## Lake Okeechobee Watershed Restoration Project

Sanibel-Captiva Conservation Foundation

Conservancy of Southwest Florida

**DRAFT** - March 07, 2022





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

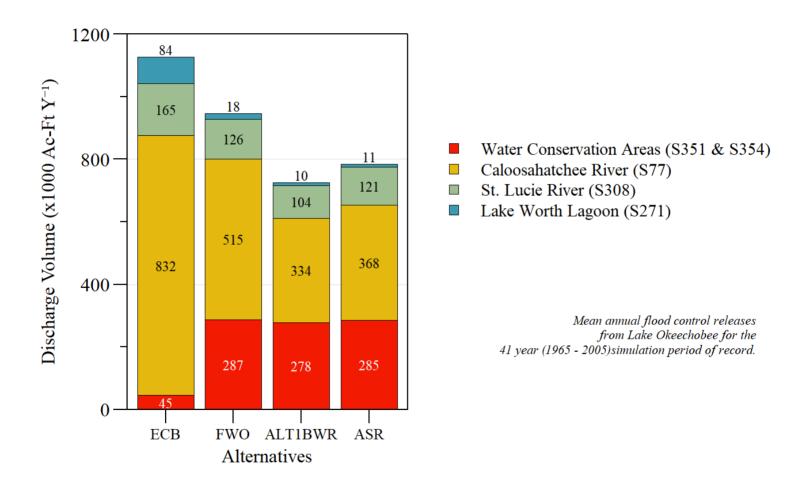
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## **General Description**

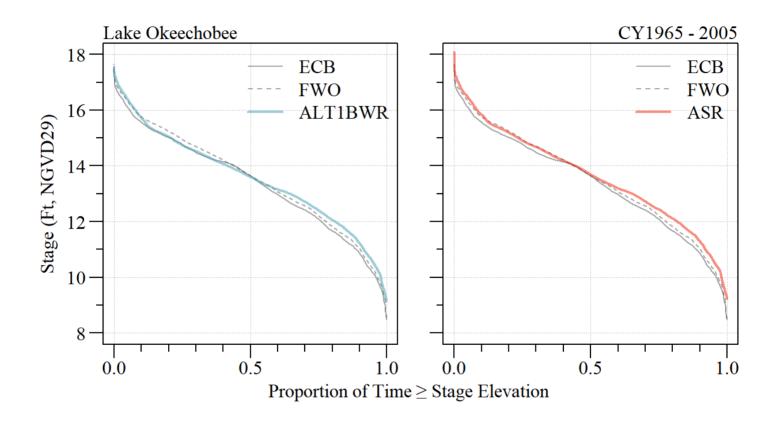
Alternative	Description
ECB	KRR partial complete; HHD under construction; C44 & C43 under construction;
	LORS08 schedule (cira 2012)
FWO	KRR & HHD complete; C44, C43 and C23/24 complete; CEPP feautres operational;
	LORS08 schedule (cira 2025)
1BWR	Wetland Attenuation Feature - 43000 acres; 80 ASR wells; wetland restoration; LORS08
	(cira 2025)
ASR	WAF removed; 55 ASR wells; wetland restoration; LORS08 (cira 2025)

- RSMBN modeling Period of Simulation Jan 1, 1965 to Dec 31, 2005
- Performance Measures
  - Both 2007 and 2020 Lake Okeechobee Stage and Northern Estuaries Salinity Envelopes were used to evaluate LOWRP alternatives.

### **Regulatory Discharge**

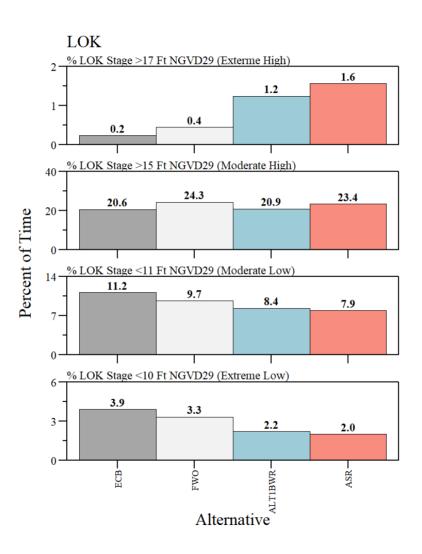


# **LOK Stage Duration Curves**

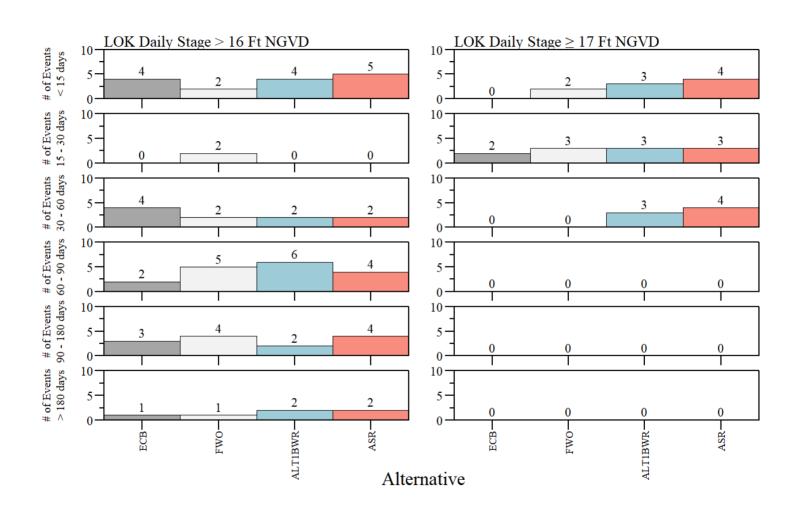


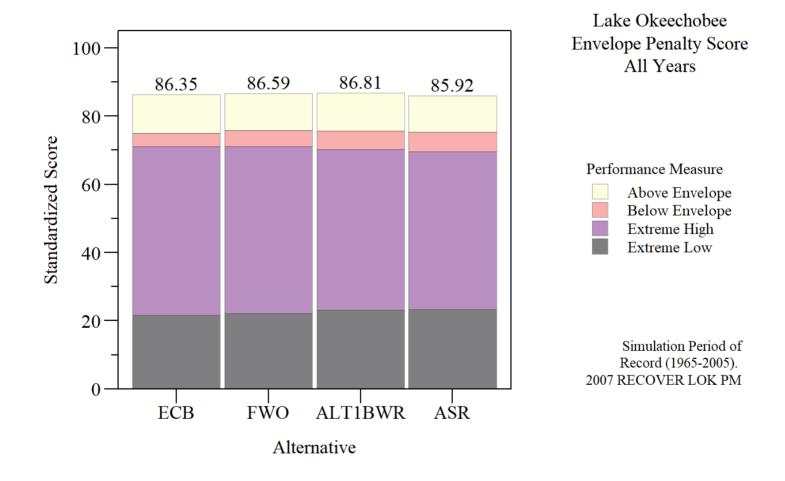
Stage duration curves for 1BWR and ASR alternatives relative to ECB and FWO baseline conditions.

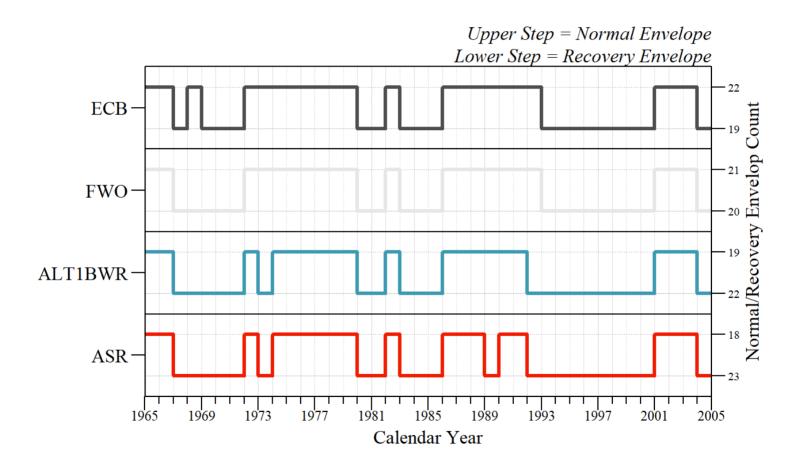
# **LOK Stage Conditions**



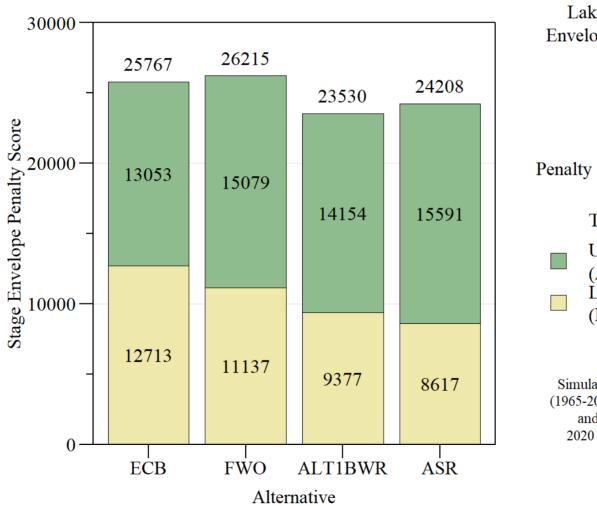
# LOK - High Stage Event and Duration







Normal and recovery stage envelope timeline for each alternative.



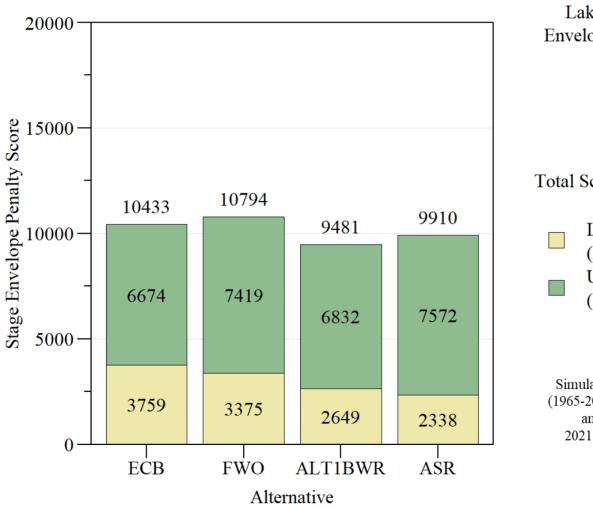
Lake Okeechobee **Envelope Penalty Score** All Years

**Penalty Score** 

**Total Score** 

- Upper Penalty (Above Envelope) Lower Penalty
- (Below Envelope)

Simulation Period of Record (1965-2005). Includes Normal and Recovery envelopes. 2020 RECOVER LOK PM

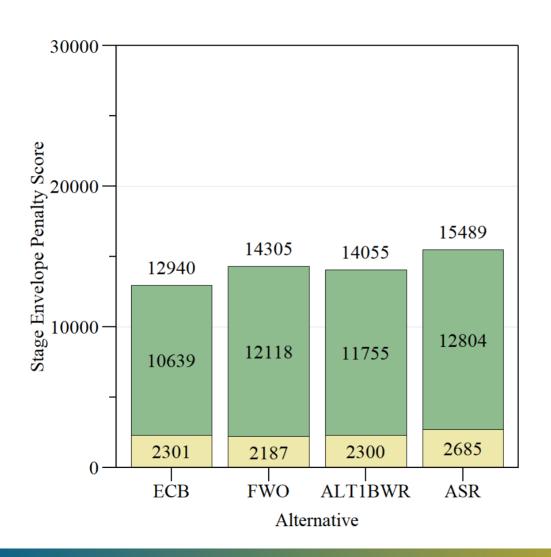


Lake Okeechobee **Envelope Penalty Score** May-Sep All Years

**Total Score** 

- Lower Penalty (Below Envelope)
- Upper Penalty (Above Envelope)

Simulation Period of Record (1965-2005). Includes Normal and Recovery envelope. 2021 RECOVER LOK PM



Lake Okeechobee Envelope Penalty Score Recovery Years

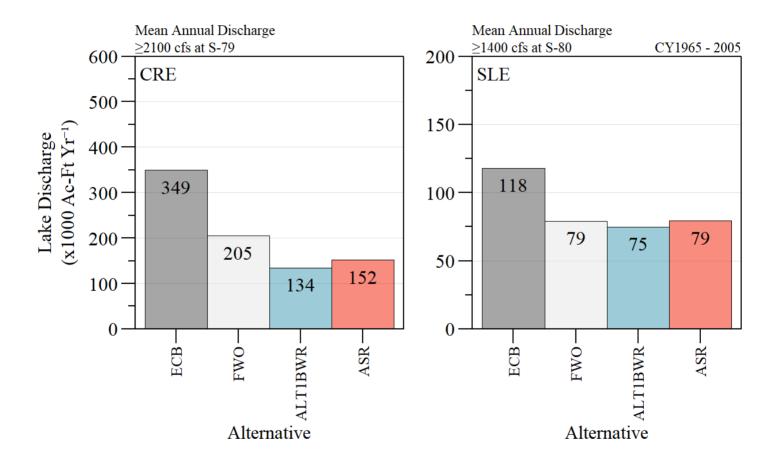
**Penalty Score** 

**Total Score** 

- Upper Penalty
  (Above Envelope)
  Lower Penalty
- (Below Envelope)

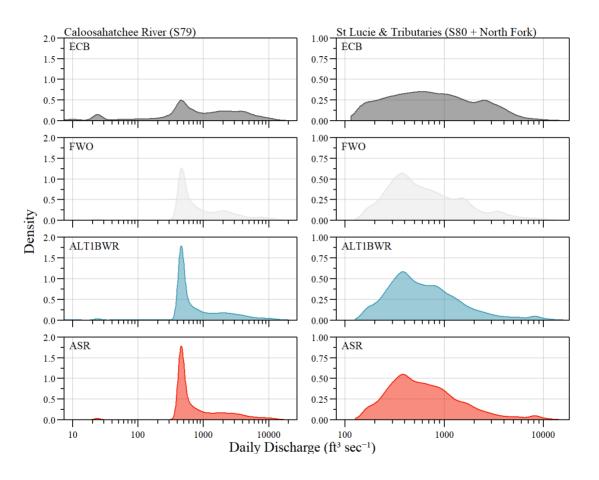
Simulation Period of Record (1965-2005). Includes only years in the recovery envelopes. 2020 RECOVER LOK PM

## **Regulatory Discharge**



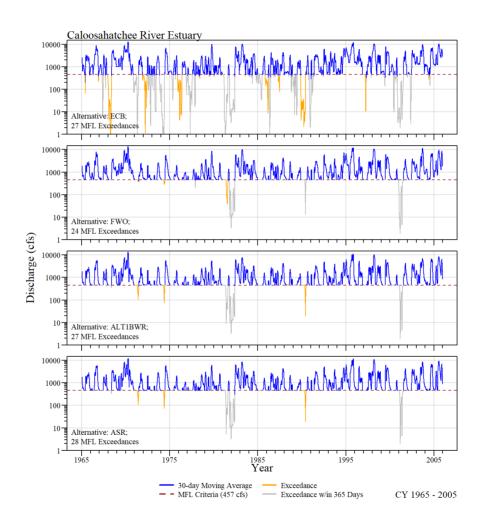
Stressful and damaging Lake discharges to CRE and SLE.

# **Daily Discharge**

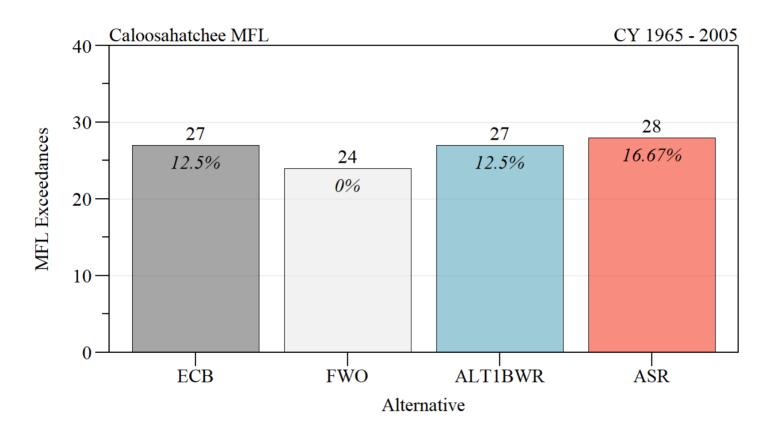


Daily discharge distribution during POS for each alternative and Estuary.

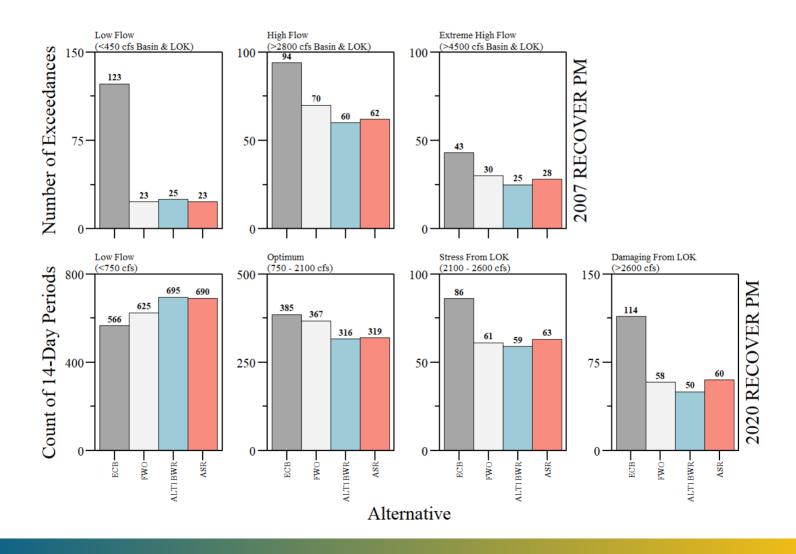
#### Caloosahatchee MFL

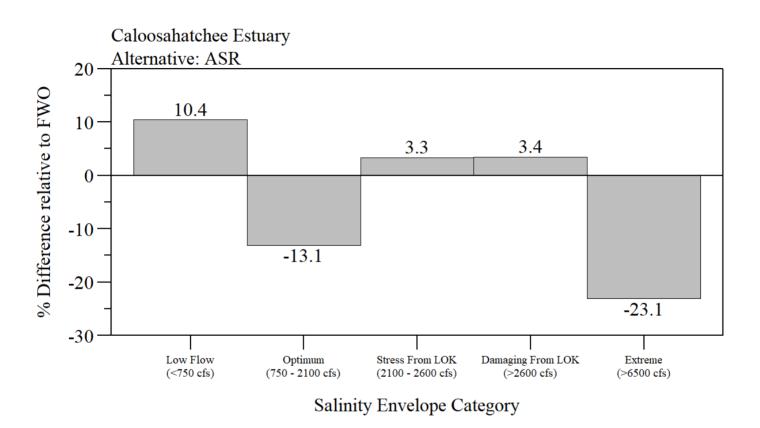


#### **Caloosahatchee MFL**

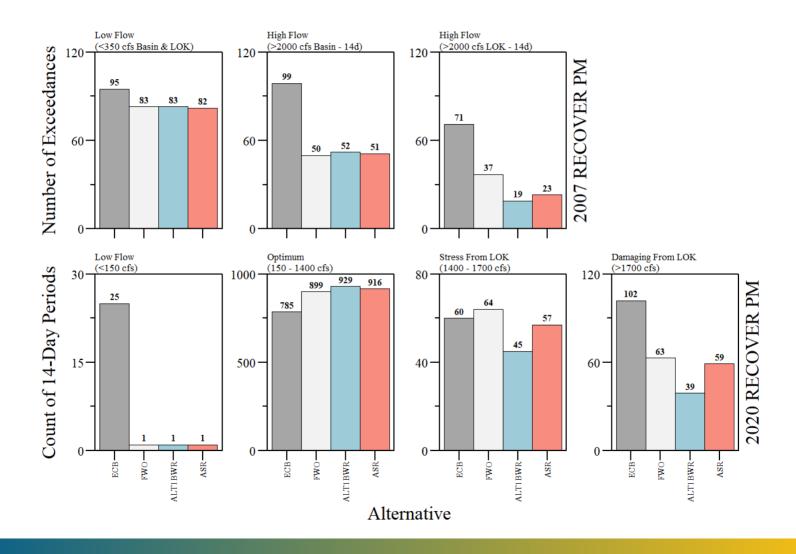


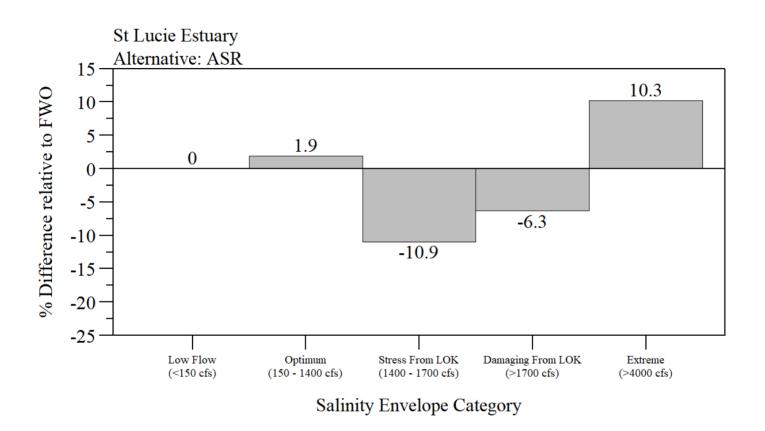
Caloosahatchee MFL percent difference relative to FWO.





Caloosahatchee salinity envelope evaluation relative to FWO.





St Lucie salinity envelope evaluation relative to FWO.