

LAKE OKEECHOBEE SYSTEM OPERATING MANUAL (LOSOM)

PUBLIC WORKSHOPS

September 16 & 17, 2019
Cape Coral and Stuart, FL

U.S. Army Corps of Engineers
Jacksonville District



US Army Corps
of Engineers®



AGENDA



- Purpose of the Meeting
- LOSOM Planning Framework
 - Study and Project Area
 - Objectives
 - Constraints
 - Considerations
 - Increments
- Question and Answer
- Lunch
- Water Management Simulation Exercise



PURPOSE OF WORKSHOP



- Inform the public on progress since last public meetings in February 2019
- Opportunity to give feedback
- This is not a PDT Meeting



PDT MEMBERS



- Sent out 60+ invites to include:
 - Federal agencies
 - State agencies
 - Local governments
 - Tribes
- Encourage all Federal, State and Local governments to be a part



COOPERATING AGENCIES



1. National Park Service (NPS) – Everglades National Park
2. National Marine Fisheries Service (NMFS)
3. South Florida Water Management District (SFWMD)
4. Florida Department of Agriculture and Consumer Services (FDACS)
5. Florida Department of Environmental Protection (FDEP)
6. Florida Fish and Wildlife Conservation Commission (FFWCC)
7. Florida Department of Health (FDOH)
8. Seminole Tribe of Florida
9. Environmental Protection Agency (EPA)



Public Comment Period
(Fall 2022)

COMPLETION

Decision/Approval

START

Scoping
Period

10 Public Meetings
(Feb - Mar 2019)
> 8,000 comments received



Educational
Webinars

WE ARE HERE

Final NEPA
Document

LOSOM NEPA Process and Engagement Opportunities

Public Comment Period
(Spring 2022)

Draft NEPA
Document

Develop Purpose &
Need, Study
Objectives, Constraints
and Considerations

Develop Performance
Metrics & High Level
Scenarios

PDT Meetings &
Public Workshops

lakeocomments@usace.army.mil
www.saj.usace.army.mil/LOSOM

**PDT Meetings & Public Workshops
(2020 – 2021)**

Select
Operational
Alternatives

Evaluate and
Compare
Alternatives

Develop
Operational
Alternatives



WHAT'S BEEN HAPPENING?



Scoping Period
(Feb – April
2019)



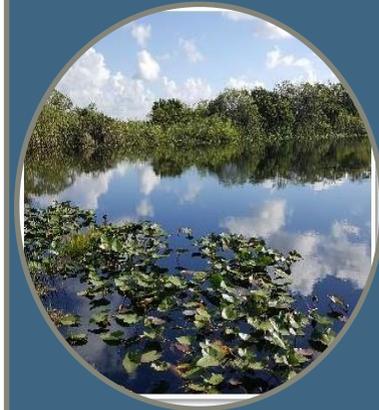
Review of
Scoping
Comments and
Development of
Draft Planning
Framework
(June – July
2019)



Tribal
Coordination
(Ongoing)



Cooperating
Agency
Coordination
Kickoff Meeting
(9 Aug 2019)

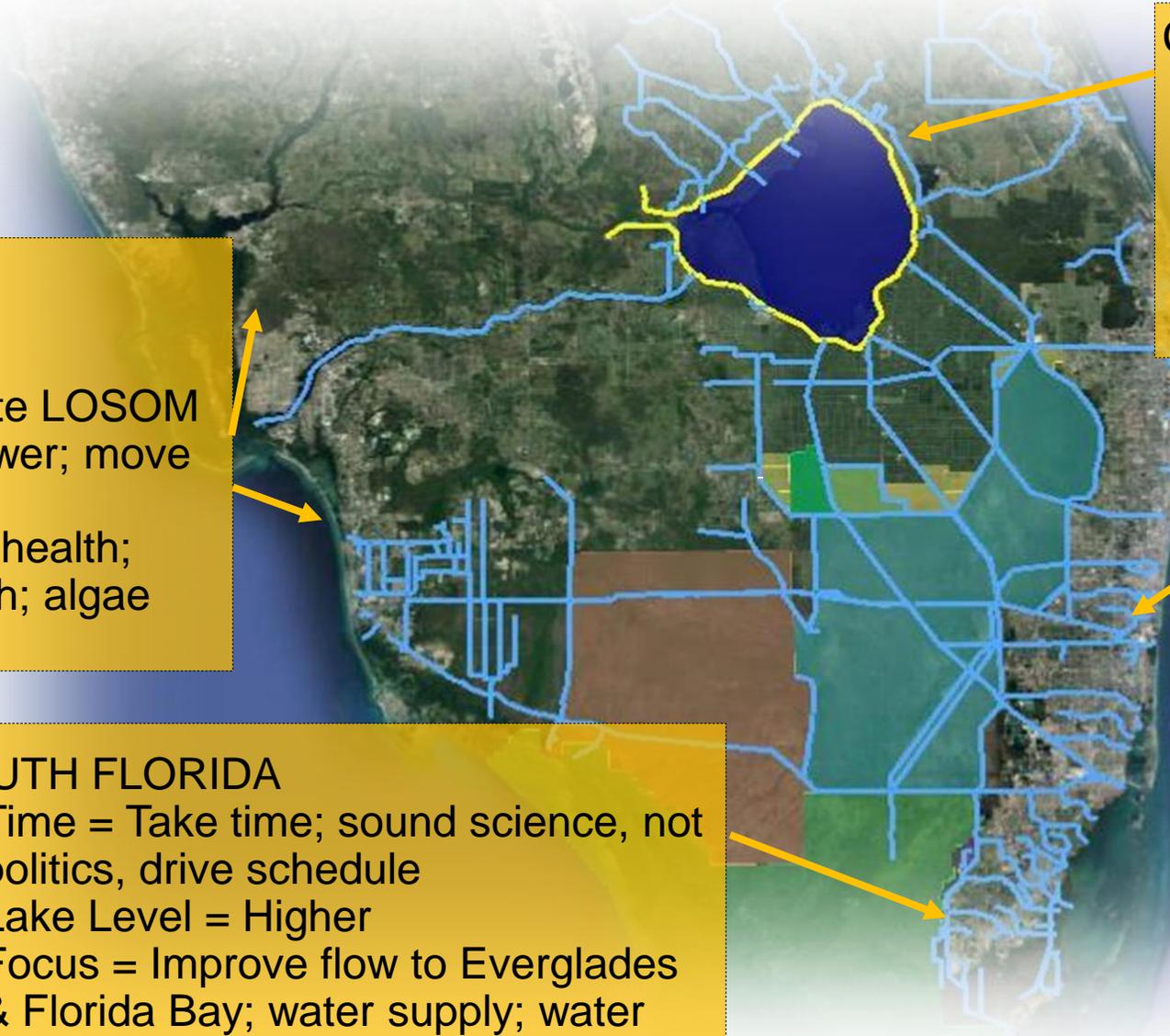


Preparing for
First PDT
Meeting &
Public
Workshops
(Aug/Sep 2019)





LOSOM SCOPING MEETING SUMMARY



COMMUNITIES AROUND LAKE O

- Time = Take time; sound science; not politics, drive schedule
- Lake Level = Higher
- Focus = Water quality; agriculture; water supply; recreation; Lake health

EAST COAST COMMUNITIES

- Time = Accelerate LOSOM
- Lake Level = Higher & lower
- Focus = Human health; water supply; water quality; algae; economy

WEST COAST COMMUNITIES

- Time = Accelerate LOSOM
- Lake Level = Lower; move water south
- Focus = Human health; ecosystem health; algae

SOUTH FLORIDA

- Time = Take time; sound science, not politics, drive schedule
- Lake Level = Higher
- Focus = Improve flow to Everglades & Florida Bay; water supply; water quality



SUMMARY OF SCOPING COMMENTS



Lake Levels
(Higher, Lower, within Ecological Bands)

Health & Safety Concerns
(Dam Safety, Water Quality, HABs*)

Study Schedule
(Hurry Up/Slow down)

Broaden Scope of Study
(Upper Kissimmee, entire SFWMD Watershed, Florida Bay, infrastructure)

Stop Discharges to the East

Baseline (LORS08, WSE)



Savings Clause
(Do include/don't Include)

Move More Water South

Do Not Lower Lake to 10.5 feet

Increase Dry Season Flow South

Consider Impacts to Tourism, Economies, Water Supply, Flood Control, Recreation, Water Quality, etc.

Use Science based Solutions

Consider Health of the Lake, Estuaries, Everglades National Park, & Florida Bay

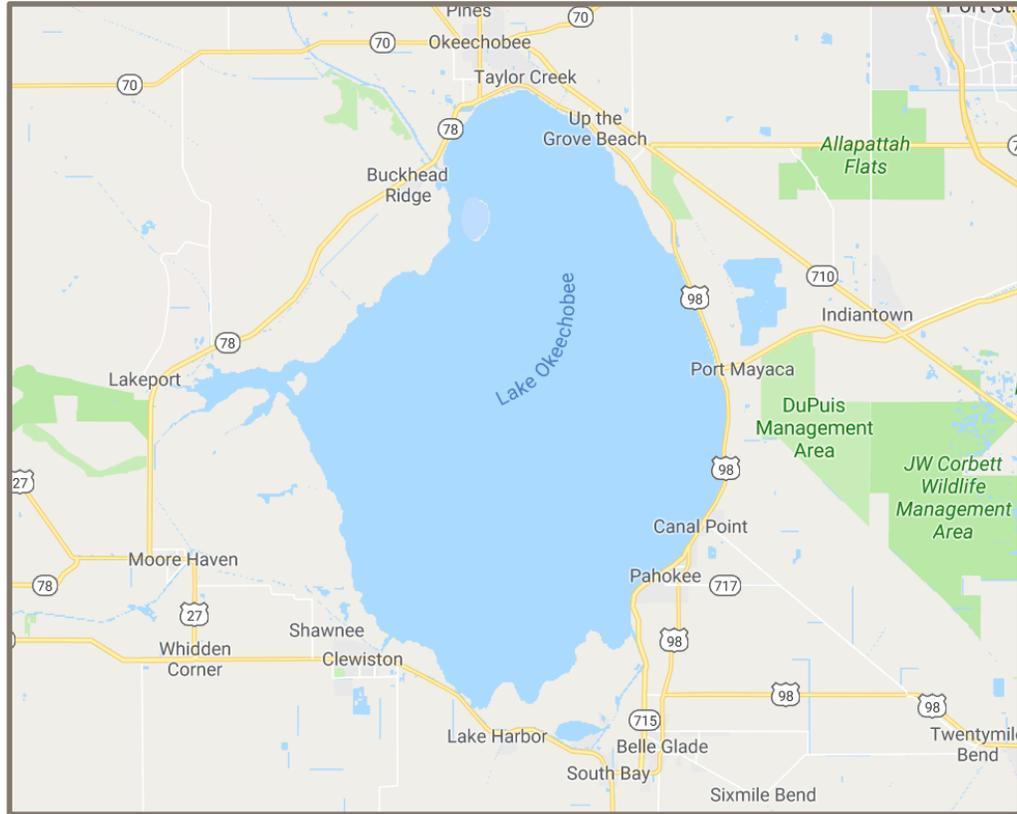
* HABs: Harmful Algal Blooms



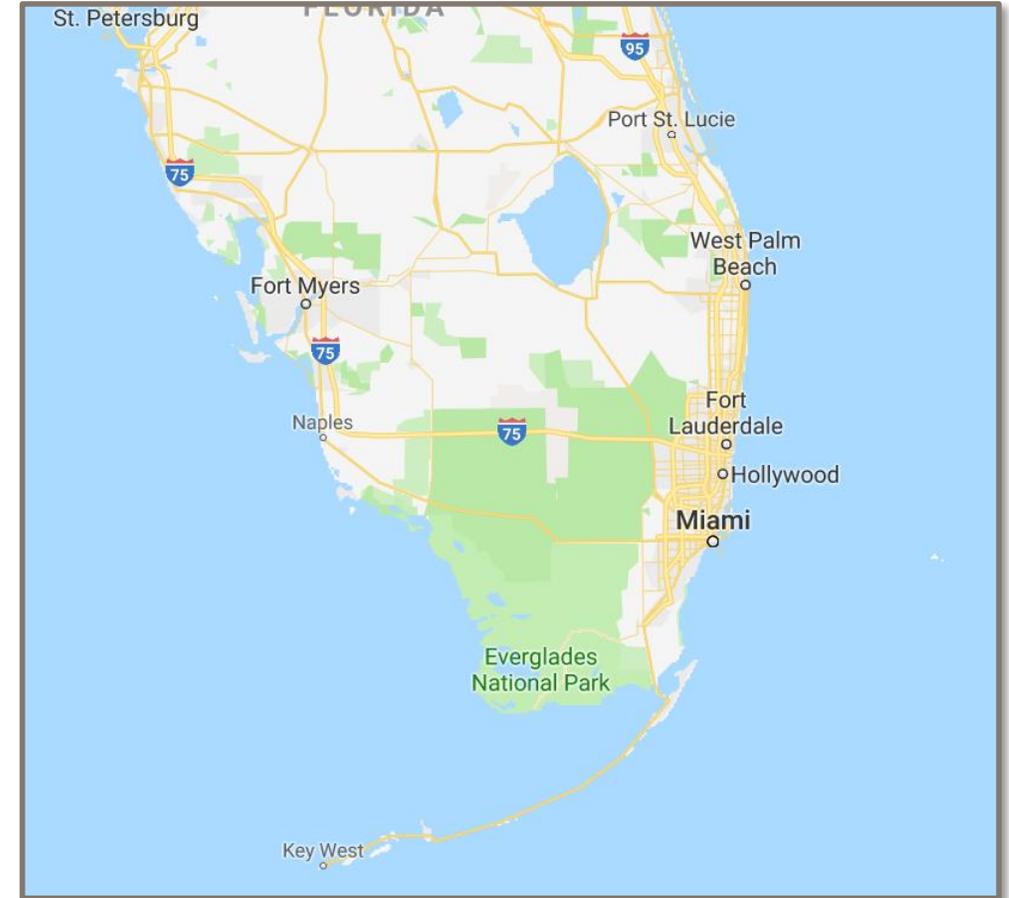
PROJECT AREA VS. STUDY AREA



Project Area



Study Area (Area of Effects)





INCREMENTS



Increment 1 - Projects

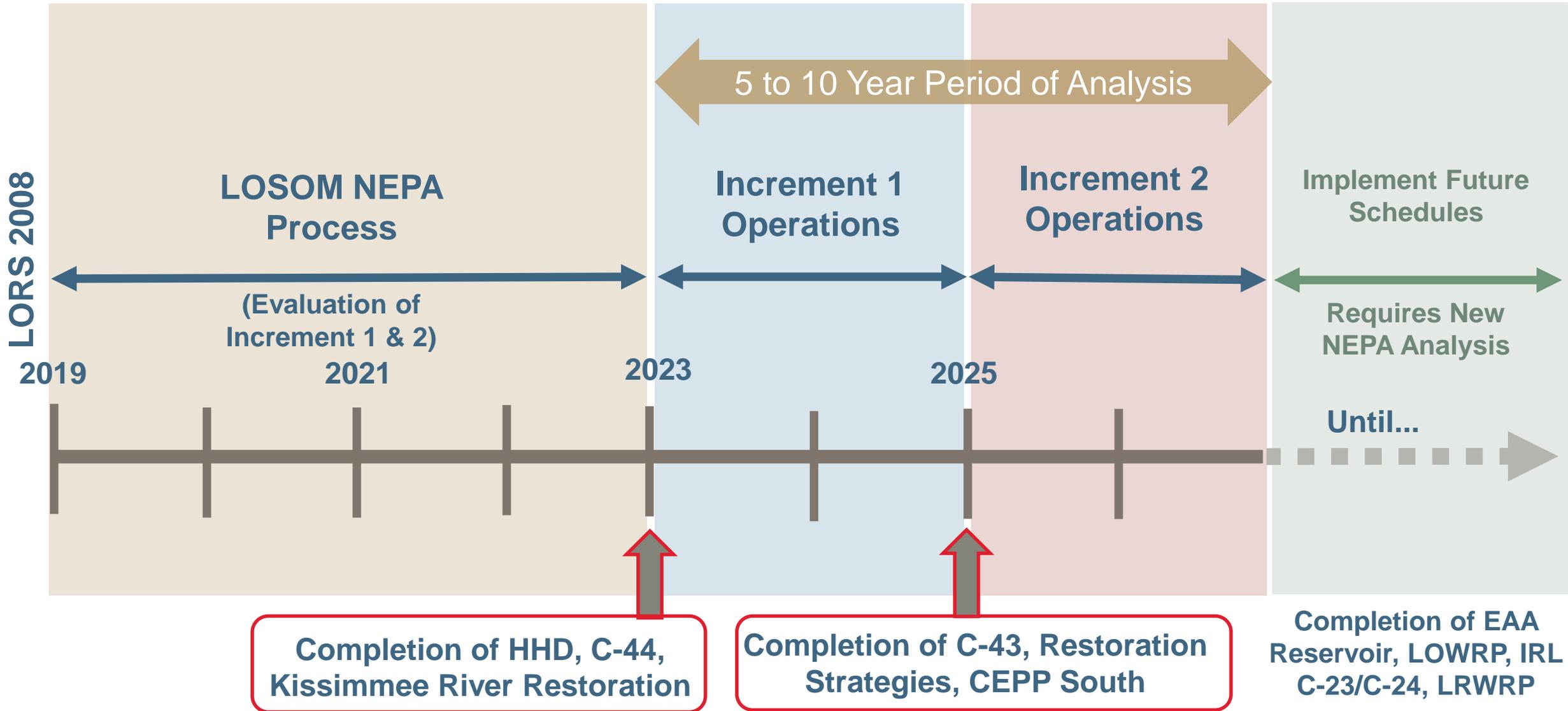
- Herbert Hoover Dike Rehabilitation
- C-44 Reservoir
- Kissimmee River Restoration Project
- Kissimmee River Headwaters

Increment 2 - Projects

- All Projects in Increment 1 plus.....
- C-43 Reservoir
- Restoration Strategies
- Central Everglades Planning Project (CEPP) South



LOSOM INCREMENTS





HOW WILL LOSOM BE EVALUATED?



Increment 1: Operational Scenarios will be evaluated and compared to:

- ❖ LORS 2008
- ❖ Herbert Hoover Dike
- ❖ C-44 Reservoir
- ❖ Kissimmee River Restoration
- ❖ Kissimmee River Headwaters

Increment 2: Operational Scenarios will be evaluated and compared to:

- ❖ LORS 2008
- ❖ Herbert Hoover Dike
- ❖ C-44 Reservoir
- ❖ Kissimmee River Restoration
- ❖ Kissimmee River Headwaters
- ❖ C-43 +
- ❖ CEPP South +
- ❖ Restoration Strategies



WHY LORS2008?



- Existing Condition = LORS2008
- Future without (FWO) Condition = No Action Alternative
 - ❖ Alternative that describes the condition in the future without additional federal action including additional infrastructure.
 - ❖ The FWO becomes the condition to which all other alternatives (future regulation schedules) are compared and evaluated.
- **LORS 2008 is the regulation schedule for the Existing Condition & Future Without Federal Action.**



PLANNING DEFINITIONS



Objective

Planning objectives are statements that describe the desired results of the planning process by solving the problems and taking advantage of the opportunities identified.

Constraint

Constraints are restrictions that limit the planning process. Constraints, like objectives, are unique to each planning study. Some general types of constraints that need to be considered are resource constraints and legal and policy constraints.



DRAFT OBJECTIVES

Develop a new Lake Okeechobee regulation schedule that better balances the project's congressionally authorized purposes of the Central and Southern Florida Project (C&SF) and is mutually beneficial for all stakeholders. The new lake regulation schedule will take advantage of the HHD rehabilitation and new infrastructure to:

- Better balance congressionally authorized project purposes:



Flood
Control



Water
Supply



Navigation



Recreation



Preservation
of Fish
& Wildlife



DRAFT OBJECTIVES



- Improve the lake's ecology and natural resources while maintaining the structural and operational integrity of the project
- Minimize high regulatory releases to the St. Lucie and Caloosahatchee estuaries to the extent practicable
- Improve dry season flows to the Caloosahatchee Estuary and the Everglades to enhance the environment and natural resources
- Improve water supply performance
- Avoid risk to public health and safety as it relates to flood control, water supply and harmful algal blooms



DRAFT CONSTRAINTS



- Herbert Hoover Dike (Dam Safety Risk)
- Design and operational capacity of major outlets and their downstream canals and the Okeechobee Waterway (OWW)
 - However, no new infrastructure will be authorized by LOSOM
- Seminole Water Rights Compact
- Endangered Species Act (ESA)



DRAFT CONSIDERATIONS: WATER SUPPLY



- Agricultural needs
- Everglades National Park
- Municipal and Industrial needs
- Saltwater Intrusion
- Stormwater Treatment Areas
- Tribal Water Rights



DRAFT CONSIDERATIONS: ECOSYSTEMS



- Lake Okeechobee
- St. Lucie River and Estuary
- Caloosahatchee River and Estuary
- Everglades National Park
- Loxahatchee River
- Florida Bay
- Indian River Lagoon
- Biscayne Bay
- Lake Worth Lagoon
- Near shore and Offshore Resources on the East and West Coast
- National Wildlife Refuges throughout South Florida



DRAFT CONSIDERATIONS: WATER QUALITY

- Inflows to Lake Okeechobee
- Within Lake Okeechobee
- St. Lucie River and Estuary
- Caloosahatchee River and Estuary
- Associated waterways to include HABs
- Everglades Protection Area



OTHER DRAFT CONSIDERATIONS



- Economic impacts across the system
- Recreation impacts within the system
- Navigation impacts along the Okeechobee Waterway (OWW) and within Lake Okeechobee
- Available downstream storage and capacity including:
 - Water Conservation Areas (WCAs)
 - Wildlife Management Areas (WMAs)
 - Reservoirs
- Downstream effects to public and private property along the OWW and the communities south of Lake Okeechobee
- Climate Change



PERFORMANCE EVALUATIONS DISCUSSION



DRAFT PERFORMANCE EVALUATIONS



- Economic Impacts
- Endangered Species
- Flood Risk Management
- Navigation
- Public Health
- Recreation
- Salt Water Intrusion
- System Wide Ecology
- Water Supply
- Water Quality

**Goal: Finalize
Performance
Measures (PMs) by
December 2019**



PROJECTS WITH CANDIDATE PMs

- RECOVER
- Lake Okeechobee Regulation Schedule (LORS 2008)
- Herbert Hoover Dike (HHD) Dam Safety Modification Report (DSMR)
- Lake Okeechobee Watershed Restoration Project
- Restoration Strategies
- Everglades Agricultural Area (EAA) Reservoir
- Combined Operational Plan (COP)
- SFWMD Lower East Coast Water Supply Plan
- Central Everglades Planning Project (CEPP)
- Loxahatchee River Watershed Restoration



SUB-TEAM LEAD INTRODUCTIONS

Sub-Team	USACE Sub-Team Lead
Economics	Colin Rawls
Environmental	Ann Hodgson
Modeling	Jessica Mallett
Plan Formulation	Marci Jackson
Water Quality/ HABs	Jim Riley
Water Supply	Jessica Mallett

Other Disciplines	USACE Lead
Water Management	Savannah Lacy
Cultural Resources	Chris Altes



SCOPING COMMENTS



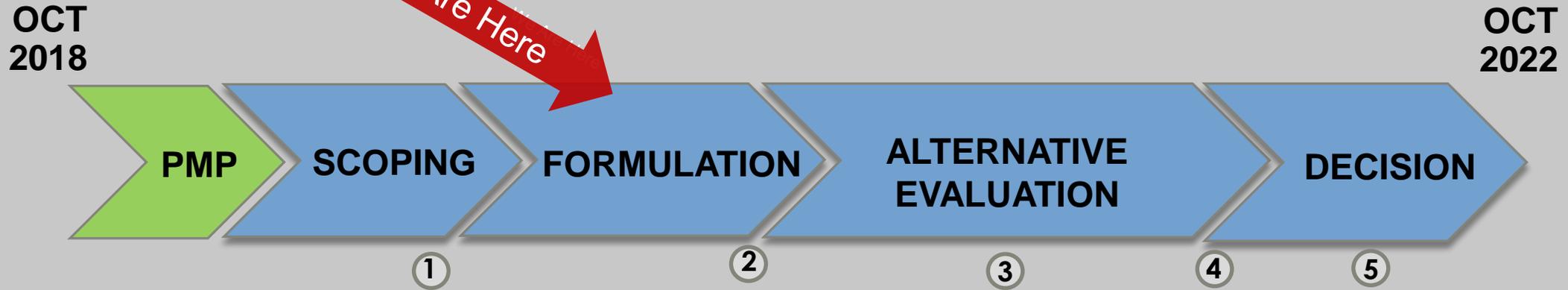
COMMON SCOPING COMMENTS



- Schedule Speed up, 18 Months Max
- Take your time, use science, not politics
- Human Health – Water Quality and HAB Consideration
- Human Safety – Dam safety and HABs
- Ecological health (Lake, estuaries and everglades)
- Lake Levels
 - Hold lake lower to minimize releases
 - 10.5-ft is too low
- Stop releases to St. Lucie estuary
- Send more water south
- Health impacts of lake water used on crops
- Guarantee the water supply 1-in-10 year drought level of service



LOSOM SCHEDULE



Milestones	Date
1 - Scoping Meetings (complete)	February/March 2019
2 – Initial Increment I Array of Alternatives & Performance Metrics Finalized	February 2020
3 - Alternative Evaluation Increment I, Increment II	February 2020 – April 2021
4 - Draft Report	January 2022
5 - Final Report	September 2022



LOSOM 2-MONTH LOOK AHEAD



Sep 2019
You are Here

- Public Workshops (September 16 & 17)
- PDT Meeting (September 26)
- Develop Preliminary Screening Methods, Tools and Metrics

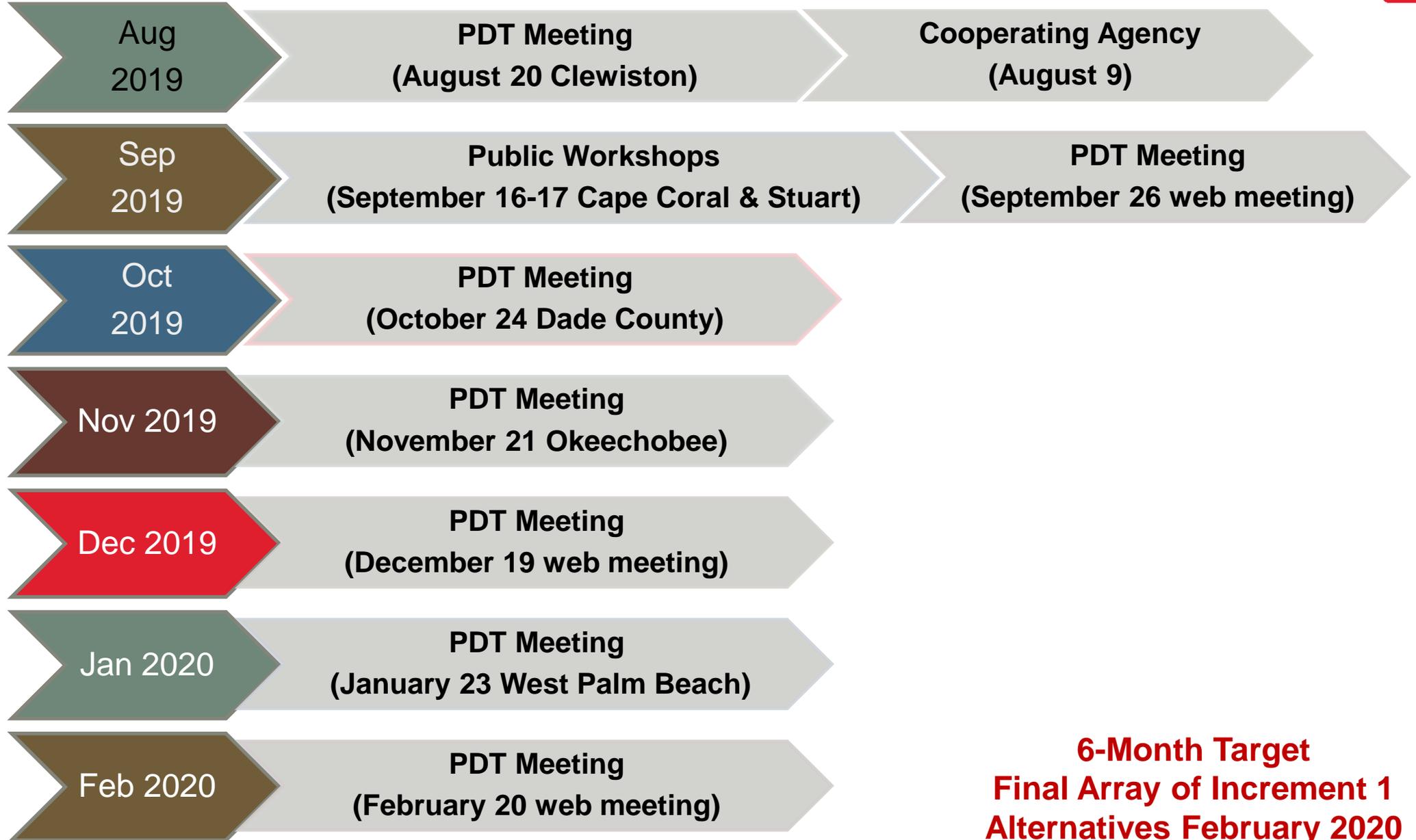
Oct
2019

- PDT Meeting (October 24th)
- Results from Initial Screening Scenarios
- Discuss Modeling Strategy & Formulation Framework
- Continue to Define PM

6-Month Target
Final Array of
Increment 1
Alternatives by
February 2020



HIGH LEVEL LOOK AHEAD



**6-Month Target
Final Array of Increment 1
Alternatives February 2020**