# Lake Okeechobee Regulation Schedule Study

**Pete Milam**
**U.S. Army Corps of Engineers**
**Jacksonville District**

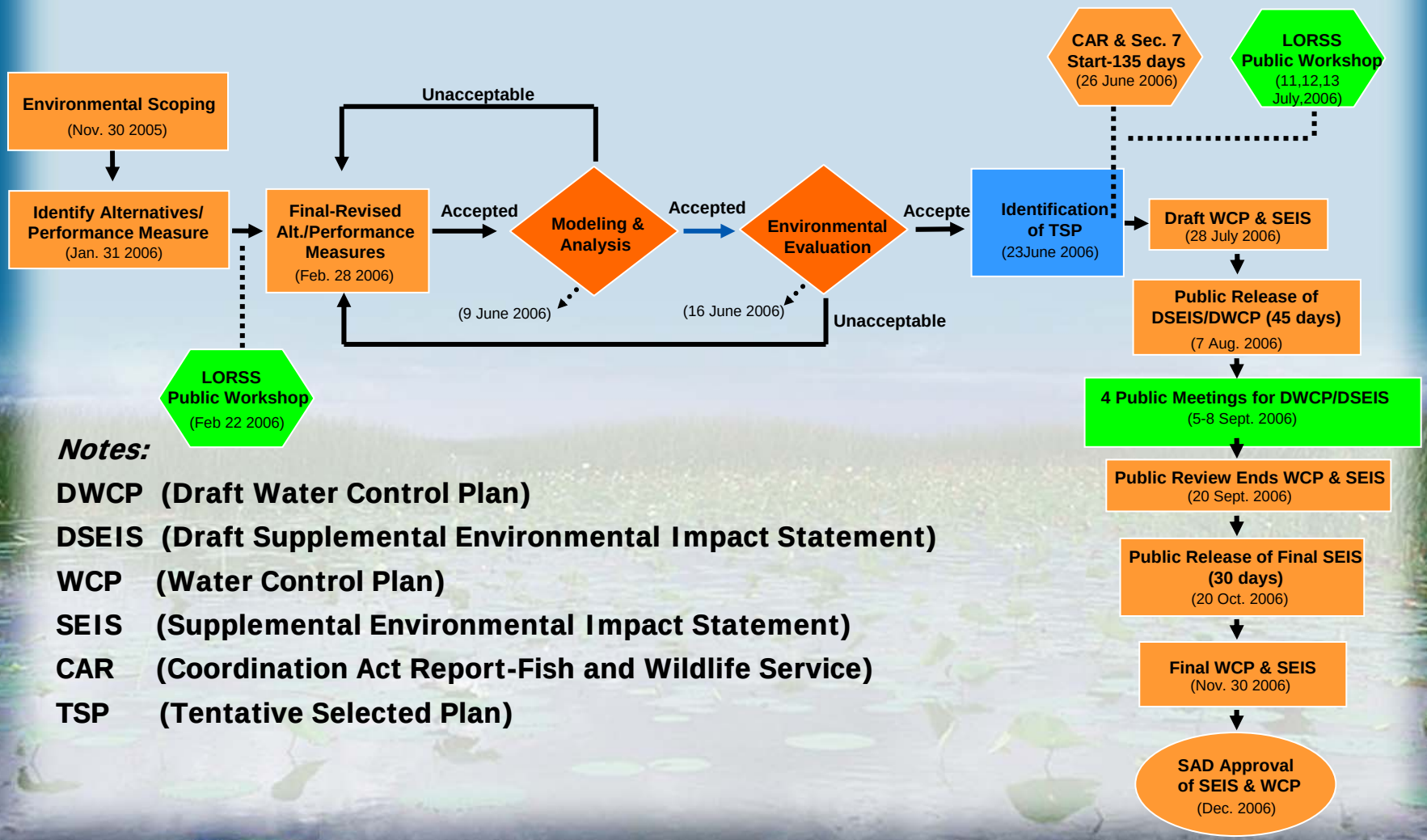
# Study Goals & Objectives

- Implement a new Lake Regulation Schedule supported by a Supplemental Environmental Impact Statement by January 2007.

**The objectives of the new regulation schedule are:**

- Ensure public health and safety.
- Manage Lake Okeechobee at optimal lake levels to allow recovery of the Lake's environment and natural resources.
- Reduce high regulatory releases to the Caloosahatchee and St. Lucie estuaries so that the health of the estuaries are not compromised.
- Continue to provide flood control, water supply, navigation and recreation water resource needs.

# Lake Okeechobee Regulation Schedule Study (LORSS) Process




***Notes:***

**DWCP (Draft Water Control Plan)**

**DSEIS (Draft Supplemental Environmental Impact Statement)**

**WCP (Water Control Plan)**

**SEIS (Supplemental Environmental Impact Statement)**

**CAR (Coordination Act Report-Fish and Wildlife Service)**

**TSP (Tentative Selected Plan)**

# Study Assumptions

- Existing condition: 2007
- Development of Operational Rules will consider years/ climate data not currently in model.
- Temporary Forward Pumps
- New schedule's anticipated period of use: 2007 to 2010
- Corps will initiate new Lake Okeechobee Regulation Schedule Study & EIS in 2007, to capture Acceler8 other CERP Band 1 projects and permanent forward pumps, scheduled for implementation in 2010

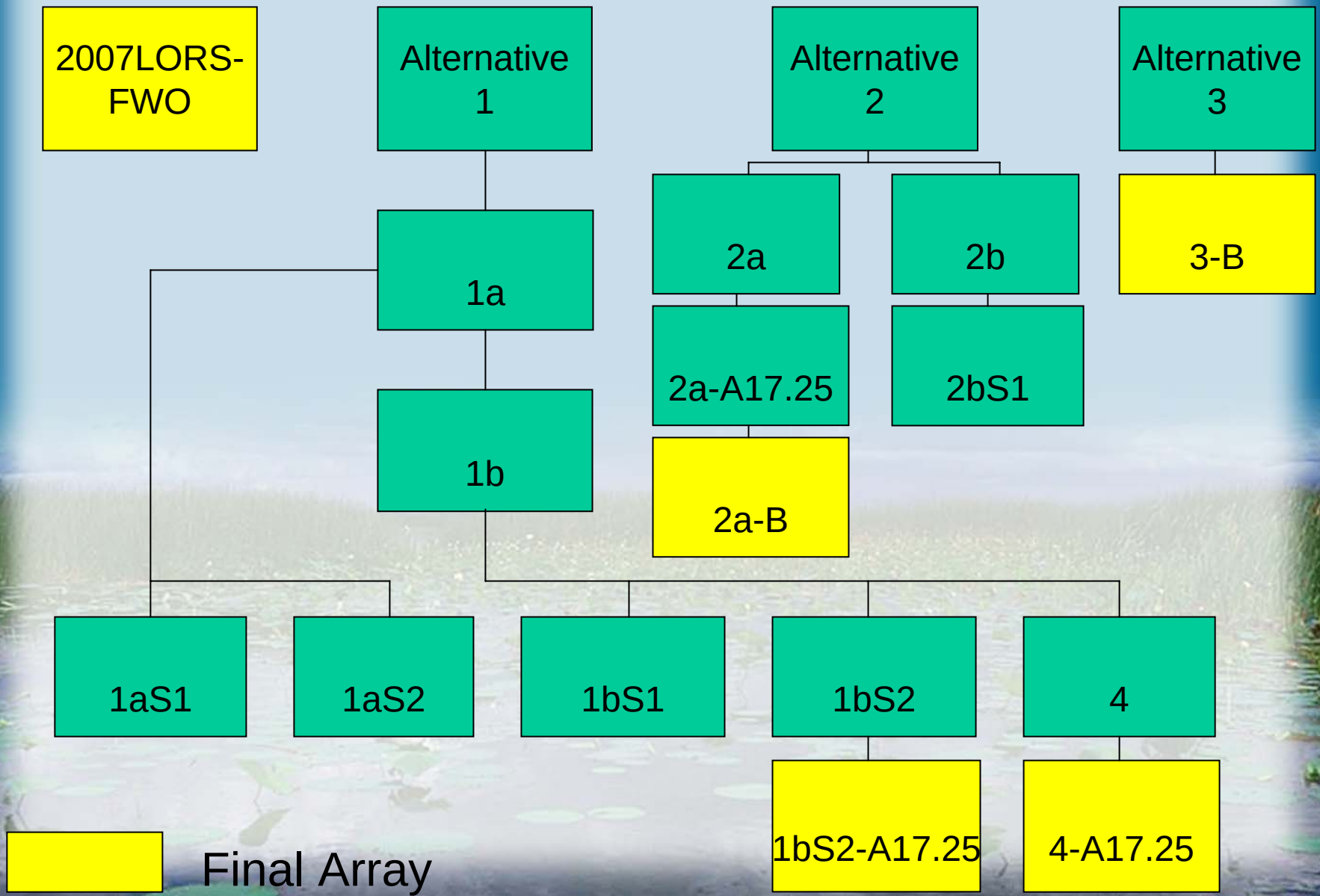
# Study Constraints

- Model Period of Record (1965 – 2000) 36 Years.
- Existing Systems Conveyance Capacity.
- Stormwater Treatment Areas (STA) Water Quality Treatment Capacity (64,000 af / avg. annual)
- Existing Regulation Schedules for WCA and Kissimmee River Chain of Lakes.
- Herbert Hoover Dike Integrity (17.25 criteria for max. discharge)

# Preliminary Performance Measure

- CERP-accepted performance measure targets including:
  - Caloosahatchee Estuary
  - St. Lucie Estuary
  - Lake Okeechobee
  - Water supply
  - Flood Control (public health & safety)
  - Navigation
  - Greater Everglades

# Alternatives Analyzed



# WSE - FWO

Same as current WSE Schedule with following revisions:

- Zones A & B modified to allow Max releases at 17.25 feet.
- Provide Environmental Base Flow releases to Caloosahatchee Estuary.
- SSM line lowered by 1.0 foot ( as assumed for all alternatives).
- Assume Temporary Forward  Pumps are included.
- STA 3/4Treatment Constraint

# Alt 1bS2-A17.25

- Provide quicker release response to high Lake inflows
- Reduce impacts by freshwater discharges to estuaries by reducing Zone B, C rate of flows to the St. Lucie Estuary
- Limit high water conditions in lake by lowering Zones A, B, C
- Address long term weather patterns
- Provides environmental base flows to Caloosahatchee Estuary.
- Has guidelines (Zones) to manage lake levels from 11.5 to 17.25 ft

# Alt 2a-B

- Avoids  strict decision tree
- Address lessons learned since initiation of WSE by avoiding repeating past temporary deviations.
- Provide quicker release response to high Lake inflows.
- Avoids continuous high lake levels
- Manage lake to avoid high discharges to estuaries
- Provides Base flow to Caloosahatchee estuary.
- Manage lake between 12.5 and 15.5 and below 17.25 ft.

# Alt 3-B

- Previously developed as an alternative in the process of developing WSE(2000 EIS)
- Zones A & B modified to allow Max. releases at 17.25.
- Provide Environmental Base Flow releases to Caloosahatchee Estuary.

# Alt 4-A17.25

- Provide quicker release response to high Lake inflows
- Limit high water conditions in lake by lowering Zones A, B, C
- Address long term weather patterns
- Provides environmental base flows to Caloosahatchee  estuary.
- Minimum release in Zone C of 3250 cfs
- Minimum release in Zone D of 2330 cfs
- Has guidelines (Zones) to manage lake levels from 12.5 to 17.25 ft

# Modeling Revisions

- All alternatives now include the 17.25 criteria for maximum discharge as a constraint.
- All alternatives will provide environmental base flow to the Caloosahatchee Estuary.

# Public Coordination

- Next Public Information Workshops being scheduled for: 11,12, & 13 July, 2006 in Clewiston, Stuart and Fort Myers.
- 45 Day Public  comment period for Draft SEIS and WCP - 7 Aug. to 20 Sept. 2006.
- Four Regional Public Meetings for SEIS and WCP – 5 - 8 Sept. 2006 in Clewiston, Okeechobee, Stuart and Fort Myers.