LOSOM: BRINGING TOGETHER DATA, MODELS AND WATER MANAGEMENT LESSONS-LEARNED

Jason Engle, Eva Velez, ***Jessica Mallett****, Savannah Lacy*
U.S. Army Corps of Engineers (USACE), Jacksonville District, Jacksonville, FL, USA

The Lake Okeechobee System Operating Manual (LOSOM) represents a significant shift in the operational philosophy for Lake Okeechobee to a system wide benefits approach. Lake Okeechobee water levels will be managed to focus on making beneficial releases at times and in quantities that enhance fish and wildlife in the region (Caloosahatchee River Estuary low flows, flows south for Central Everglades, and no flows to St. Lucie Estuary most of the time) and improve water supply availability (Seminole Tribe of Florida, Lake Okeechobee, and Lower East Coast Service Areas). LOSOM manages Lake Okeechobee stage within an operational zone (Zone D) that provides benefits to the system by:

- Providing beneficial flows to the Central Everglades and Caloosahatchee Estuary throughout the operational Zone D.
- Providing beneficial flows to Lake Worth Lagoon during the dry season.
- Sending no flow to the St Lucie Estuary through S-308 in Zone D during normal operations.
- Keeping flows to the Caloosahatchee River Estuary from Lake Okeechobee from exceeding the stressful threshold of 2100 cubic feet per second (cfs) by limiting flows to 2000 cfs in Zone D measured from S-79.
- Sending flows south to the Central Everglades through the entire schedule all the way down to the Water Shortage Management Band.

LOSOM improves the ability of water managers to adapt to real time conditions to make smart informed decisions on lake releases. Water managers will use system wide analysis and real time knowledge of climate conditions, weather data, climate projections and system needs to inform the decision process. LOSOM includes more robust and structured communication and collaboration between the USACE and stakeholders as operational decisions are made. LOSOM aims to maintain beneficial releases out of the lake to the maximum extent possible.

PRESENTER BIO: Ms. Mallett is a lead civil engineer with 24 years of experience in planning, designing, and implementing Everglades restoration projects. She has extensive experience in integrated surface water/groundwater modeling, operational planning, and risk assessments. She has led multiple projects dedicated to preserving and restoring wetlands within Florida.