

# Lake Okeechobee System Operating Manual

## Iteration 3 - Phase 2 Batch Analysis

*Sanibel-Captiva Conservation Foundation*

*Conservancy of Southwest Florida*

**DRAFT** - November 16, 2021  
(Updated: November 19, 2021 )



Use cursor keys for navigation, press "O" for a slide Overview

[Download PDF Version](#)

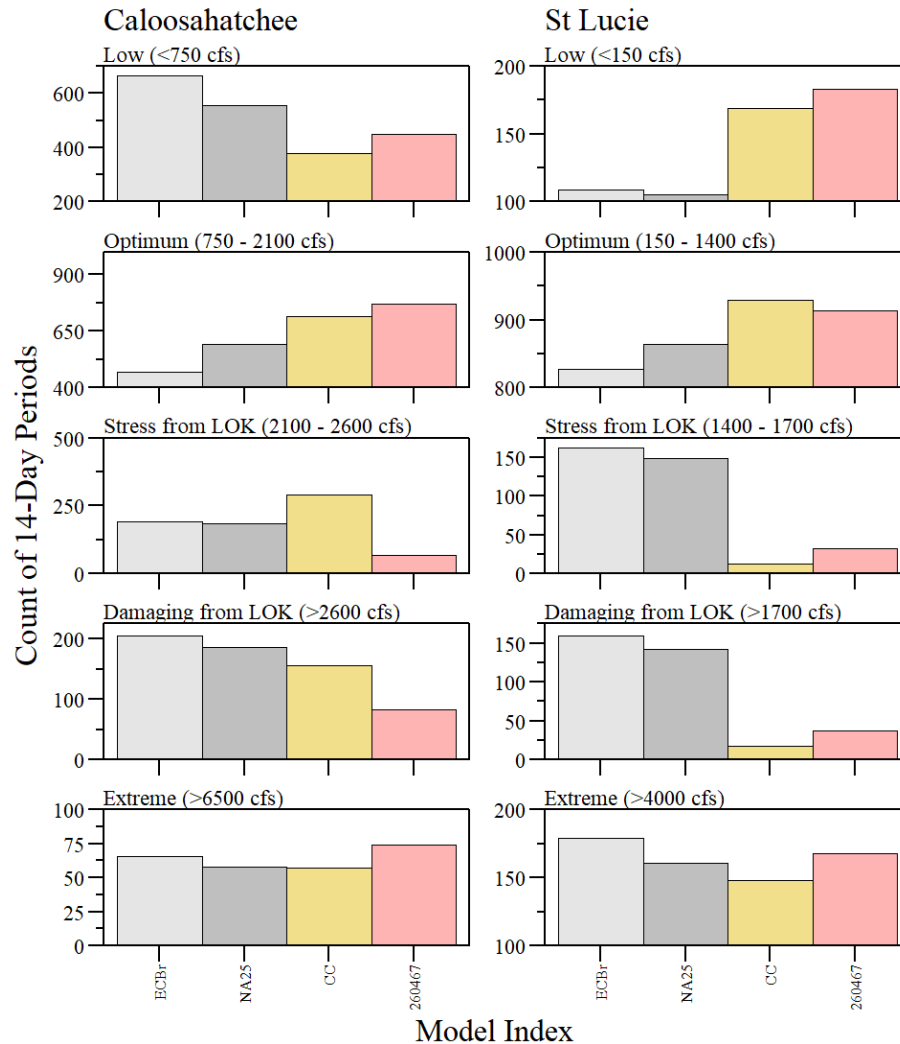
# Iteration 3 - Phase 2

Performance Measure	Model Index	
	CC	260467
CRE - Low (PM30)	-32.2	-19.1
CRE - Optimum (PM31)	20.4	30.0
CRE - Stress from LOK (PM37)	57.9	-62.8
CRE - Damaging from LOK (PM38)	-16.1	-55.9
CRE - Extreme (PM36)	-1.7	27.6
SLE - Low (PM80)	61.0	74.3
SLE - Optimum (PM81)	7.5	5.7
SLE - Stress from LOK (PM86)	-91.2	-78.4
SLE - Damaging from LOK (PM87)	-88.0	-73.9
SLE - Extreme (PM85)	-8.1	4.3
CRE - Months >6500 cfs (PM79)	-15.8	31.6
SLE - Months >4000 cfs (PM117)	-2.4	11.9
S308 Regulatory Flow (PM88)	-61.7	-37.4
S77 Regulatory Flow (PM40)	9.5	-3.1
LOK - Total Stage Envelope Penalty (PM10+PM11)	13.7	37.7

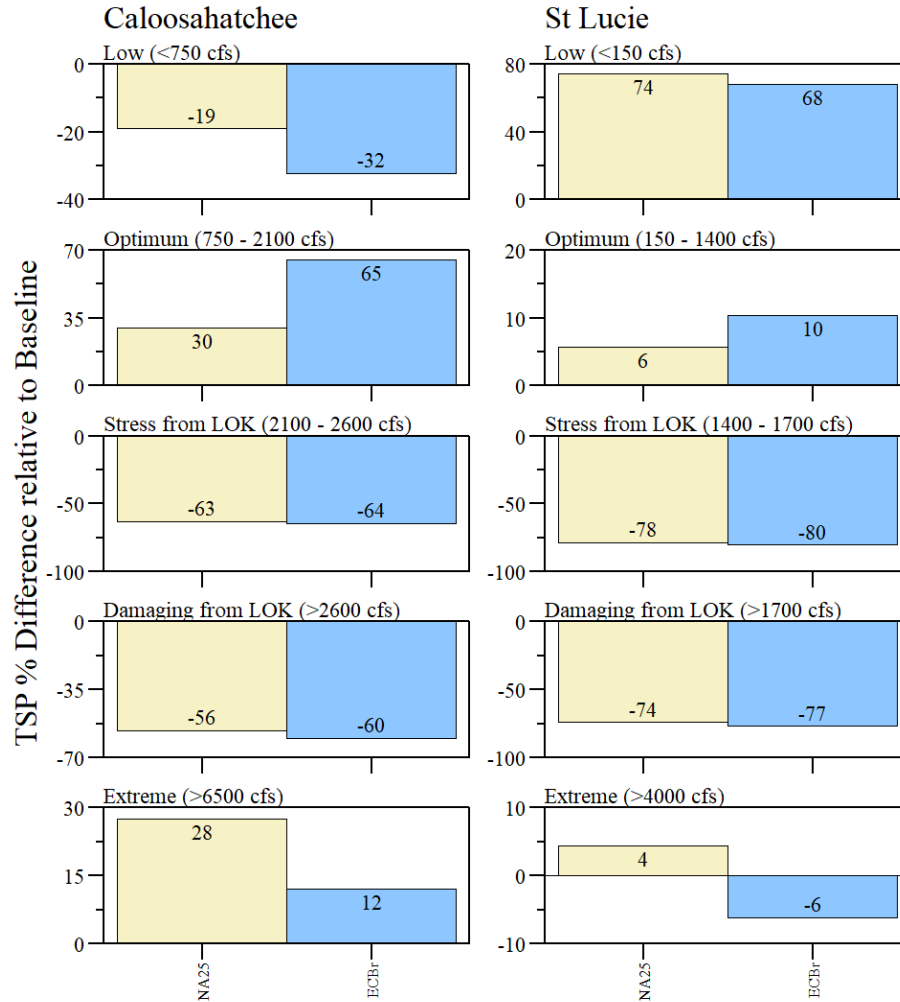
Percent Difference relative to FWO (NA25)

- The selected plan (Model Index 260467) provides substantial reduction in SLE regulatory discharges, SLE stress and damaging from the Lake salinity envelope counts.
- This plan also increases CRE optimum and reduces CRE stress and damaging from the Lake salinity envelope counts.

# Salinity Envelope

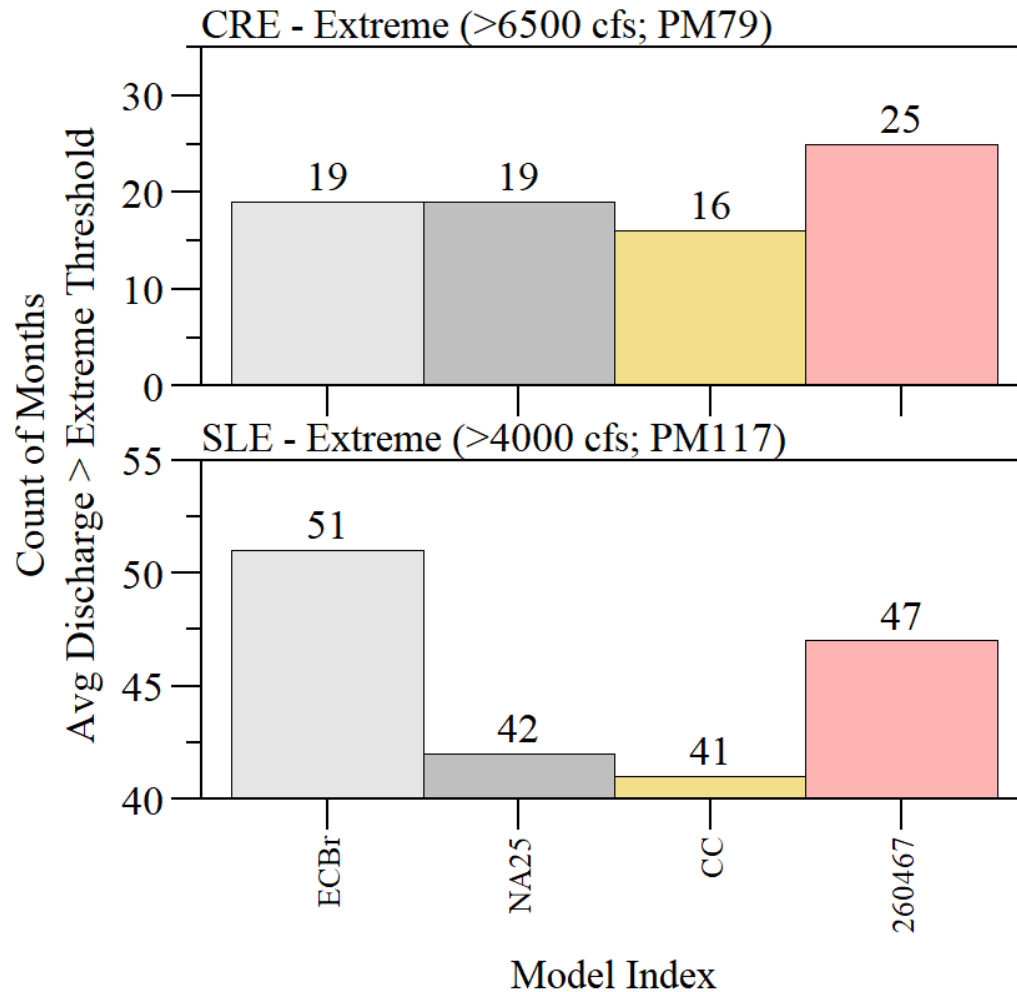


# Salinity Envelope - Baselines

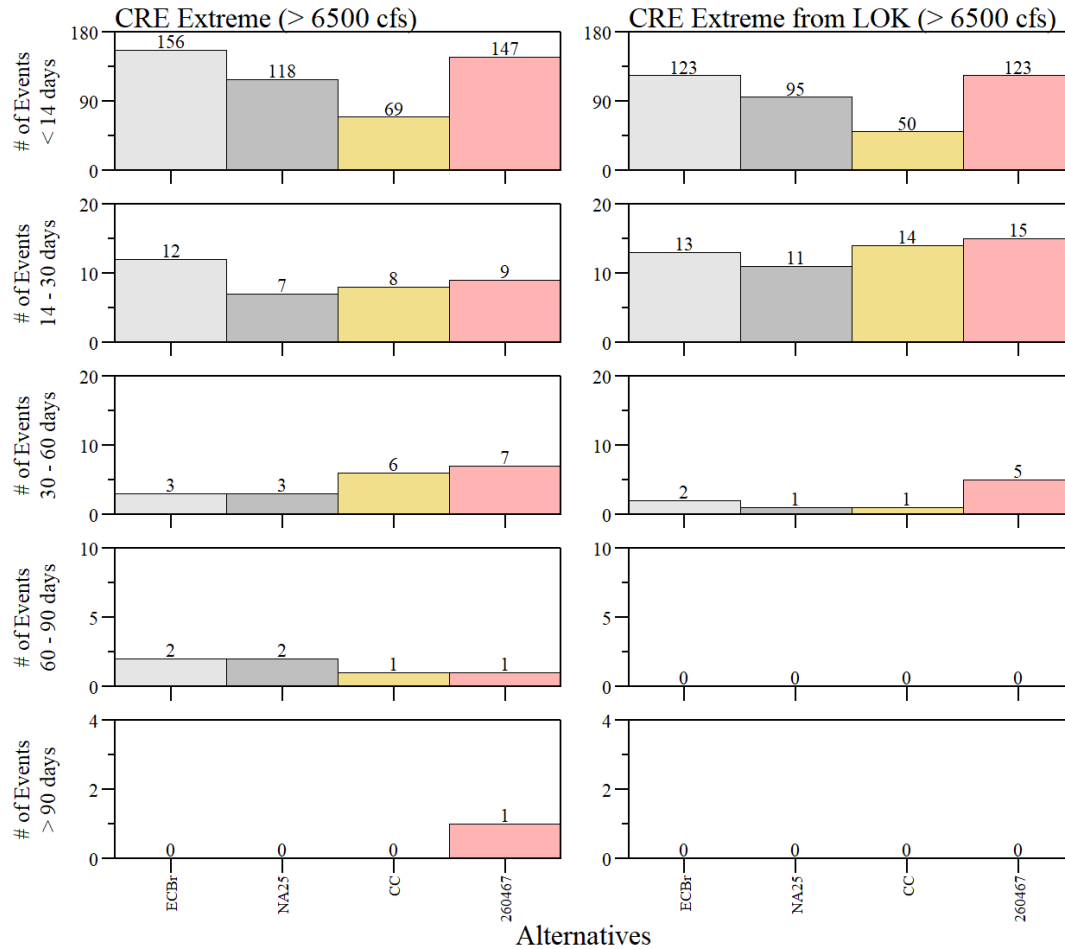


Baselines

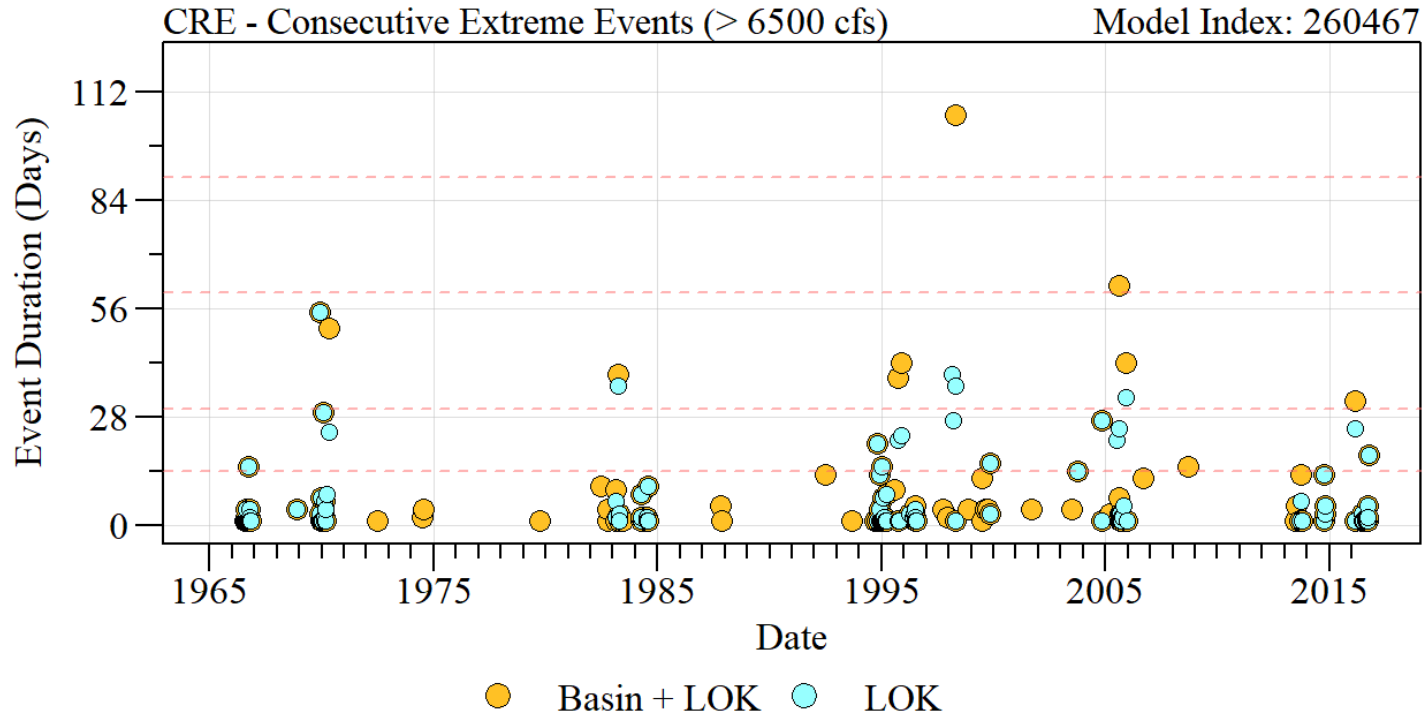
# Salinity Envelope - Extreme Discharges



# Salinity Envelope - Extreme Discharges



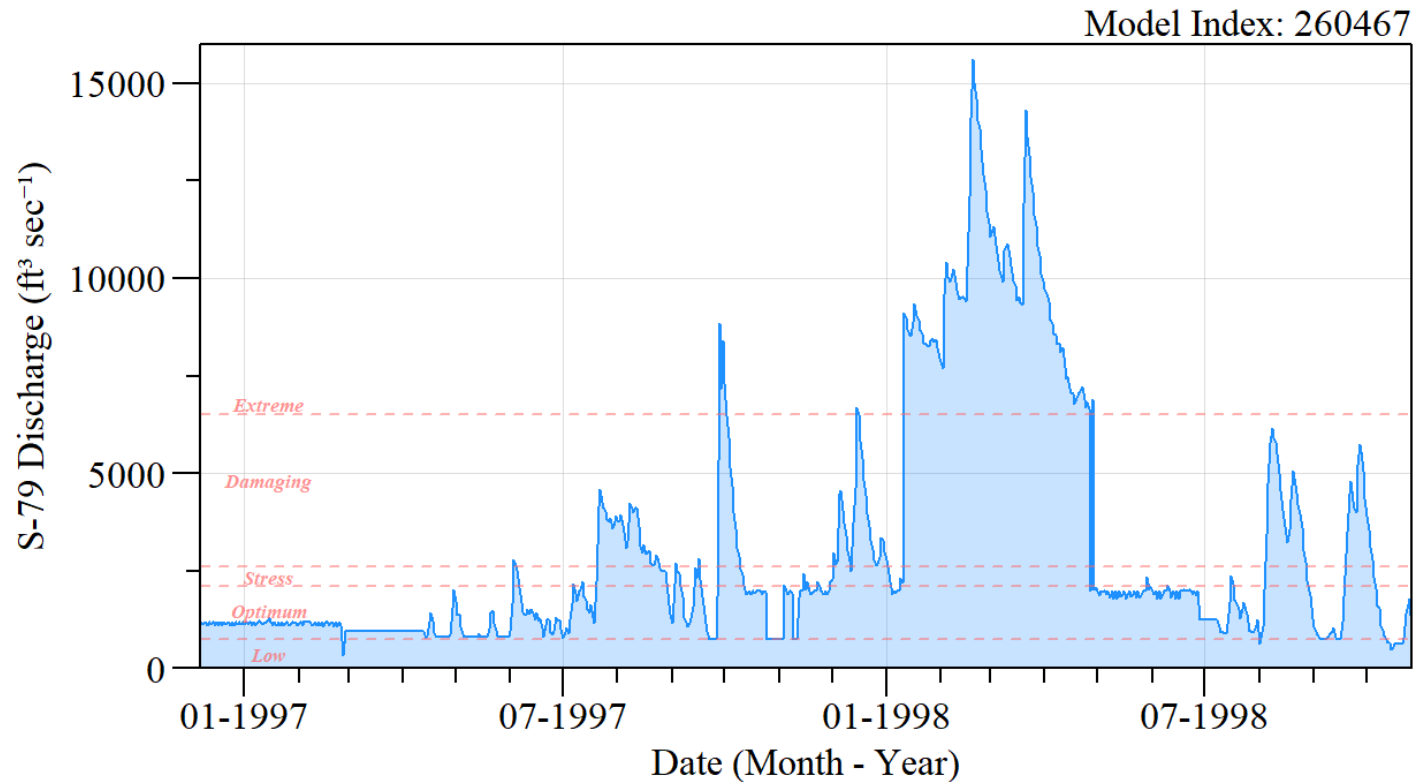
# Salinity Envelope - Extreme Discharges



- Based on daily discharges >6500 cfs
- Can have more counts of LOK events/duration than Basin + LOK (see event >90 days)

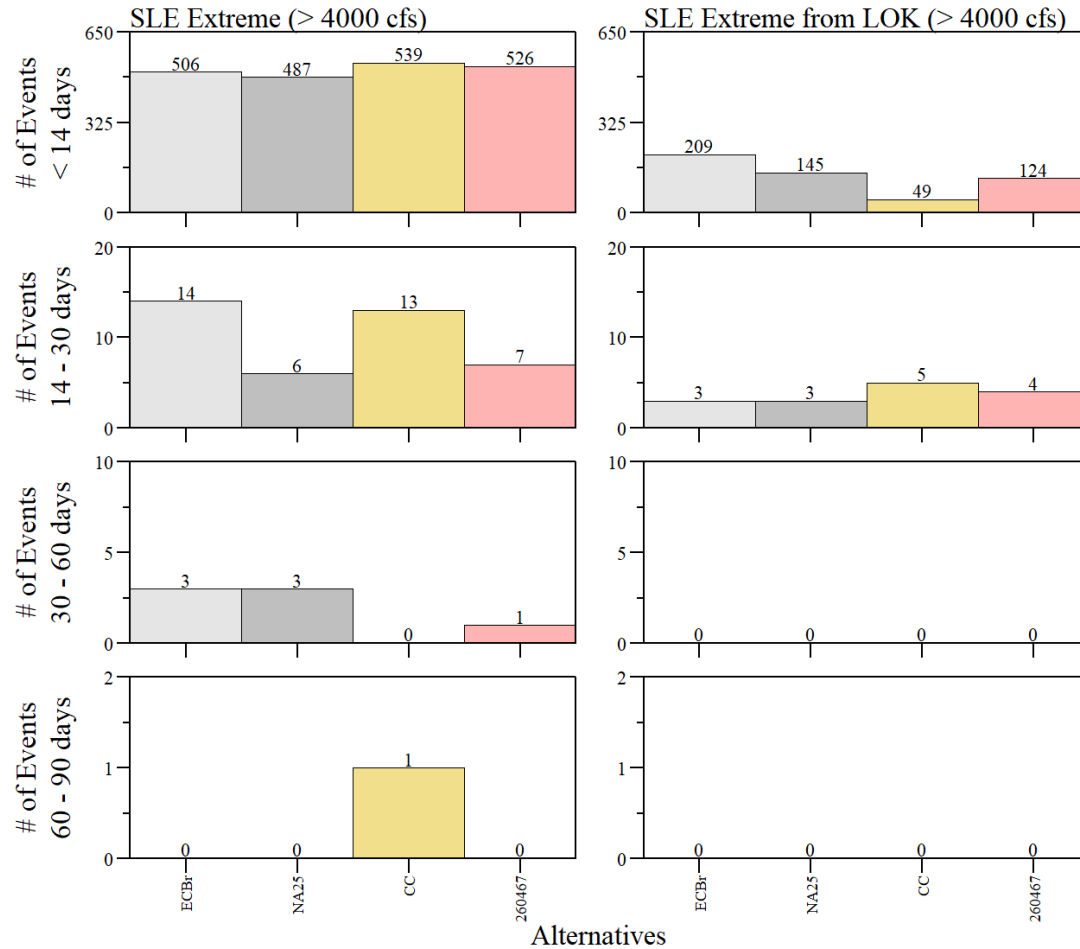
# Salinity Envelope - Extreme Discharges

- Example of >90 Day (106 days) extreme event observed in the simulation period of record.

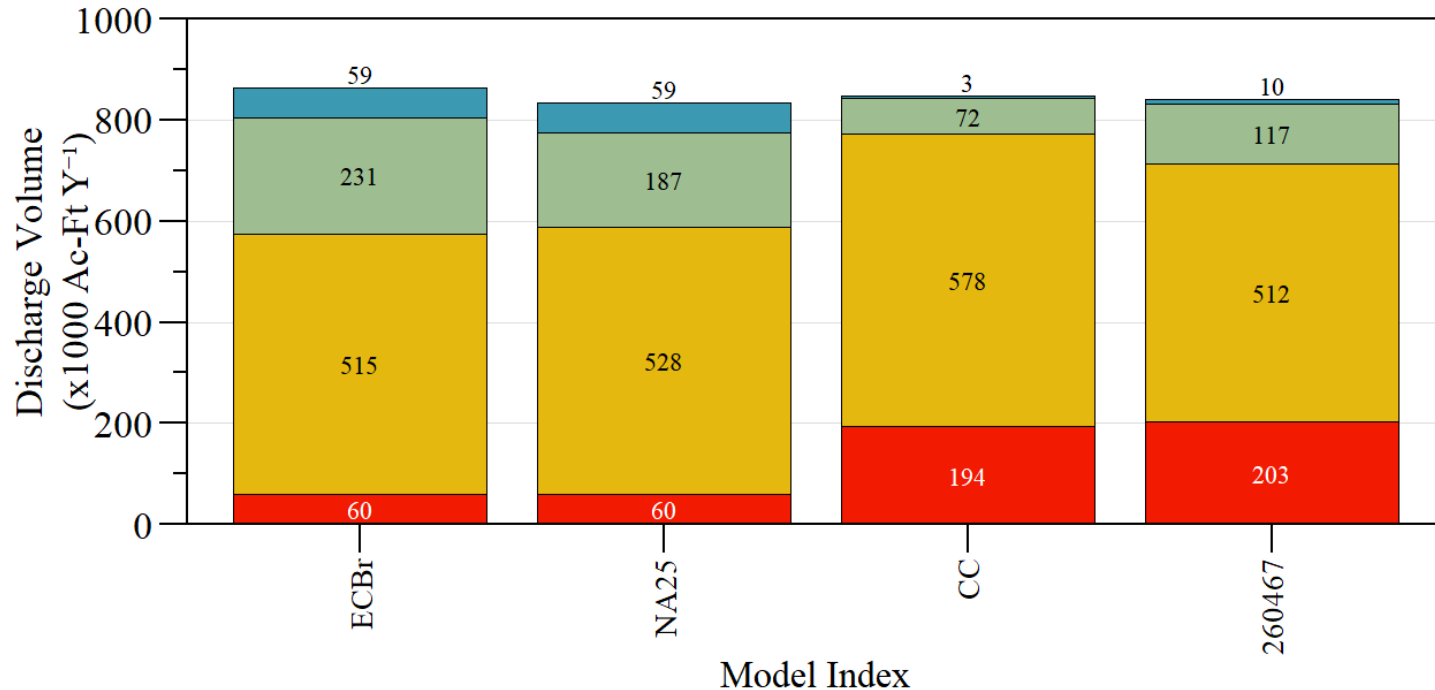




# Salinity Envelope - Extreme Discharges



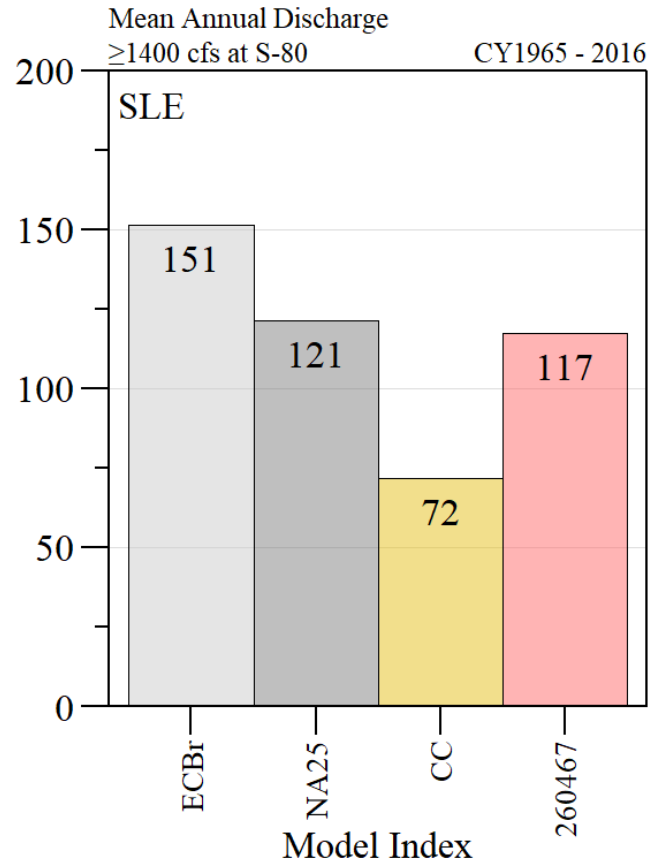
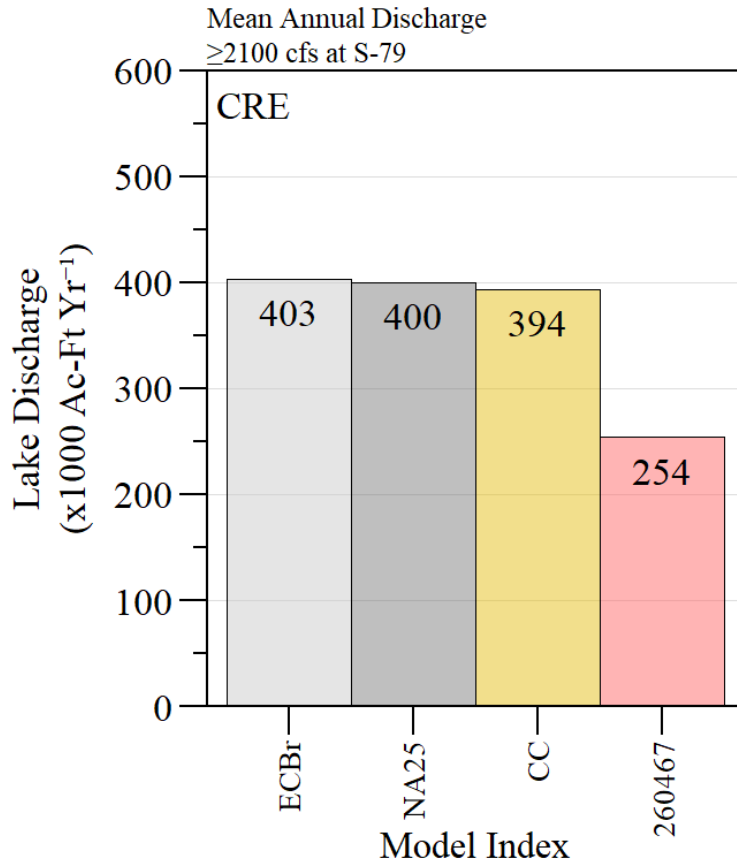
# Regulatory Discharges



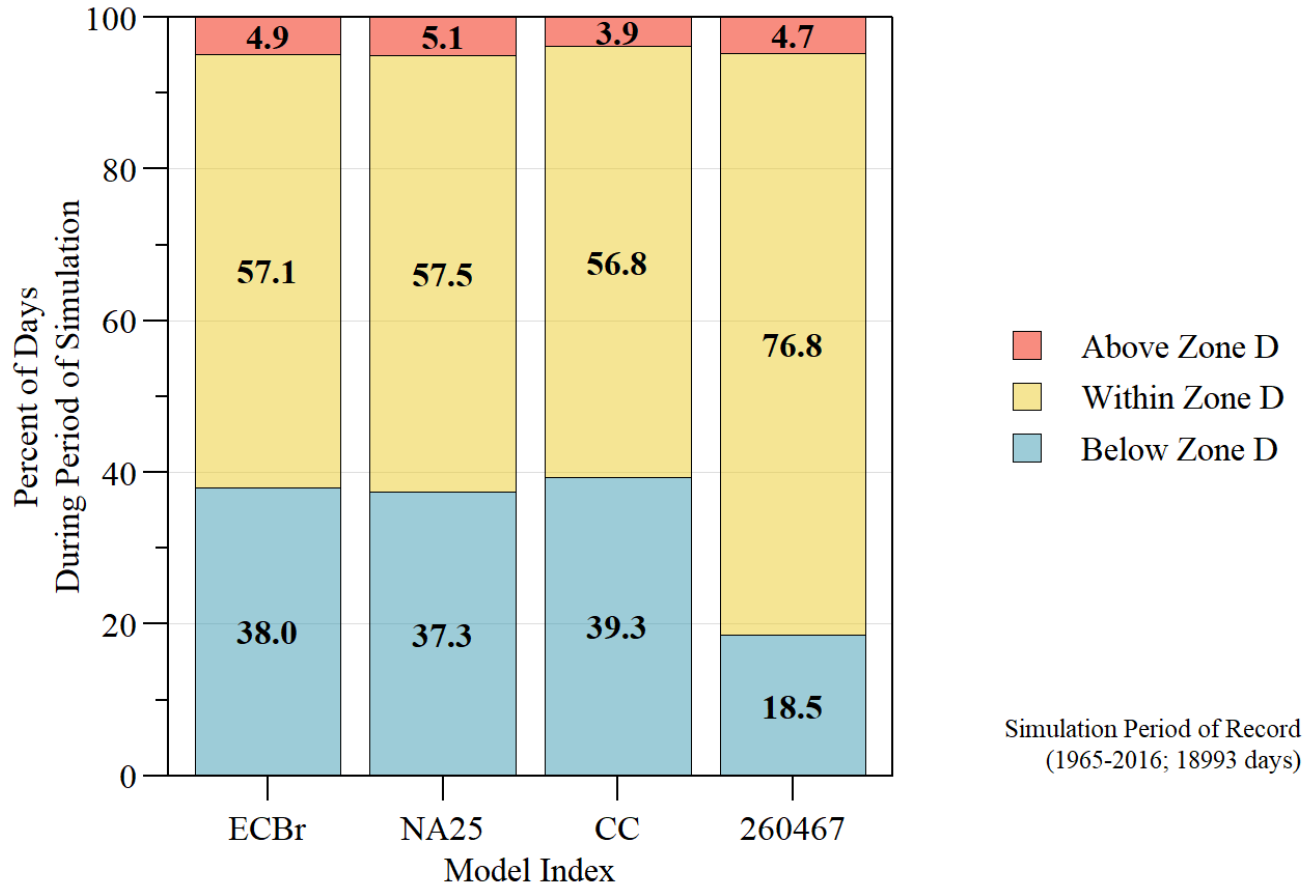
- Water Conservation Areas (PM21)
- Caloosahatchee River (PM40)
- St. Lucie River (PM88)
- Lake Worth Lagoon (PM118)

*Iteration 3 screened batch results with TSP.  
 Mean annual flood control releases  
 from Lake Okeechobee for the 52 year (1965 - 2016)  
 simulation period of record.*

# Regulatory Discharges

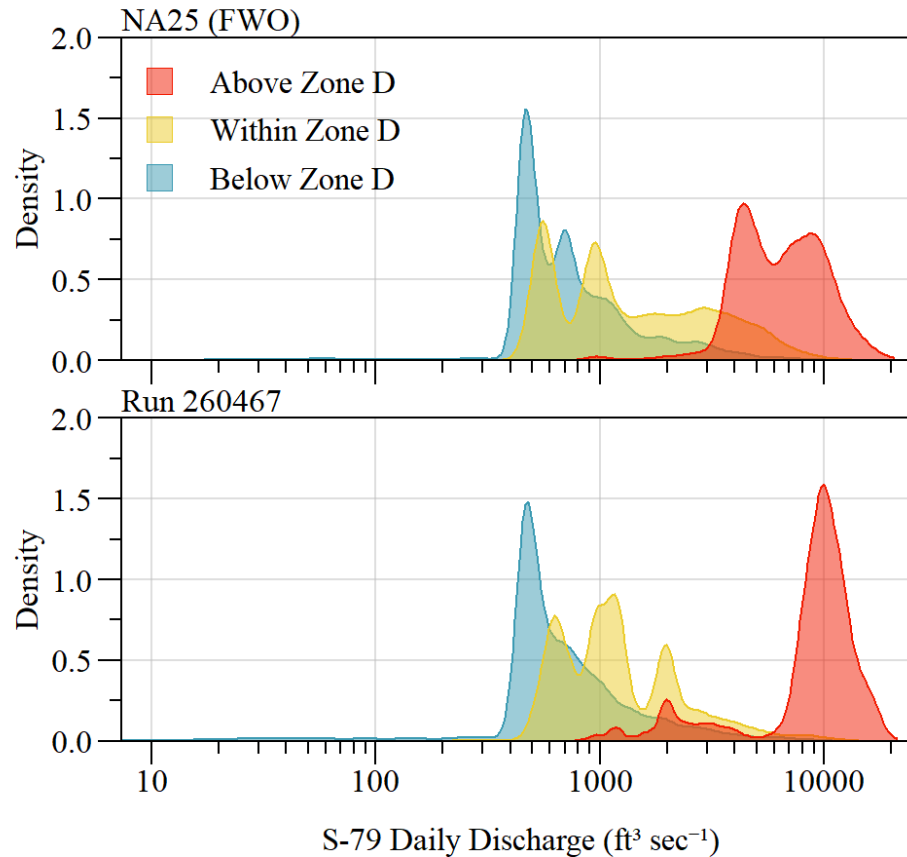


# Lake Okeechobee Regulation Schedule



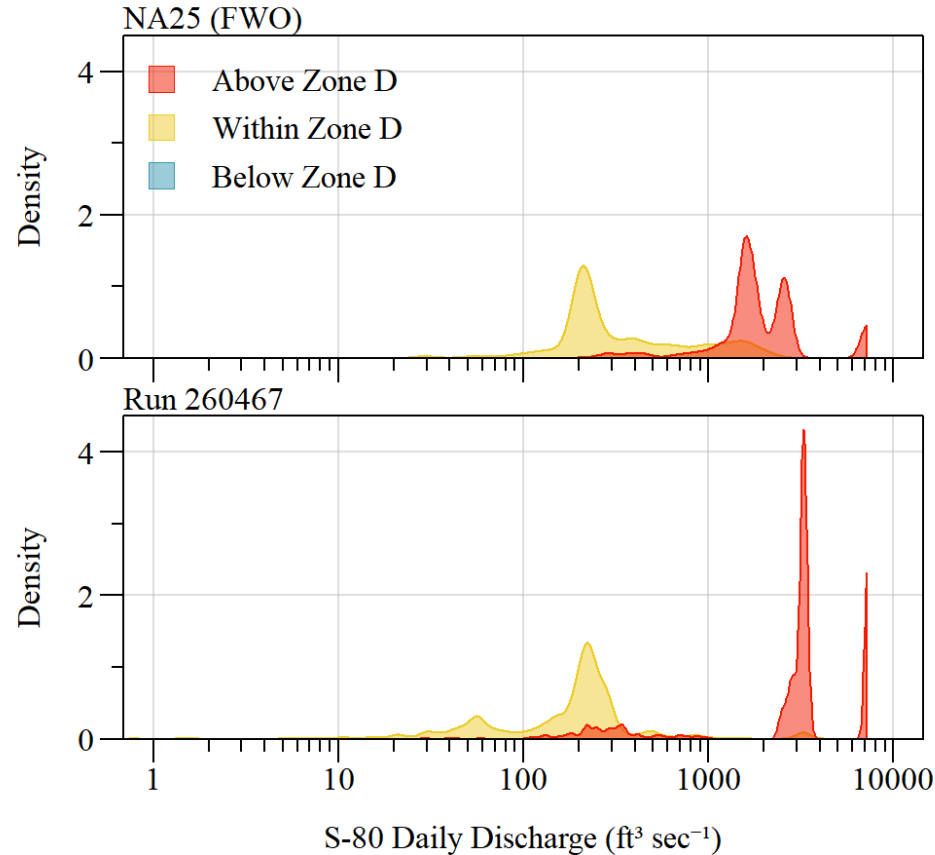
Percent of time above, within, and below Zone D of the regulation schedule.

# Lake Okeechobee Regulation Schedule



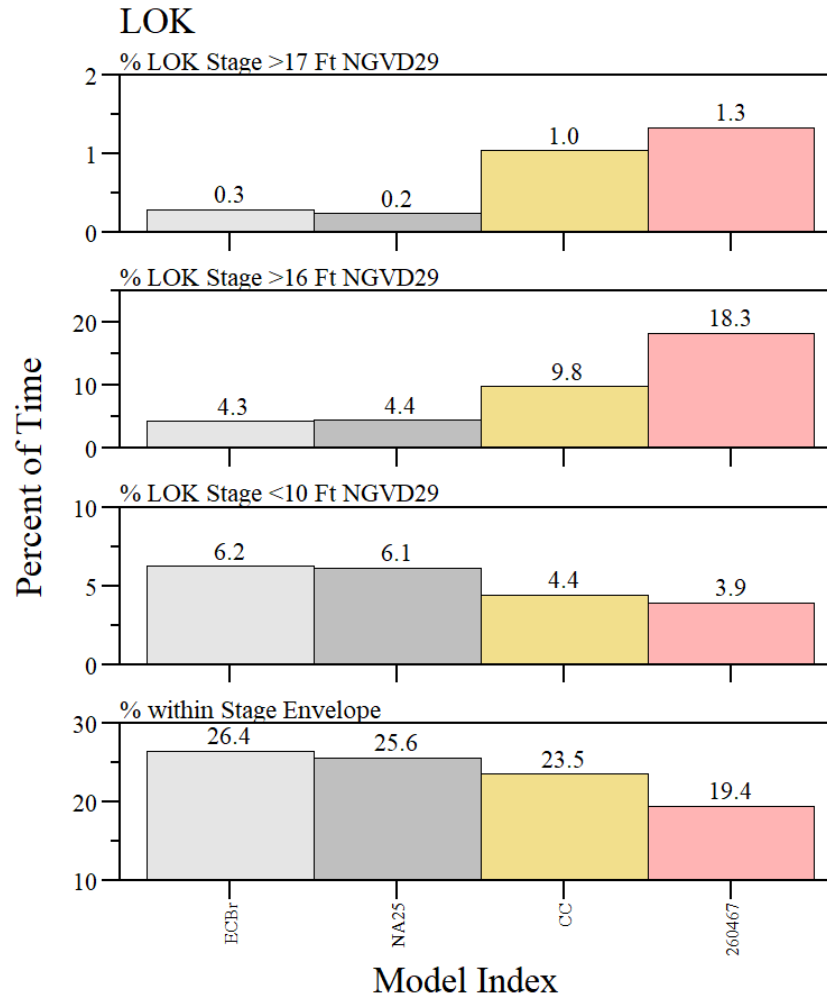
Distribution of S79 (Lake + Basin) daily discharges relative to above, within, and below Zone D of the regulation schedule.

# Lake Okeechobee Regulation Schedule

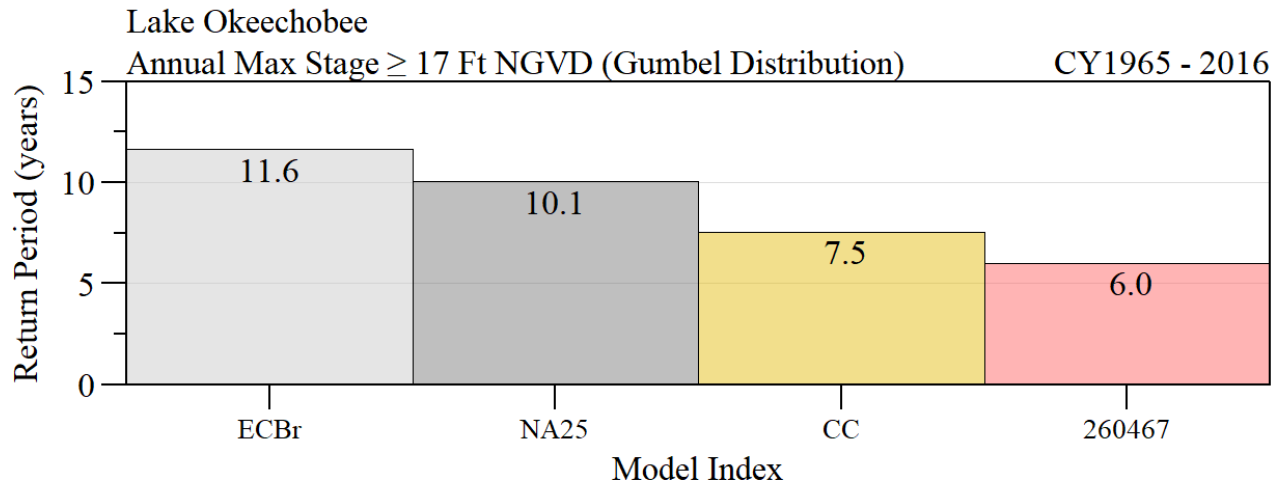
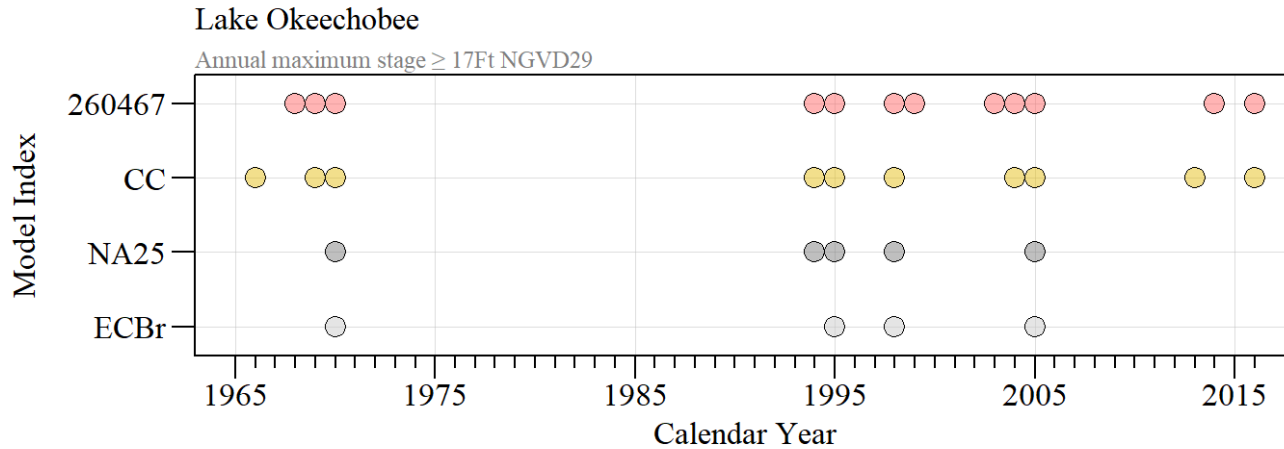


Distribution of S80 (Lake + Basin) daily discharges relative to above, within, and below Zone D of the regulation schedule.

# Lake Okeechobee



# Lake Okeechobee





# Lake Okeechobee - High Stage Events

