

Lake Okeechobee System Operating Manual

POST Iteration 2 Modeling Evaluation

Sanibel-Captiva Conservation Foundation

Conservancy of Southwest Florida

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Paul Julian PhD

 pjulian@sccf.org

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Average annual regulatory flows (QFC flow tag; CRE: S77; SLE: S308) and stress and damaging events based on RECOVER salinity envelope 14-day event counts for Caloosatchee and St Lucie estuaries.

| Summarized Data | | | | | | | Percent Different from FWO | | | | |
|------------------|-------------------|-----------------------------------|--|--|---|---|-----------------------------------|--|--|---|---|
| Estuary | Alt | Regulatory Flows (kacft/yr) | Stress Events From LOK ³ | Stress Events From Basin ³ | Damaging Events From LOK ⁴ | Damaging Events From Basin ⁴ | Regulatory Flows (kacft/yr) | Stress Events From LOK ³ | Stress Events From Basin ³ | Damaging Events From LOK ⁴ | Damaging Events From Basin ⁴ |
| CRE ¹ | NA25 ² | 528 | 183 | 118 | 186 | 173 | | | | | |
| | ECBr | 515 | 190 | 153 | 205 | 225 | -2.5 | 3.8 | 29.7 | 10.2 | 30.1 |
| | CC | 578 | 289 | 89 | 156 | 174 | 9.5 | 57.9 | -24.6 | -16.1 | 0.6 |
| SLE ¹ | NA25 ² | 187 | 148 | 210 | 142 | 428 | | | | | |
| | ECBr | 231 | 162 | 186 | 160 | 432 | 23.0 | 9.5 | -11.4 | 12.7 | 0.9 |
| | CC | 72 | 13 | 308 | 17 | 469 | -61.7 | -91.2 | 46.7 | -88.0 | 9.6 |

¹ CRE: Caloosahatchee Estuary; SLE: St Lucie Estuary; ² NA25 = Future without project (FWO)

³ Stressful Flows:

CRE: ≥ 2100 cfs & < 2600 cfs

SLE: ≥ 1400 cfs & < 1700 cfs

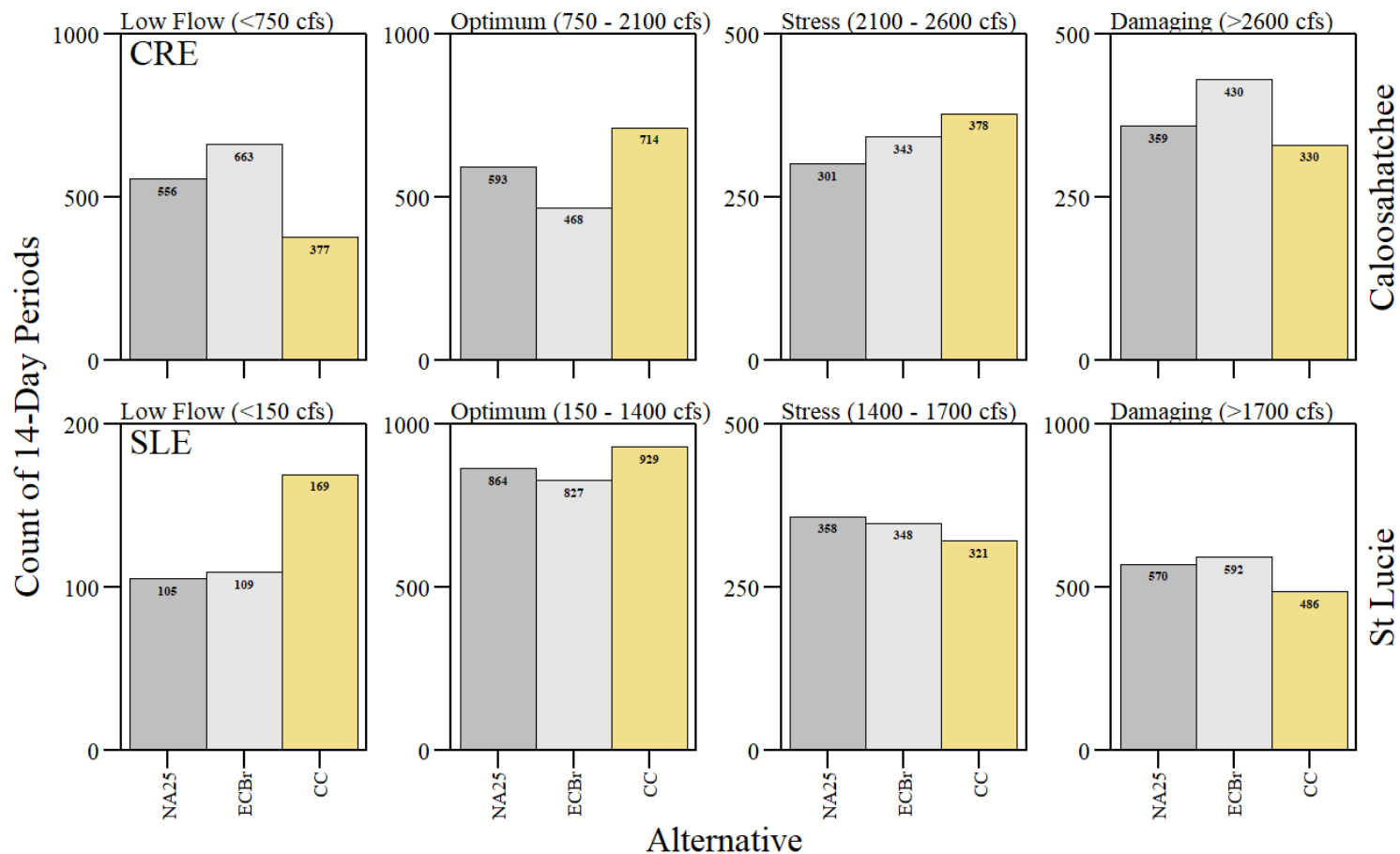
⁴ Damaging Flows:

CRE: > 2600 cfs

SLE: > 1700 cfs

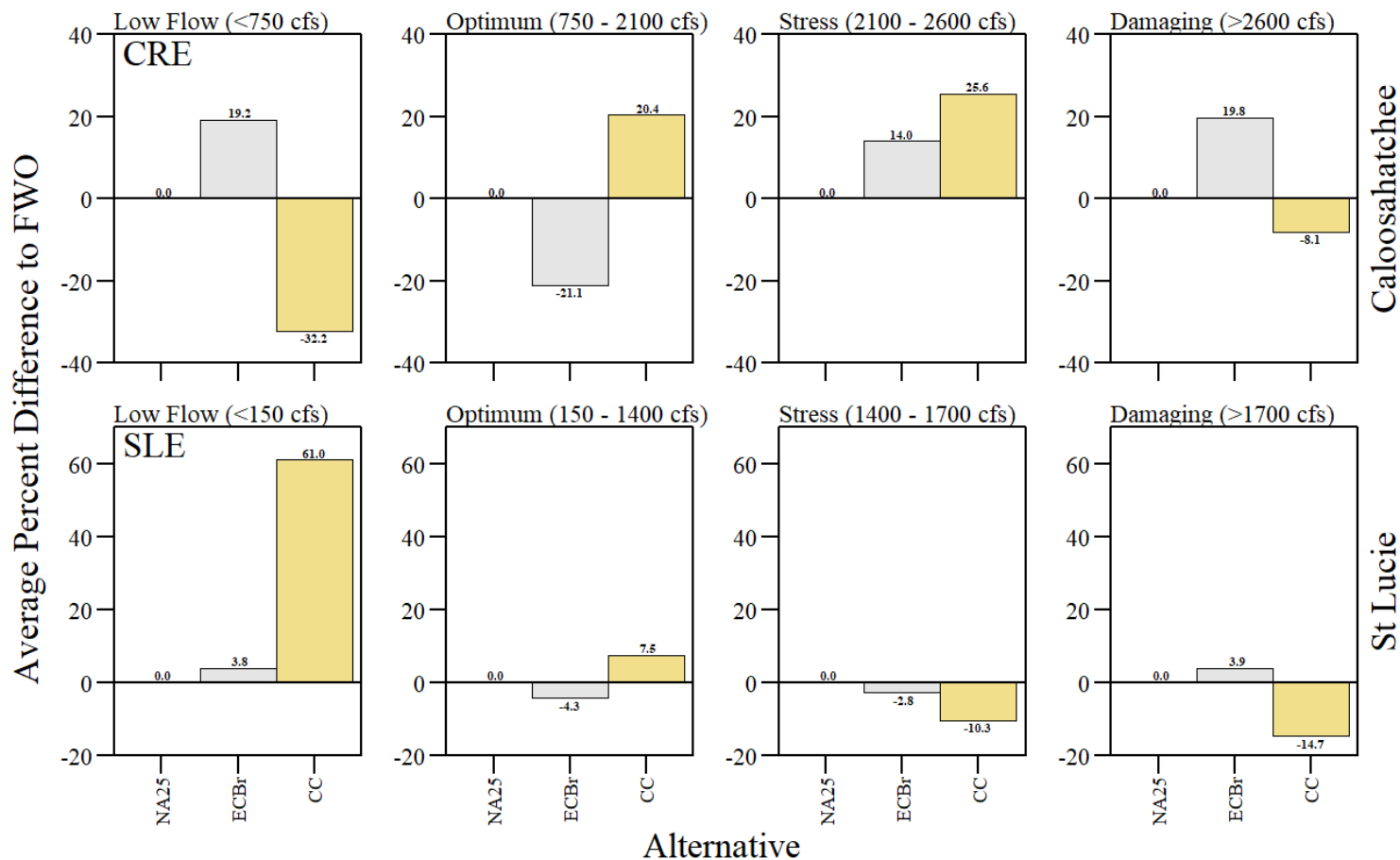
Data Source: USACE and SFWMD Interagency Modeling Center

RECOVER Metric



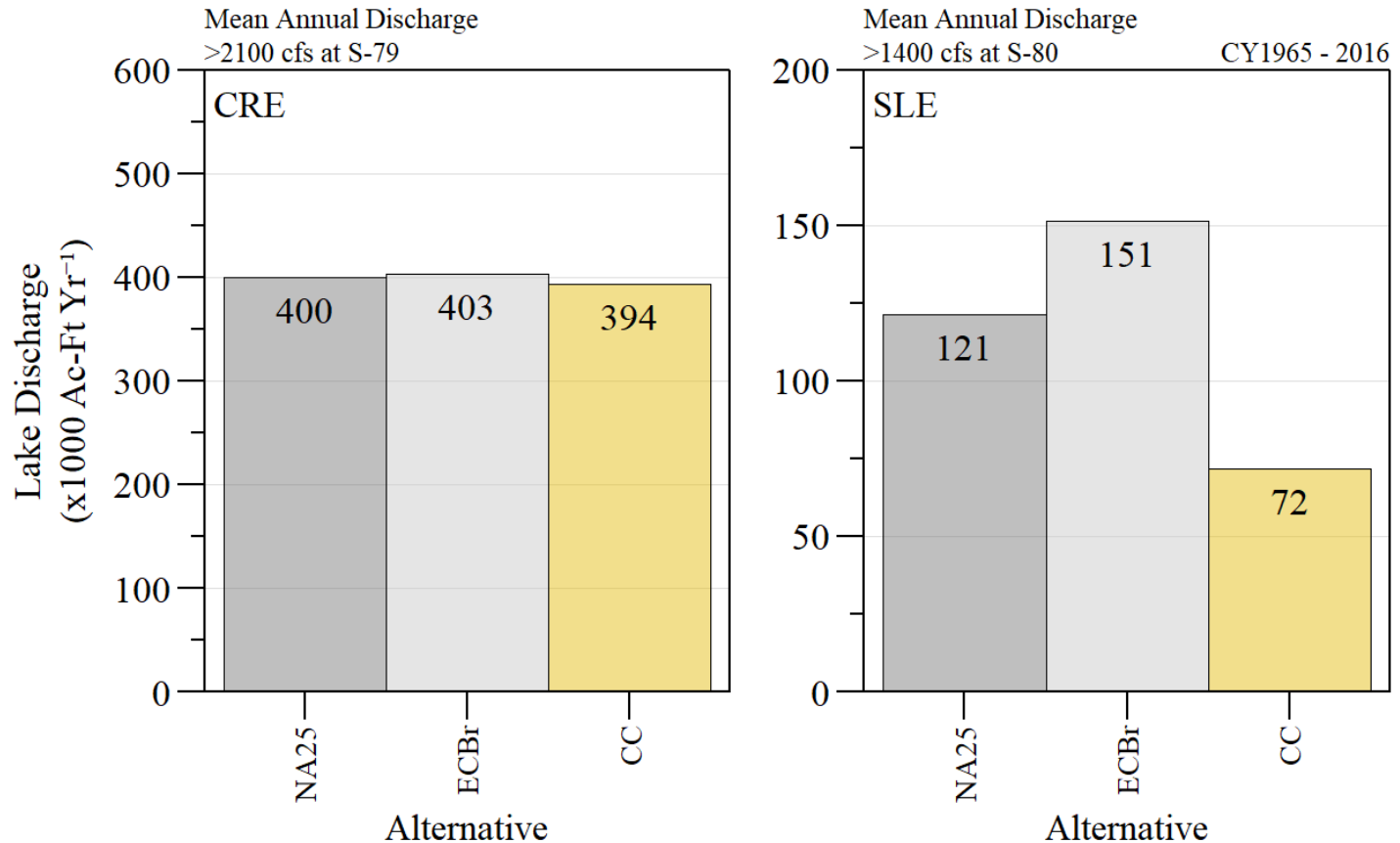
RECOVER salinity envelope evaluation during the simulation period of record for Caloosahatchee (top) and St Lucie (bottom) estuaries.

RECOVER Metric



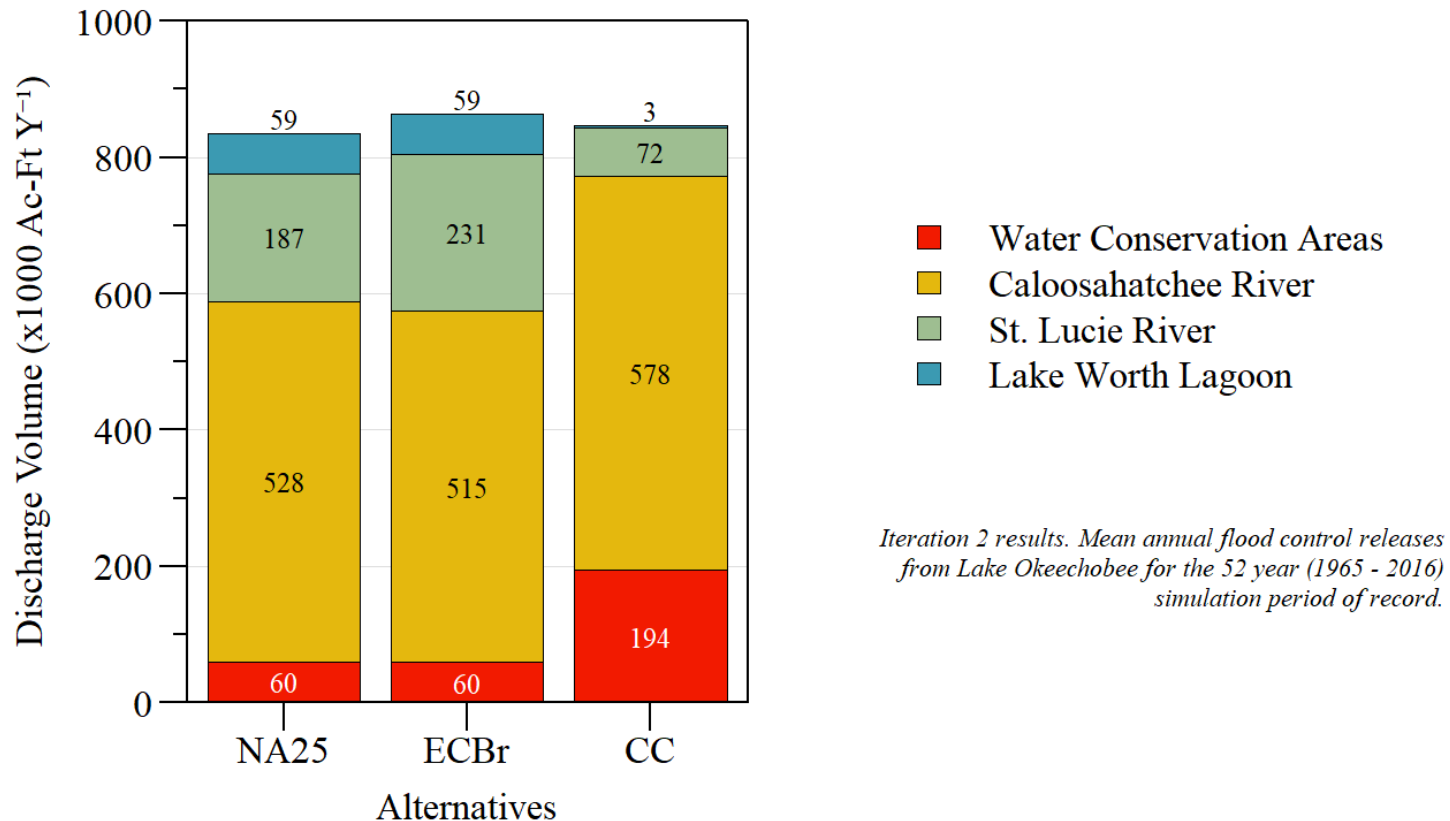
RECOVER salinity envelope evaluation relative to FWO (NA25) during the simulation period of record for Caloosahatchee (top) and St Lucie (bottom) estuaries.

Lake Discharges



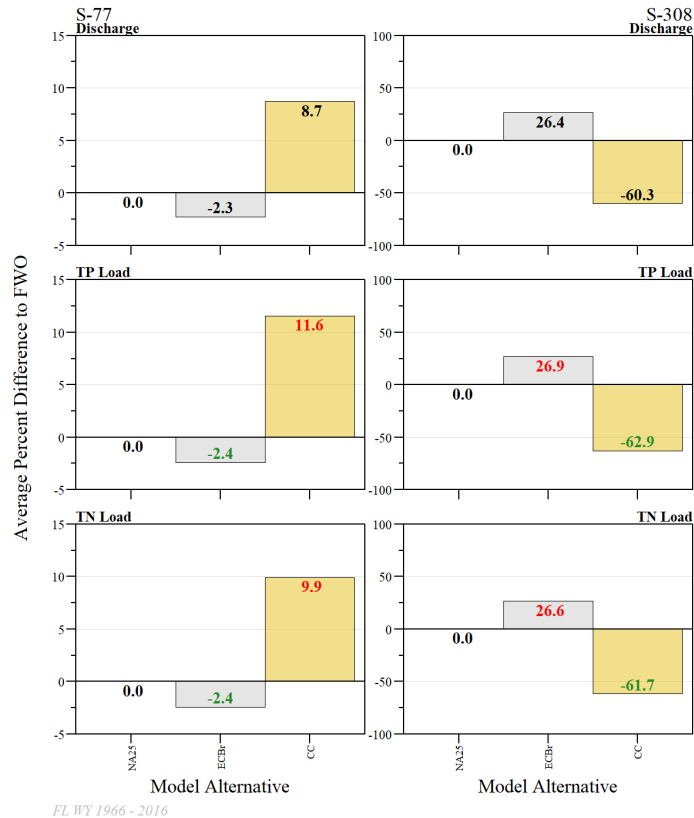
Average annual lake discharge volume over the simulation period of record when stress and damaging discharge at S79 and S80, respectively.

Flood control discharges



Average annual flood control discharges from Lake Okeechobee to Water Conservation Areas and Northern Estuaries over the simulation period of record.

Load



Average percent difference from FWO (NA25) for discharge and estimated nutrient loads over the May 1965 - April 2016 (FL WY 1966 - 2016) period of simulation.