

# Lake Okeechobee System Operating Manual

## Iteration 3 Modeling Evaluation - Preferred Alternative

*Sanibel-Captiva Conservation Foundation*

*Conservancy of Southwest Florida*

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# Iteration 3 - Model runs

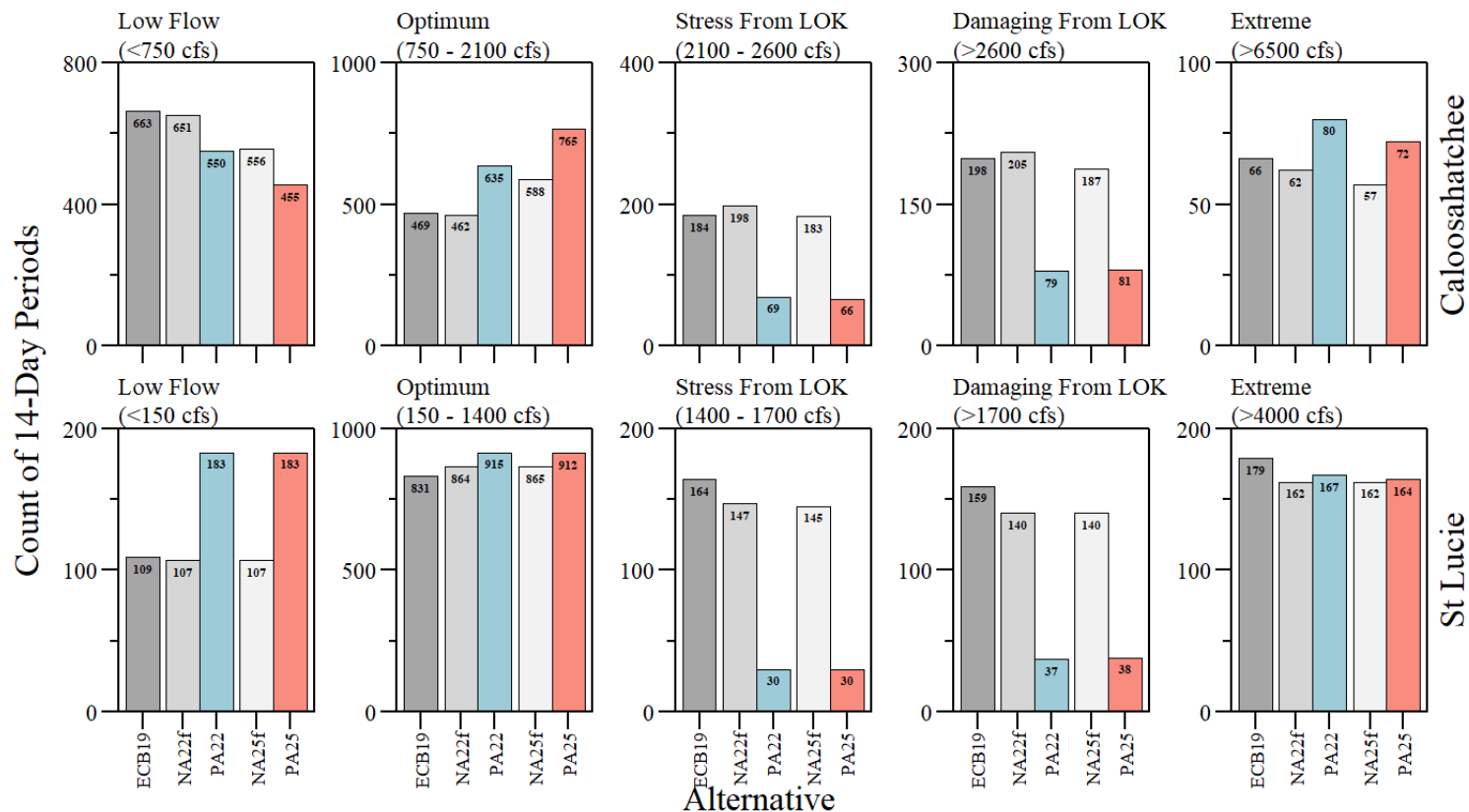
Alternative	Description
ECB19 <sup>1</sup>	LOSOM Existing Conditions Baseline 2019 with LORS08
NA22f <sup>2</sup>	LOSOM No Action 2022 (without C43 Reservoir) with LORS08
NA25f <sup>3</sup>	LOSOM No Action 2025 (with C43 Reservoir) with LORS08
PA22	Preferred Alternative 2022. Distinct operational zones and regulatory discharge rates selected based on LOSOM objectives (without C43 Reservoir)
PA25	Preferred Alternative 2025. Distinct operational zones and regulatory discharge rates selected based on LOSOM objectives (with C43 Reservoir)

<sup>1</sup> Existing Conditions Baseline 2019

<sup>2</sup> No Action Condition 2022

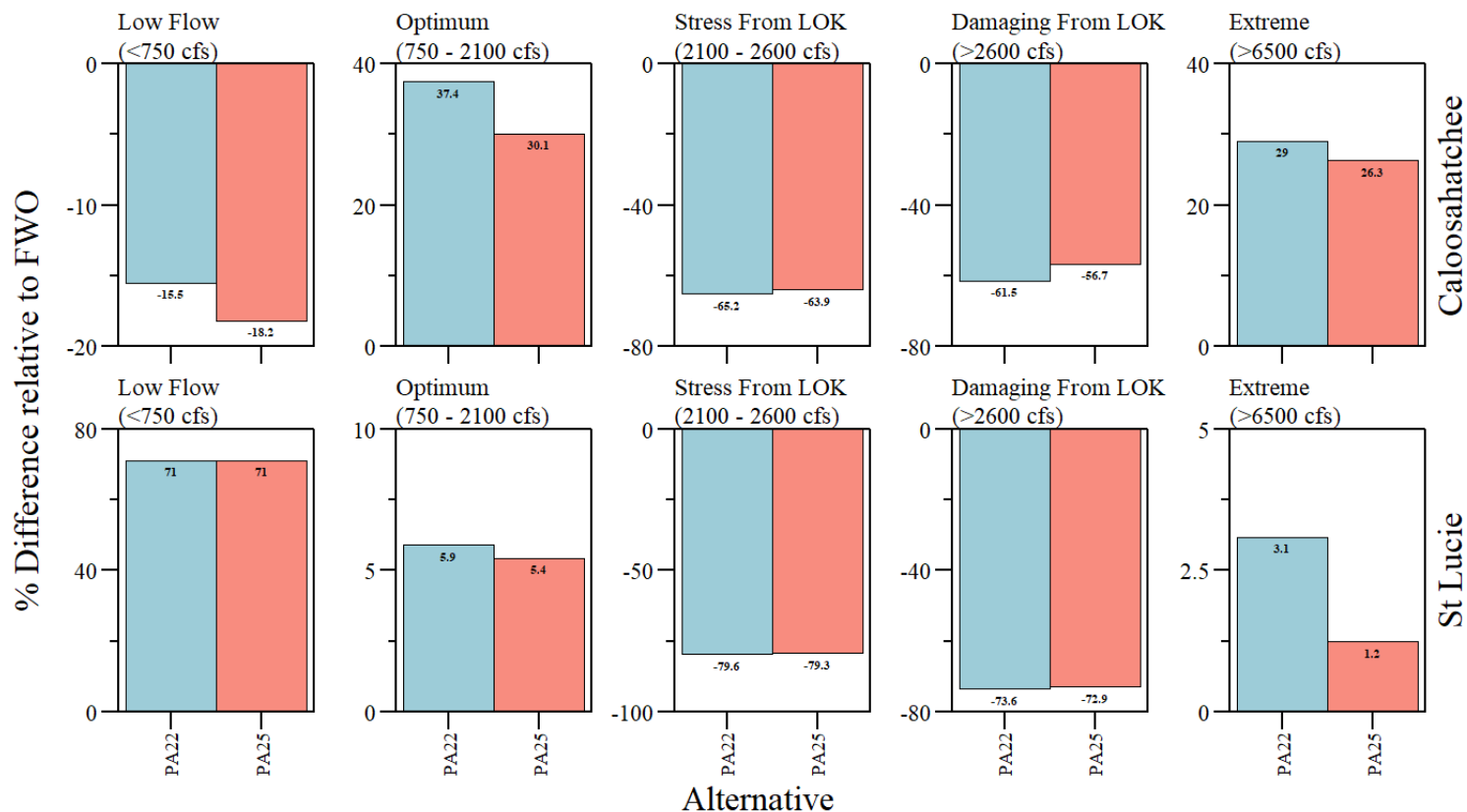
<sup>3</sup> No Action Condition 2025

# Salinity Envelope



RECOVER salinity envelope evaluation during the simulation period of record for Caloosahatchee (top) and St Lucie (bottom) estuaries.

# Salinity Envelope



RECOVER salinity envelope evaluation relative to each respective FWO/No Action Alternatives during the simulation period of record for Caloosahatchee (top) and St Lucie (bottom) estuaries.

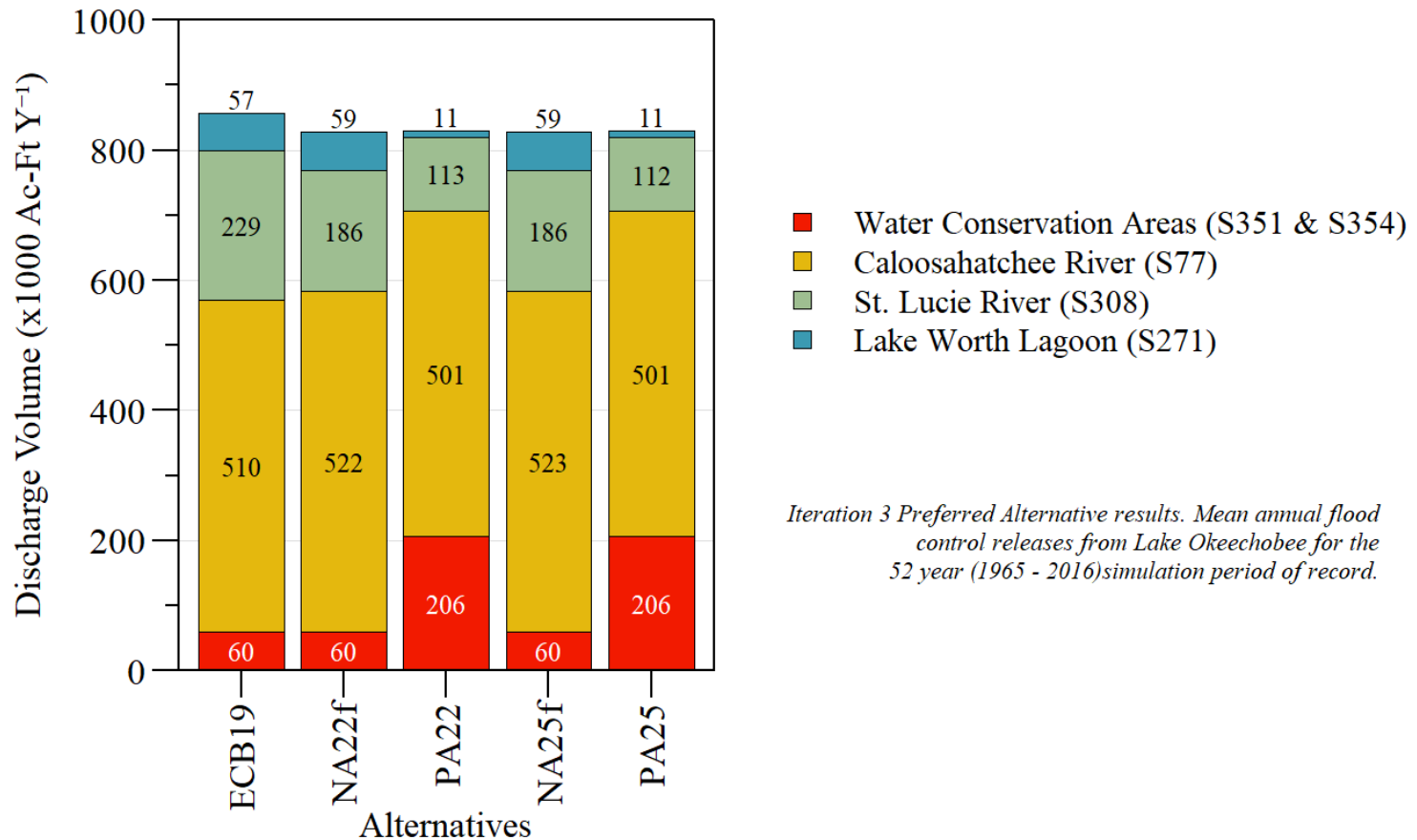
# Salinity Envelope

- place holder table of flow categories

# Salinity Envelope

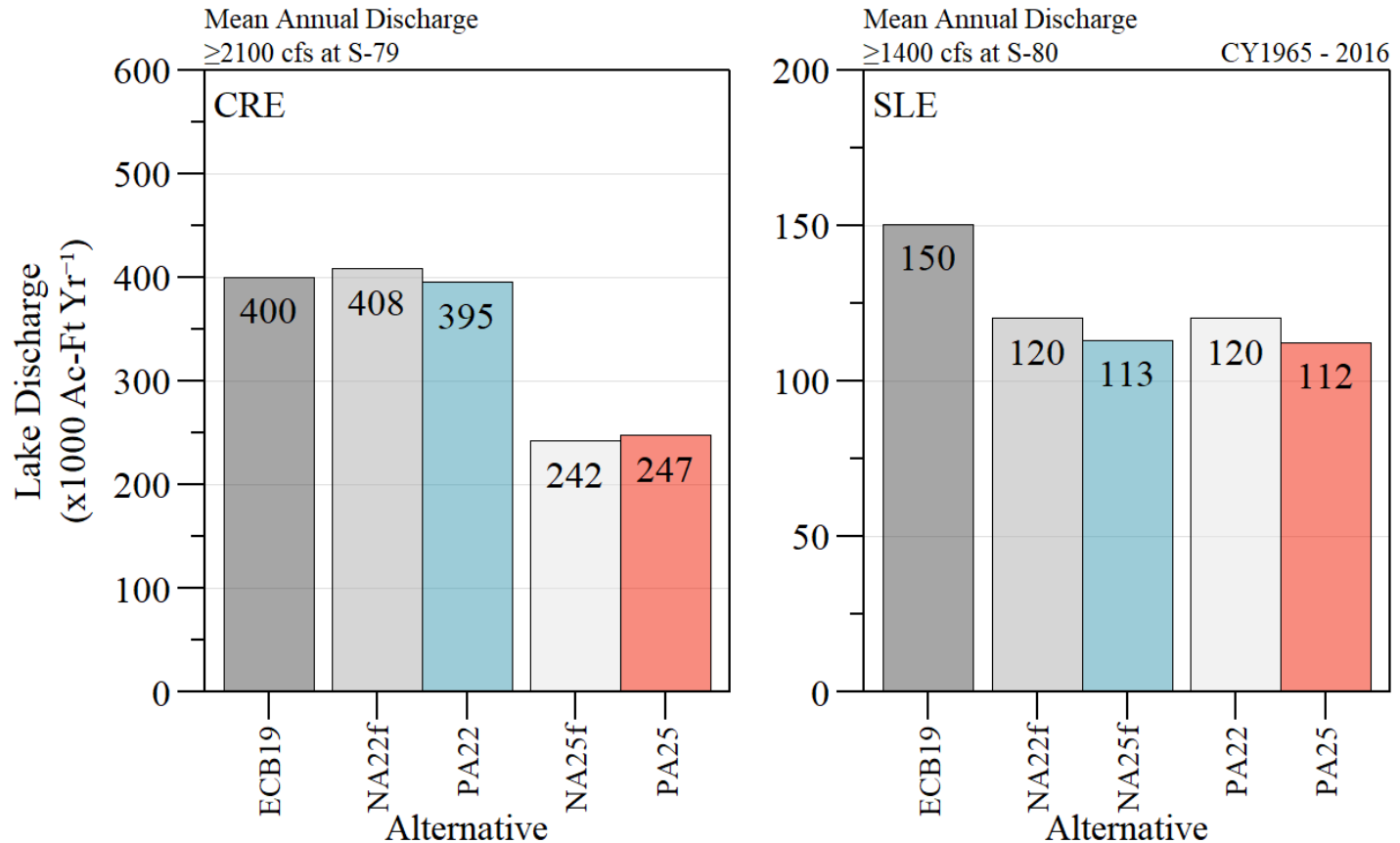
- place holder for monthly and daily discharge frequencies

# Regulatory Discharge



Average annual flood control (i.e. regulatory) discharges for each major flow-path.

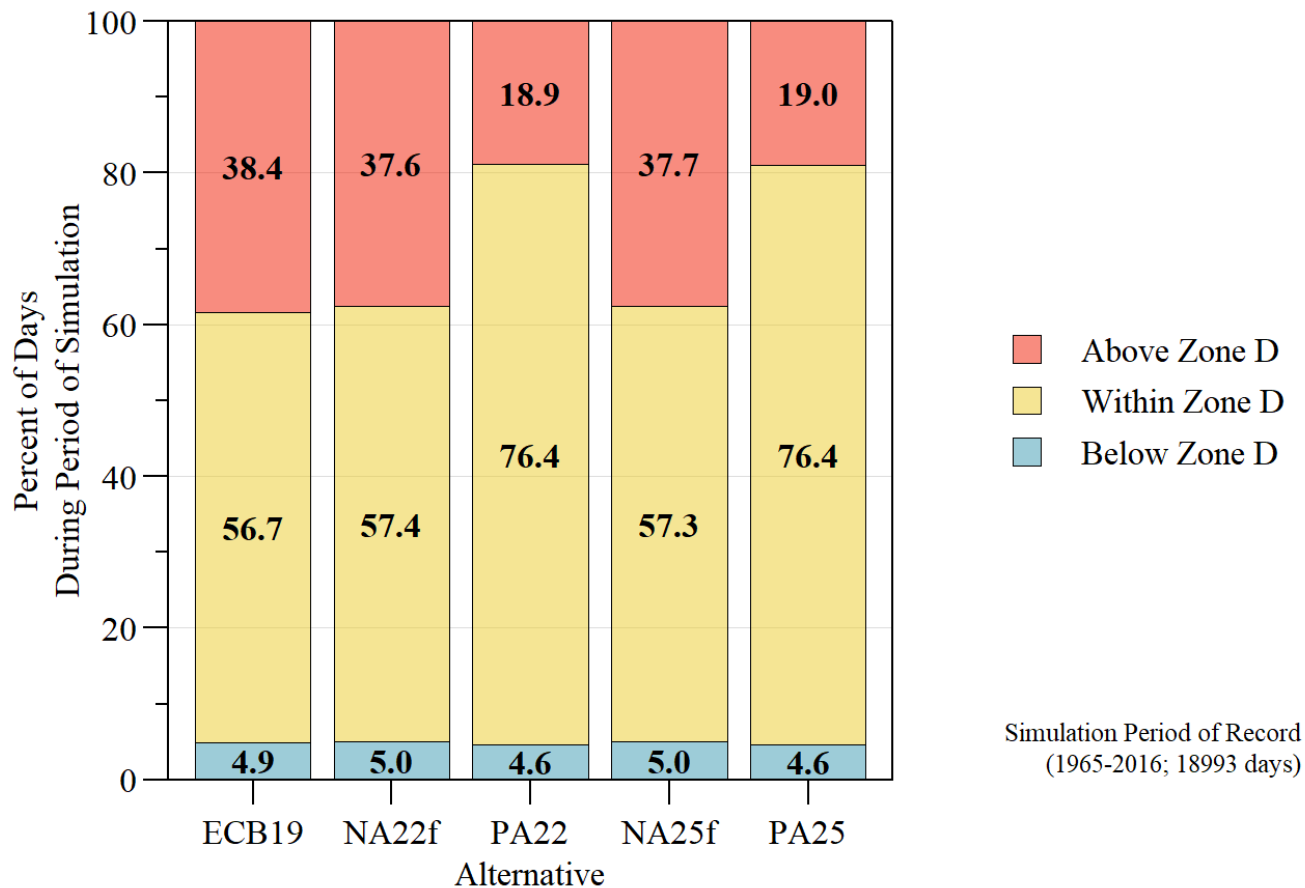
# Regulatory Discharge



Average annual lake sourced discharges to CRE and SLE within stressful and damaging discharges.

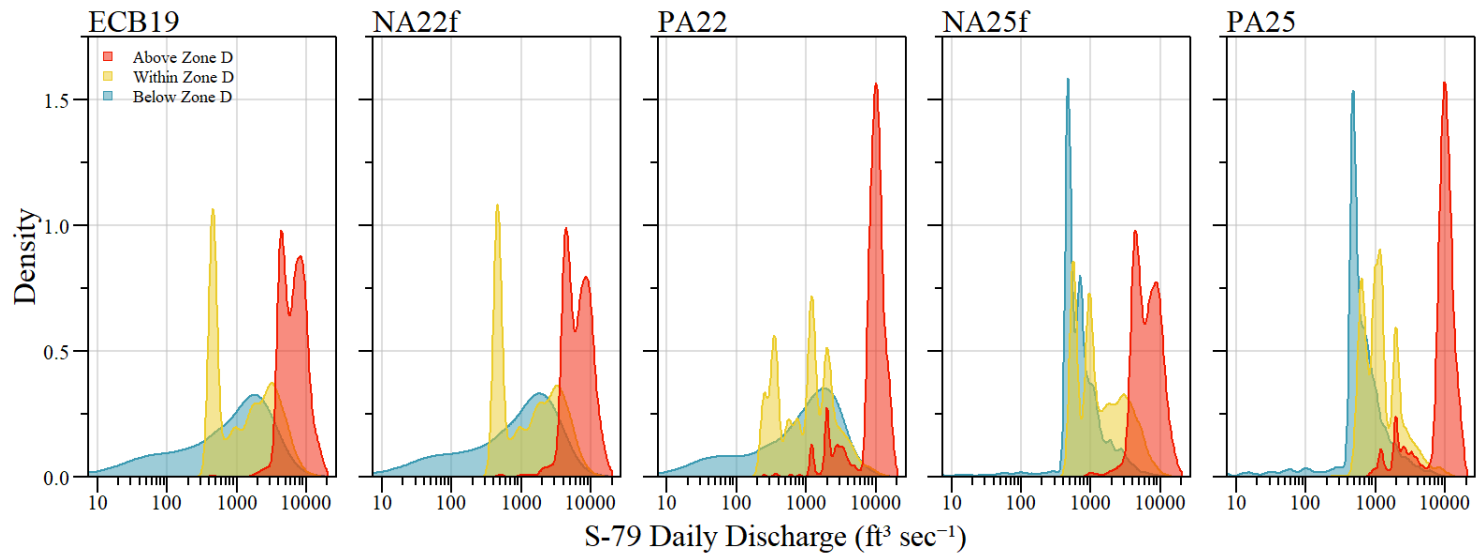


# Lake Okeechobee Regulation Schedule



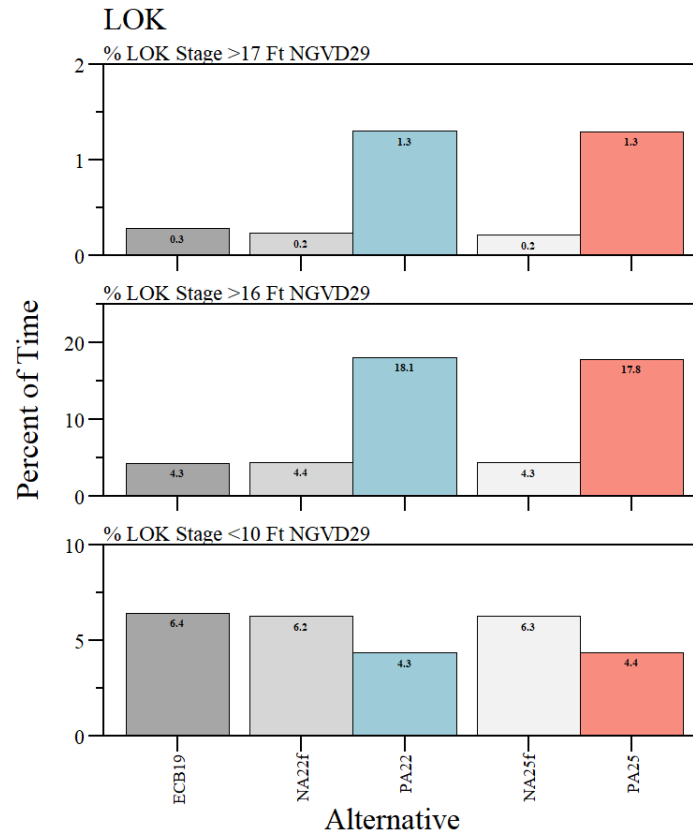
Percent of time (period of simulation) above, within and below Zone D.

# Lake Okeechobee Regulation Schedule



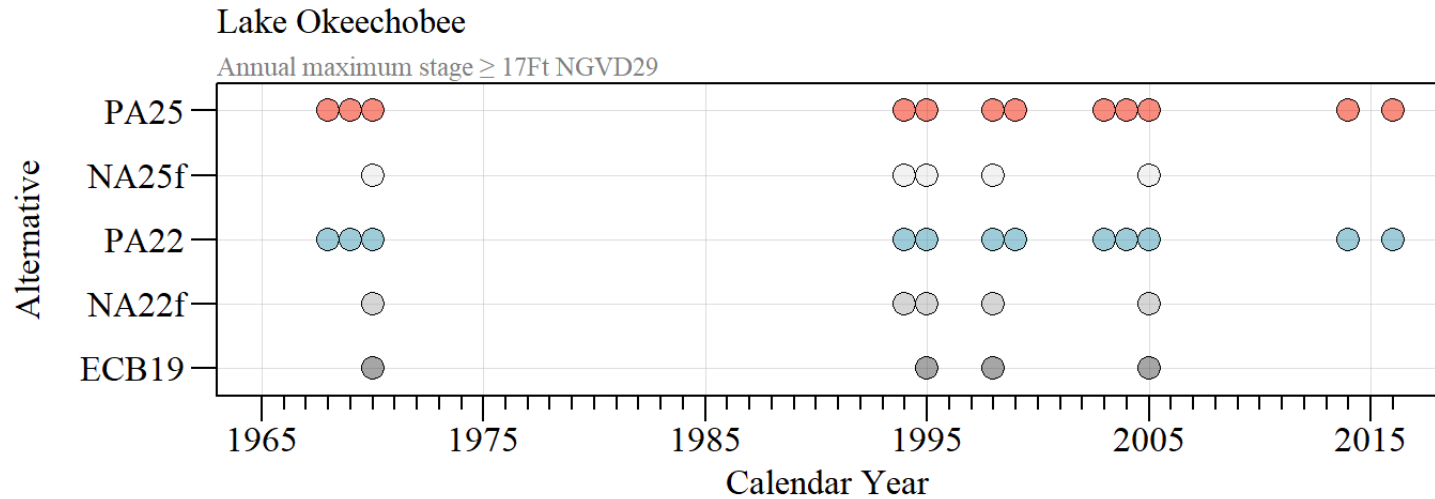
Distribution of daily discharge at S79 above, within and below Zone D.

# Lake Okeechobee



Percent of time LOK stage above 17 Ft, 16 Ft and below 10 Ft NGVD29

# Lake Okeechobee



Timeline of annual LOK max stage  $> 17$  Ft NGVD29.

# Lake Okeechobee

- Place holder Lake Stage Envelope scores

# Lake Okeechobee

- place holder extreme high event duration and count

# Lake Okeechobee

- place holder recession rates?