# CEPP PACR Evaluation

*Sanibel-Captiva Conservation Foundation*

*Conservancy of Southwest Florida*

**DRAFT** - June 02, 2022

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# General Description

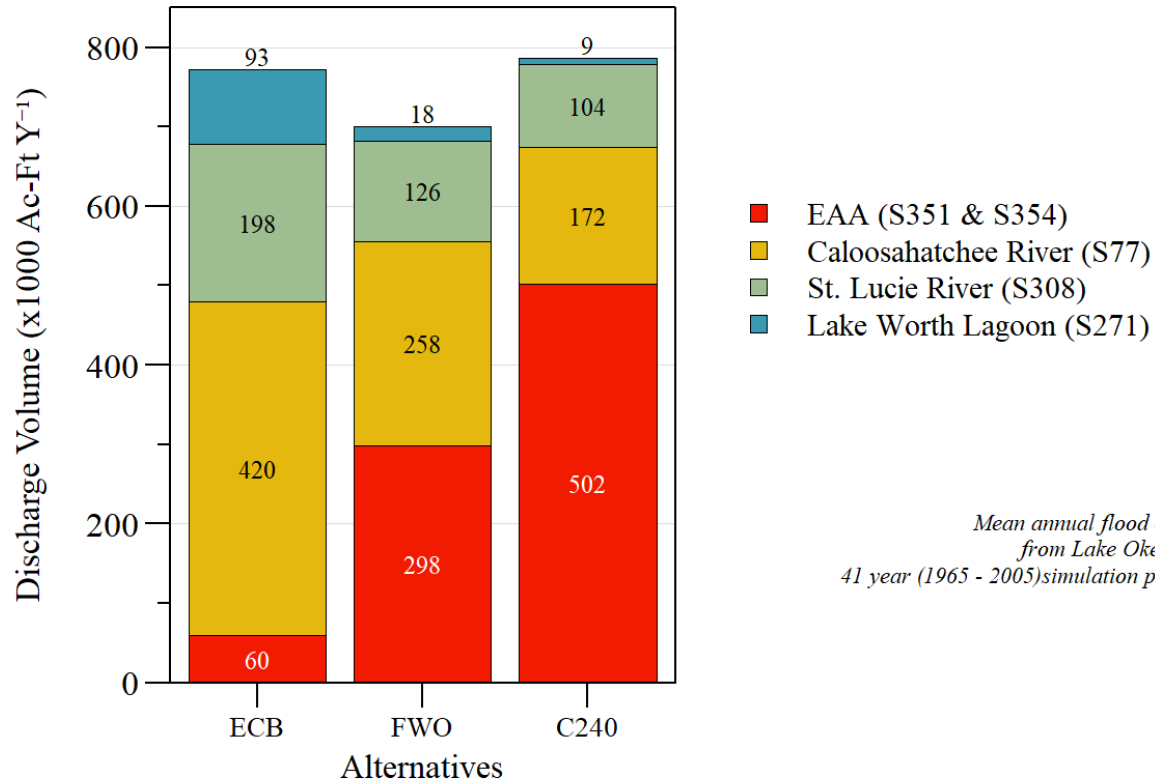| Alternative | Description |
| --- | --- |
| ECB | Modified Water Deliveries (MWD) complete; CERP projects in construction, not operational; WCA3/ENP Ops under ERTP; LORS08 |
| FWO | MWD, C111 South Dade, KRR, RS, TT next steps; CERP projects operational IRL-S, PSRP, C43, C111, CEPP; WCA3/ENP Ops under ERTP w/CEPP; LORS08 w/CEPP (LORS08++) |
| C240 | FWO + EAA Reservoir and STA (240,000 ac-ft above-ground reservoir & 6,500-acre STA) |

- RSMBN modeling Period of Simulation - Jan 1, 1965 to Dec 31, 2005

# Regulatory Discharge



Regulatory discharge from Lake Okeechobee

*Mean annual flood control releases from Lake Okeechobee for the 41 year (1965 - 2005) simulation period of record.*

# Regulatory Discharge

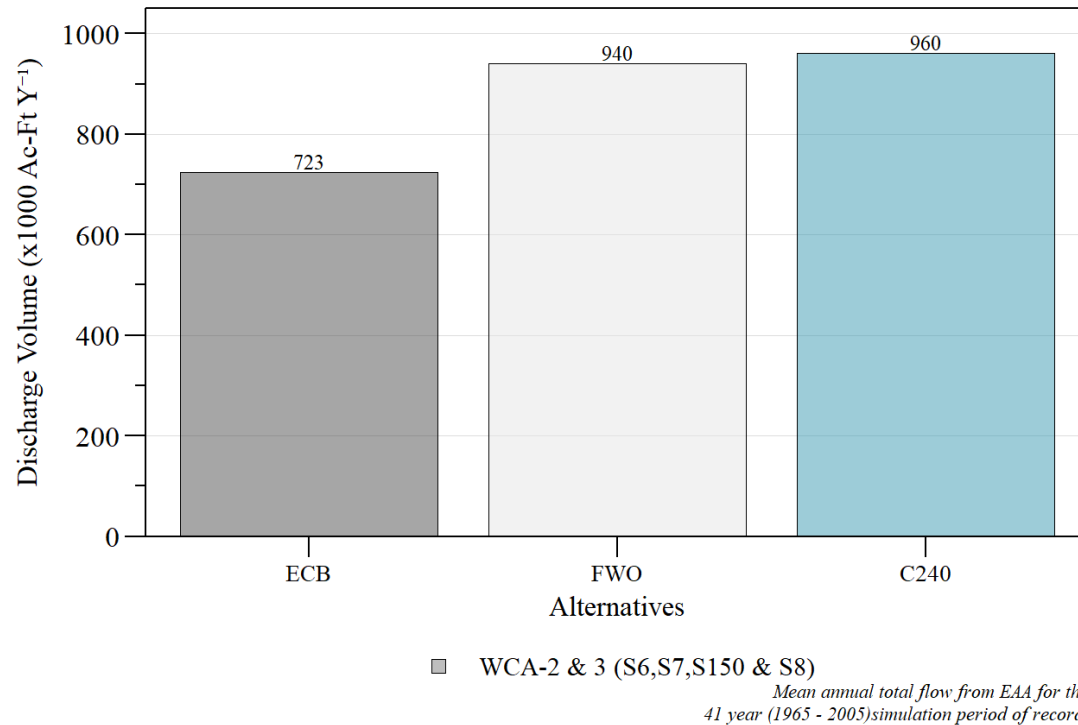Mean annual flood control releases from Lake Okeechobe for the 41-year period of simulation with percent difference relative to FWO and ECB.

| Region | Average annual total discharge | | | Percent Difference | |
|---|---|---|---|---|---|
| | ECB | FWO | C240 | FWO vs C240 | ECB vs C240 |
| EAA | 60 | 298 | 502 | 68 | 737 |
| Caloosahatchee | 420 | 258 | 172 | -33 | -59 |
| St. Lucie | 198 | 126 | 104 | -18 | -48 |
| Lake Worth Lagoon | 93 | 18 | 9 | -52 | -91 |

# Everglades Discharge



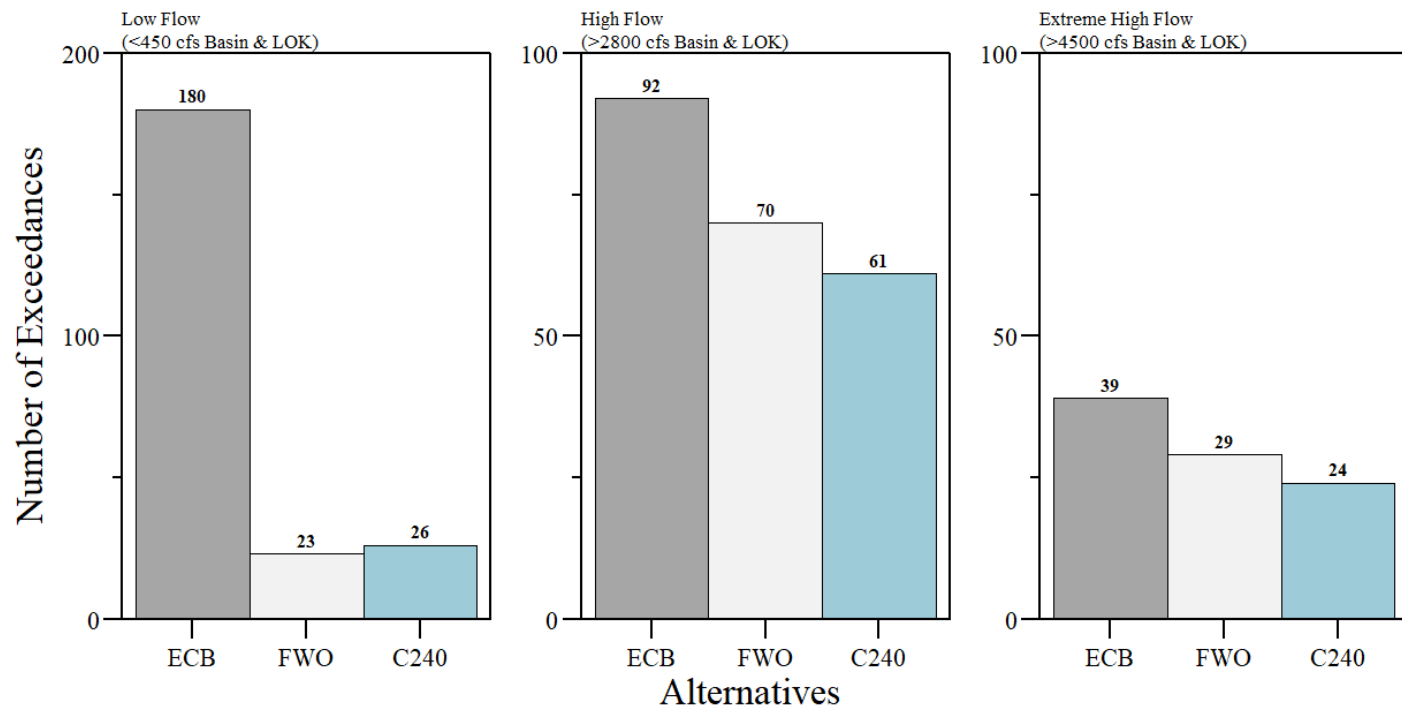Mean annual total flow from EAA for the
41 year (1965 - 2005)simulation period of record.

Total discharges to WCAs from EAA during the 41-year peroid of simulation.

- % Difference FWO vs C240: 2.2%

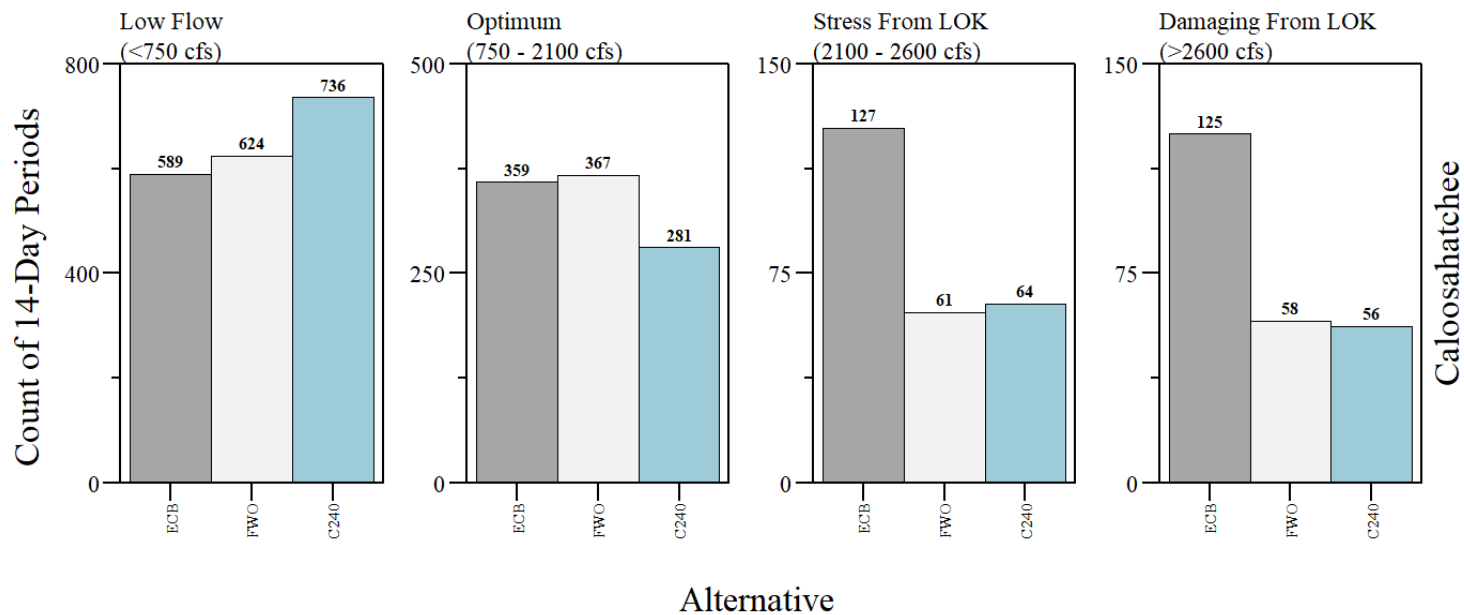- % Difference ECB vs C240: 32.8%

# CRE - Salinity Envelope (2007 PM)



*2007 RECOVER Salinity Envelope Performance Metric based on mean monthly discharge at S-79*
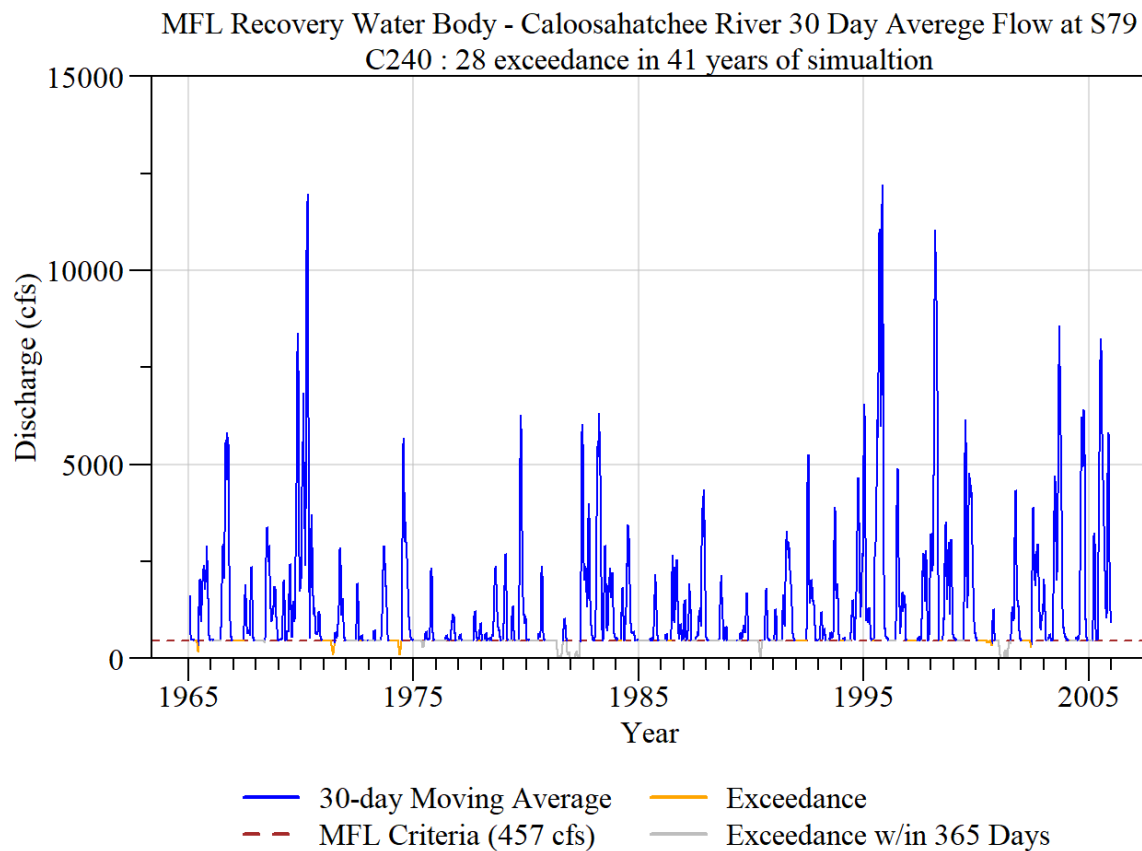
Caloosahatchee salinity envelope evaluation (2007 RECOVER PMs)

# CRE - Salinity Envelope (2020 PM)



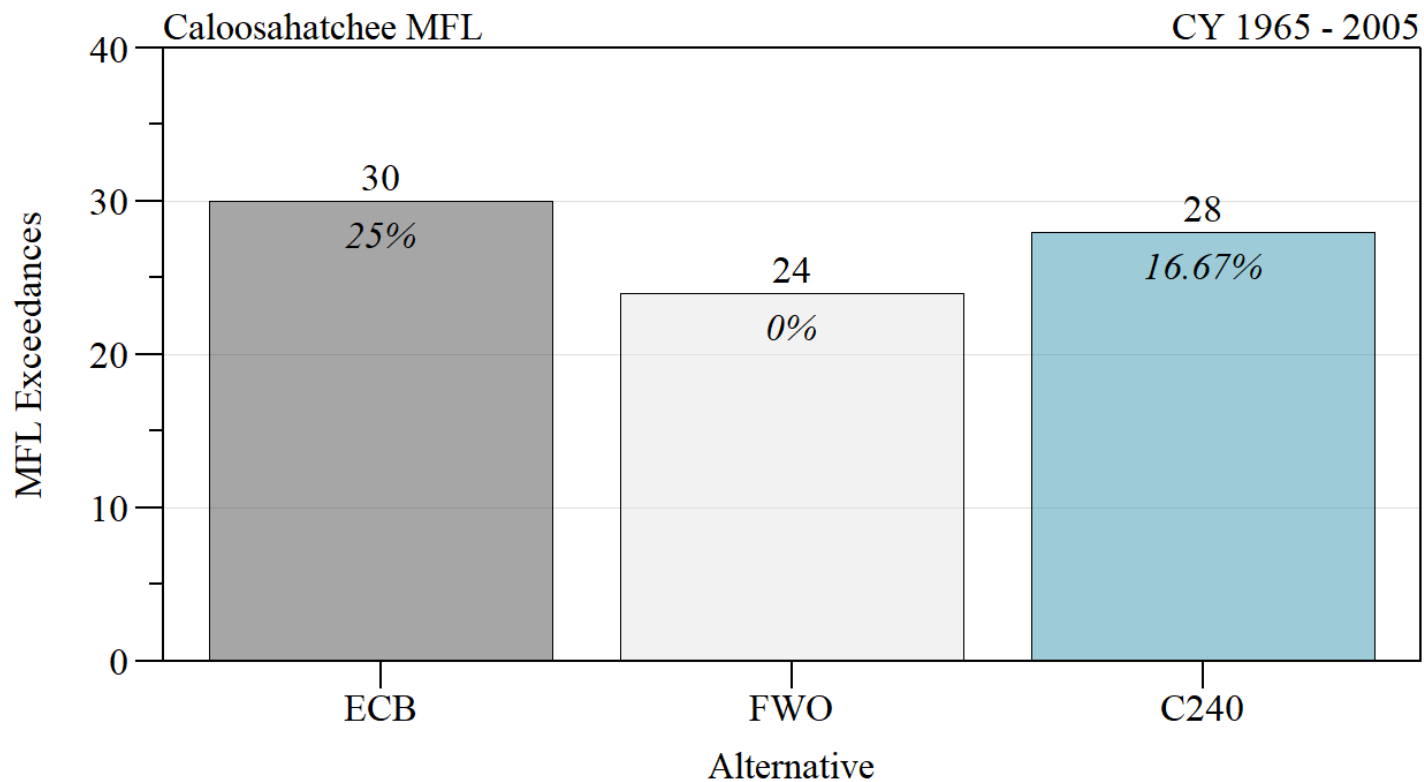Caloosahatchee salinity envelope evaluation (2020 RECOVER PMs)

# Caloosahatchee MFL
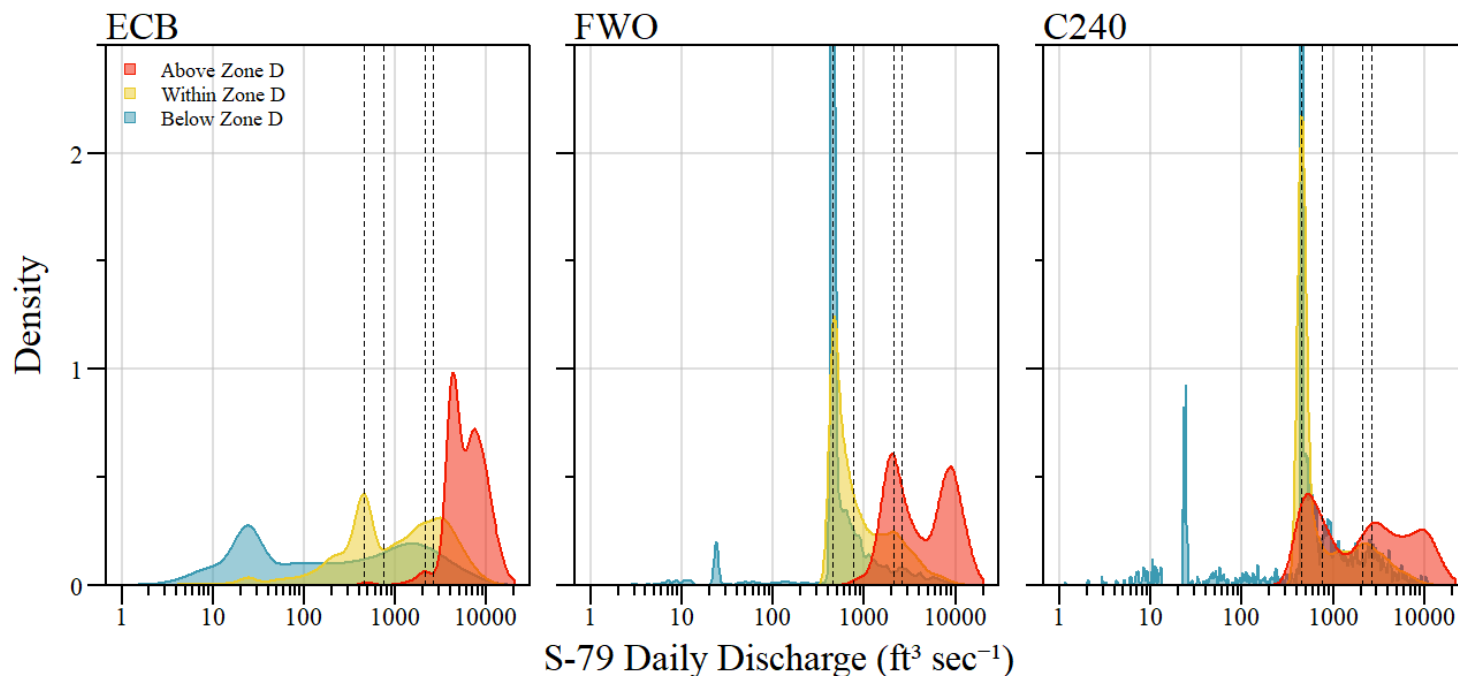


Caloosahatchee MFL for Alternative C240.

# Caloosahatchee MFL



Caloosahatchee MFL percent difference relative to FWO.

# Caloosahatchee Discharge



Discharges to Caloosahatchee below, within and above zone D of the Lake regulation schedule.

# SLE - Salinity Envelope

- waiting on some additional modeling data