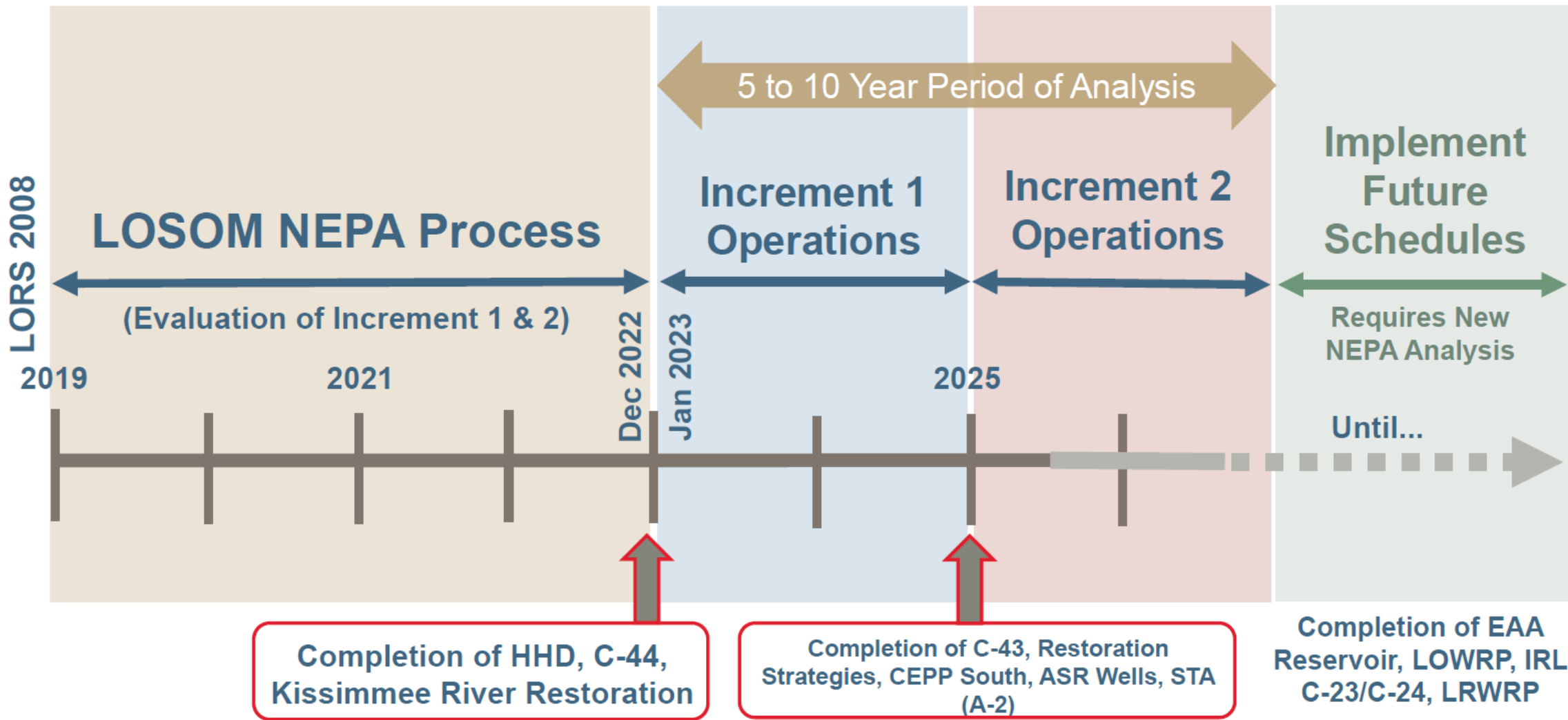
Recreation



Preservation of Fish & Wildlife



LOSOM INCREMENTS



Project Delivery Team (PDT)

- Interagency committee of elected officials and agency staff acting in official capacity representing interests of their agency / community
- Sub-teams: Plan Formulation; Modeling; Ecological/Environmental; Water Quality; Water Supply; Economic
- Goal: Assist with the development of the new LOSOM including multidisciplinary expertise analysis / feedback



SENSITIVITY RUNS



WHAT?

- Simplified models and data processing techniques to analyze a broad range of options and to identify ideas that warrant further in-depth analysis.
- Sensitivity runs are NOT alternatives and are not designed to result in a balance between the multiple project purposes.

WHY?

- Use simulation modeling to test effects from specific changes to Lake O operations.
- Gather information that can be used in development of alternatives.
- Evaluate stakeholder concepts generated during the NEPA scoping process.



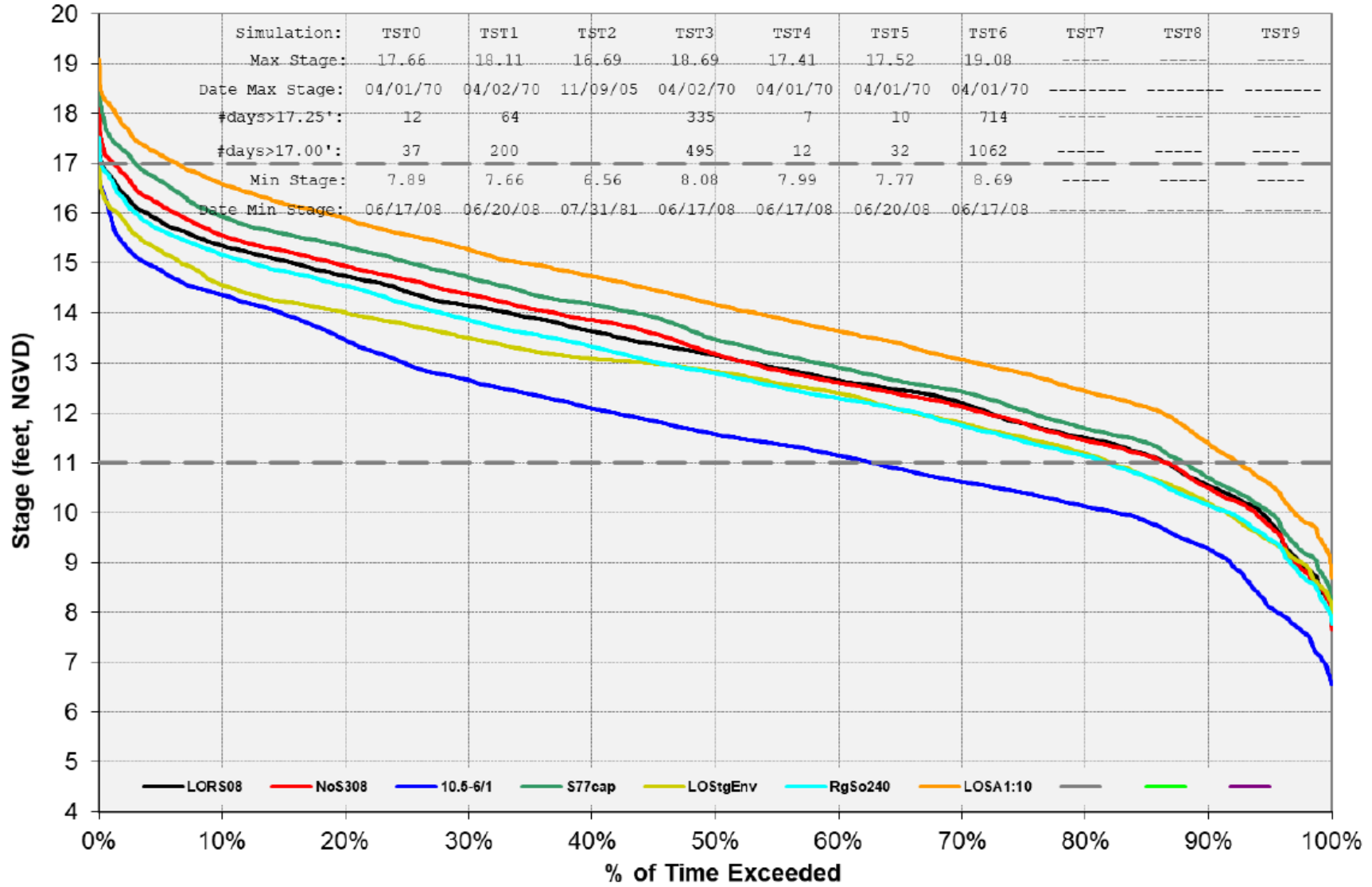
INITIAL SENSITIVITY RUNS



Run #	Title	Description
Run 0	LORS08	LORS08: Preliminary Existing Condition Baseline
Run 1	NoS308	S-308 closed for regulatory releases, C-44 basin backflow, and C-44 basin water supply
Run 2	10.5-6/1	Modify LORS08 to target stage of 10.5 feet NGVD on May 31 st
Run 3	S77cap	Limit S-77 regulatory release to not exceed 1250 cfs at S-79 when C-43 runoff < 1250 cfs
Run 4	LOStgEnv	Modify LORS08 to use Stage Envelope bounds as operating bands
Run 5	RgSo240	Modify LOSRS08 to allow additional regulatory release to WCAs
Run 6	LOSA1:10	Raise LORS08 bands by 1.42 ft to achieve no more than 5 of 45 water years with cutbacks > 100kaf



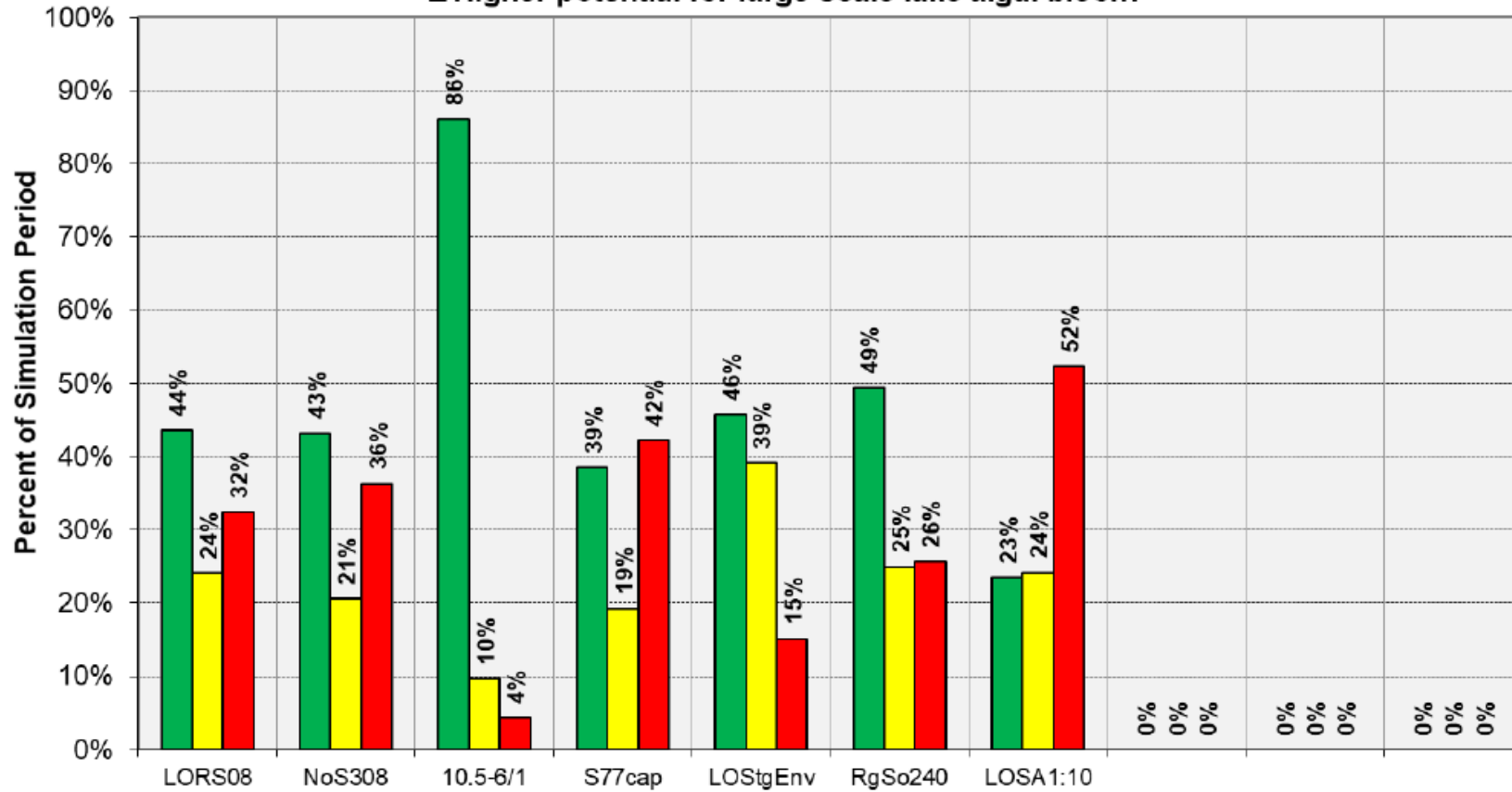
Lake Okeechobee Stage Duration Curves





Potential* for Large-scale Algal Blooms on Lake Okeechobee Based on Percent of Time Simulated Stage was Below, Inside, & Above Stage Envelope from May-Aug

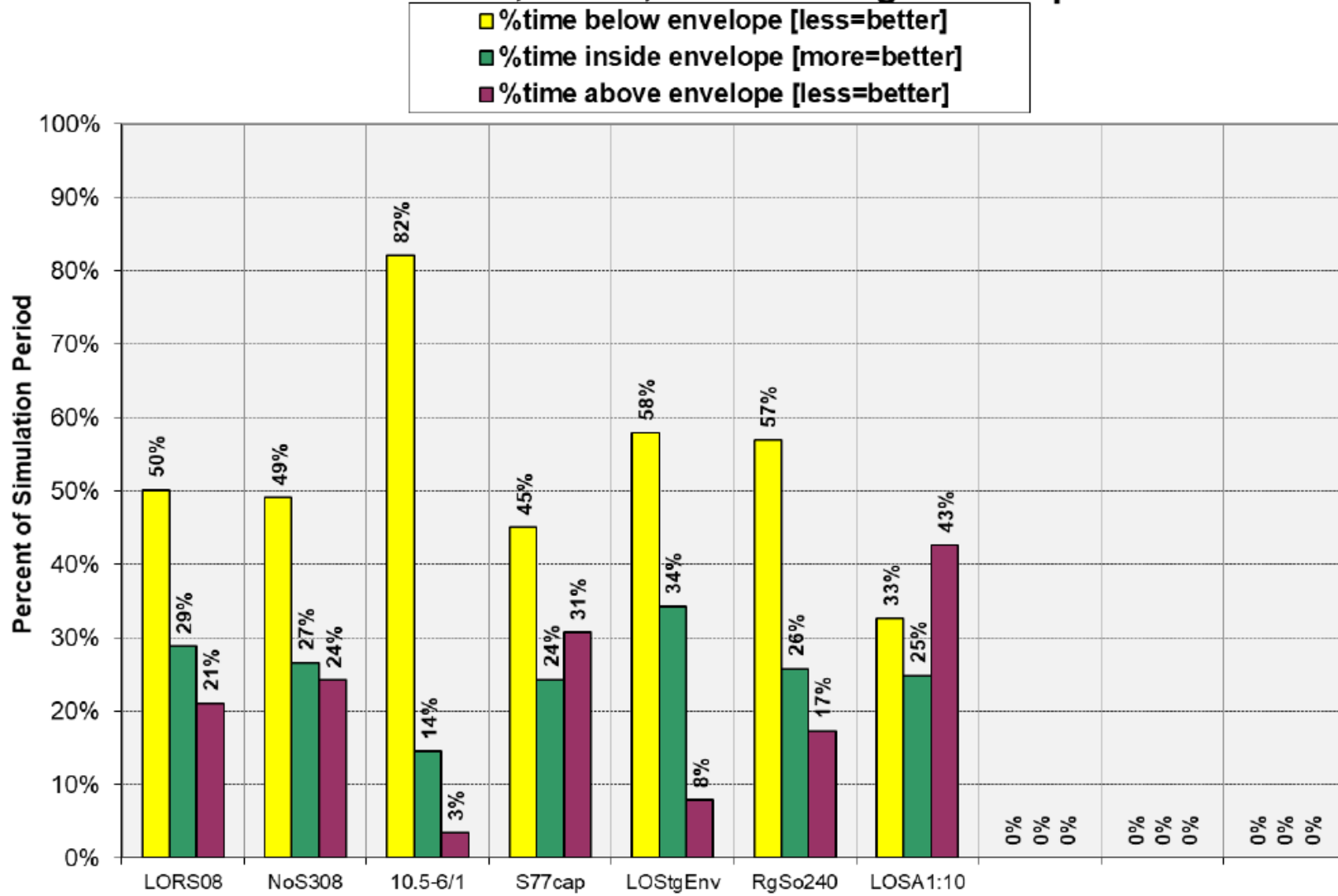
- Lower potential for large-scale lake algal bloom
- Med potential for large-scale lake algal bloom
- Higher potential for large-scale lake algal bloom



* Summer lake stage affects lateral movement of turbid lake-water into nearshore zones, in turn affecting nutrient concentrations, light penetration, plant and algal growth in areas of the lake where blooms originate.



Percent of Time Simulated Lake Okeechobee Stage was below, inside, & above Stage Envelope



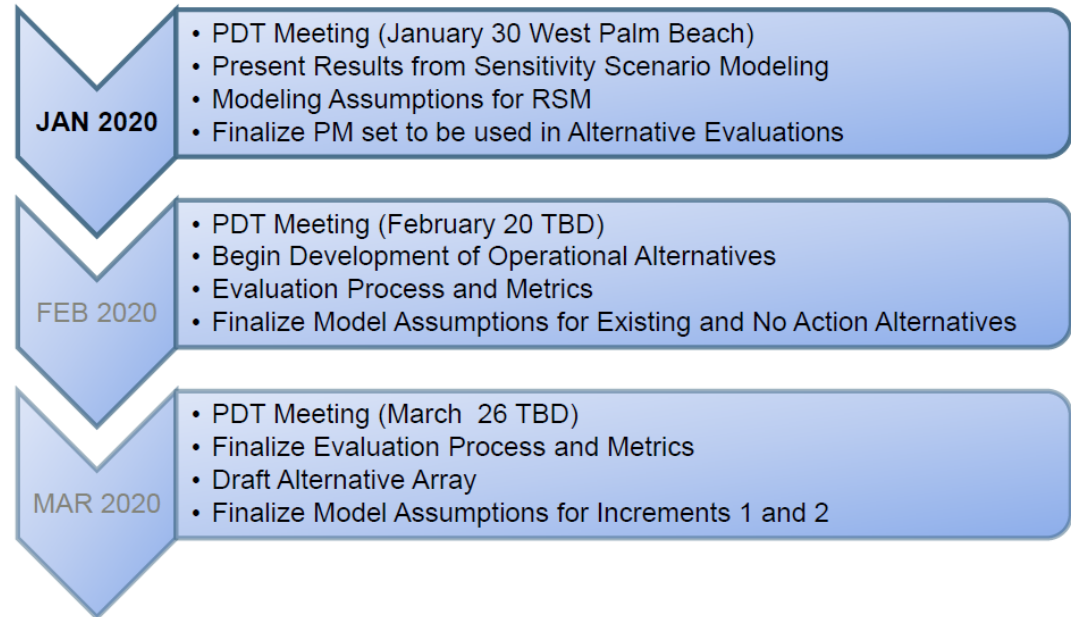


LOSOM SCHEDULE



90 DAY LOOK AHEAD

MILESTONE	DATE
Scoping Meetings (complete)	February - March 2019
Initial Increment I Array of Alternatives & Performance Metrics Finalized	April 2020
Alternative Evaluation Increment I, Increment II	May 2020 – April 2021
Draft Report Release	January 2022
Final Report Release	July 2022
Record of Decision (ROD)	October 2022



Future Project Delivery Team Meetings

January 30, 2020 – West Palm Beach (SFWMD HQ)

February 27, 2020 – Web Meeting

March 26, 2020 – Okeechobee (TBD)

April 23, 2020 – TBD

*Ongoing through April of 2021