

Combined Structural and Operational Plan (CSOP)

Objectives of Presentation

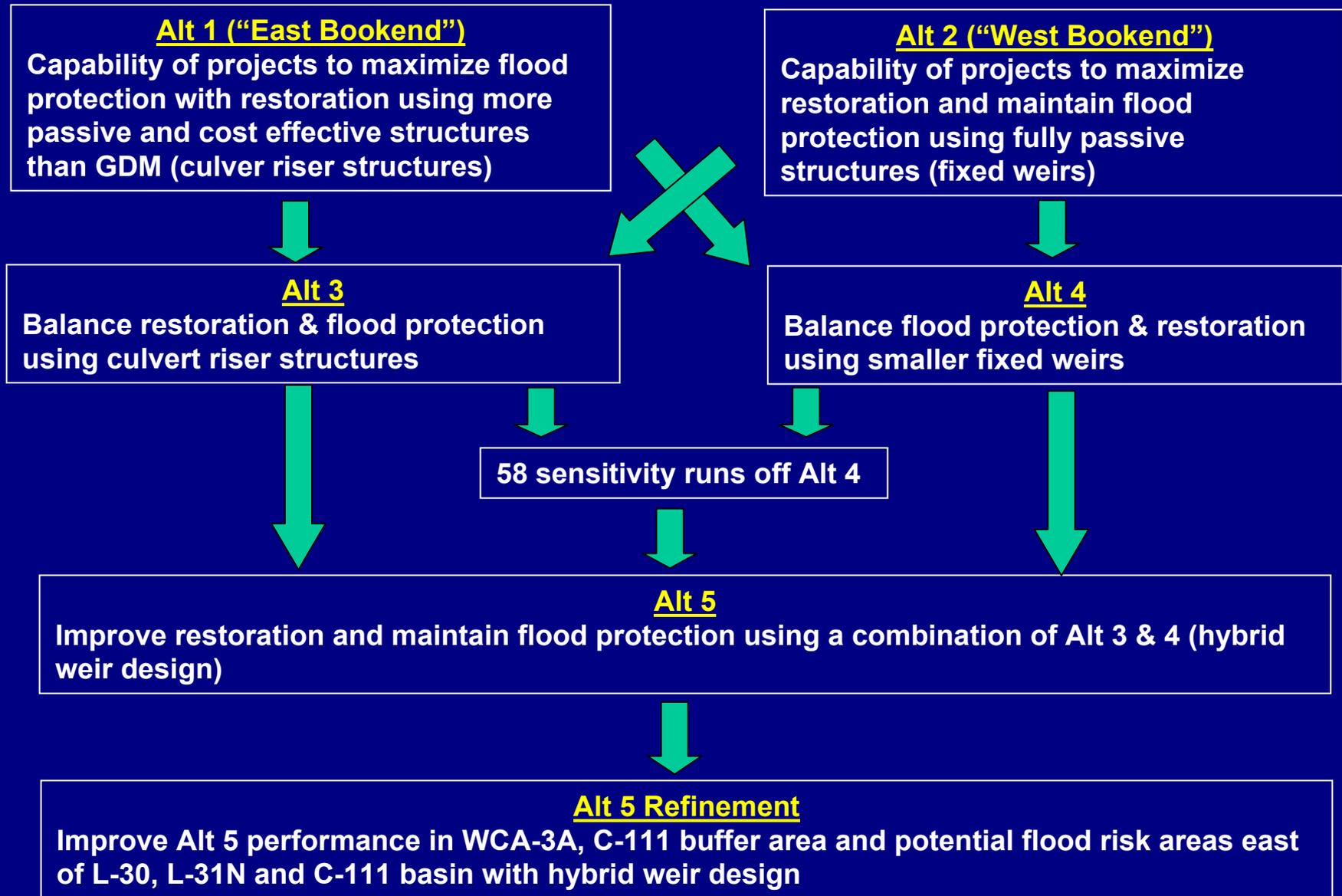
- Overview of CSOP alternatives
- Summary of alternative modeling results



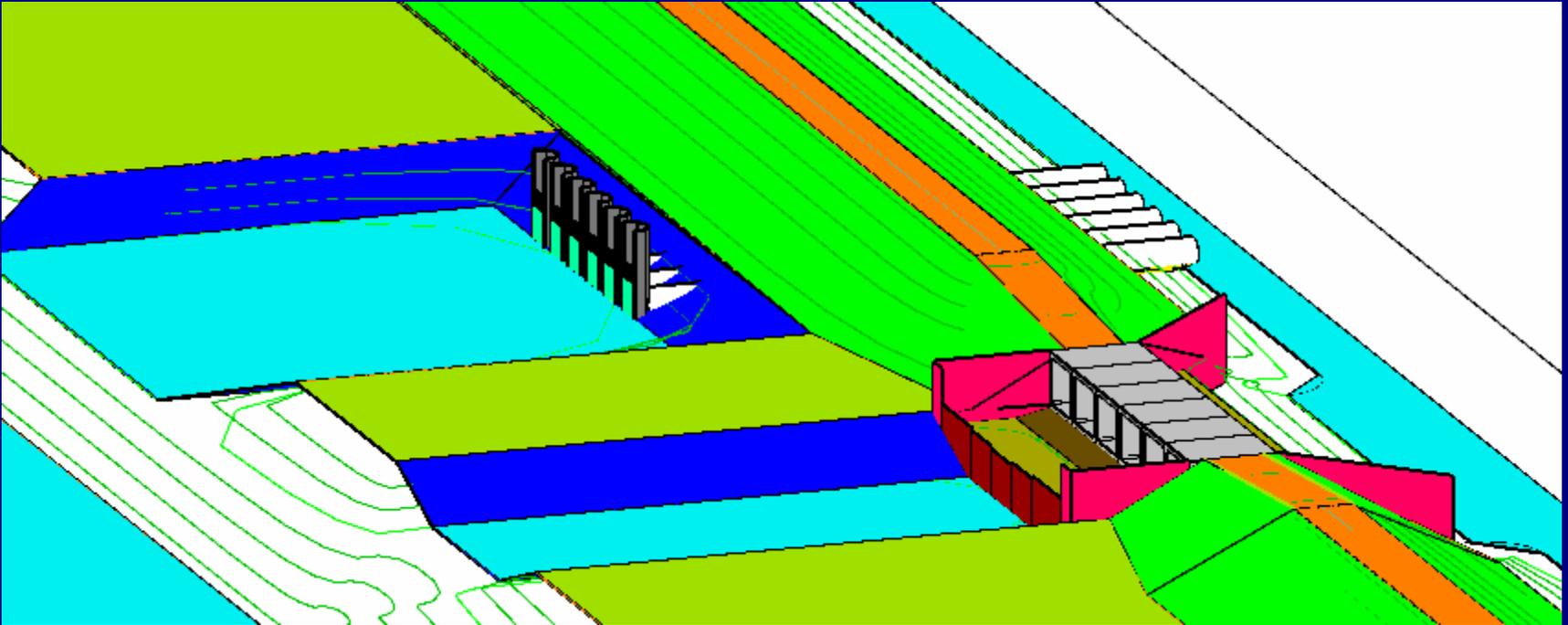
Components

- Reconnect 3A/3B flowpath
 - L67A & C structures
- Restore flows to NESRS
 - S-355's and Tamiami Trail
- Mitigate seepage impacts
 - S-356 and 8.5 SMA
- Minimize or eliminate wet season transfers
 - G-211 or S-331
- Reduce seepage losses from ENP and maintain flood protection
 - C-111 detention area
- Restore Taylor Slough and reduce damaging discharges to Barnes Sound
 - C-111 detention area
 - Taylor Slough Bridge
 - Remove C-111 spoil mounds

Alternative Formulation Process

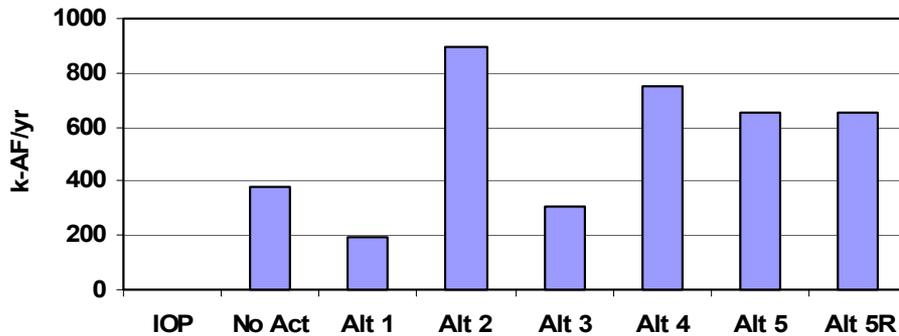


Structures Side by Side

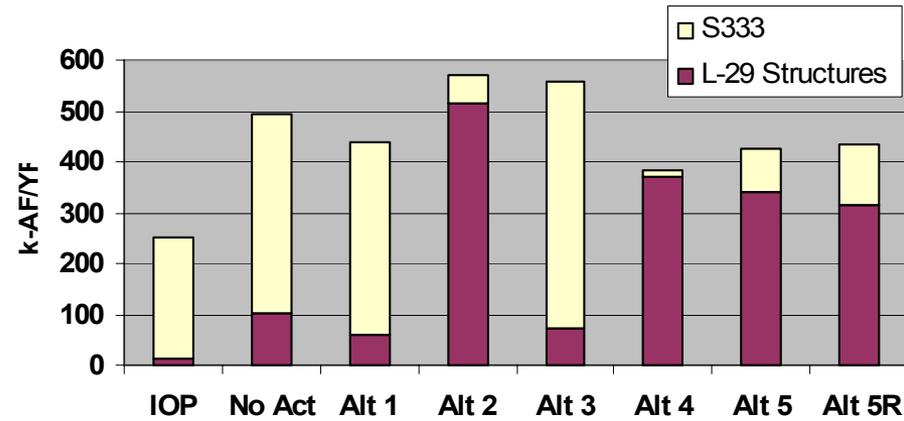


Restoration of WCA-3B as functioning component of hydrologic system...

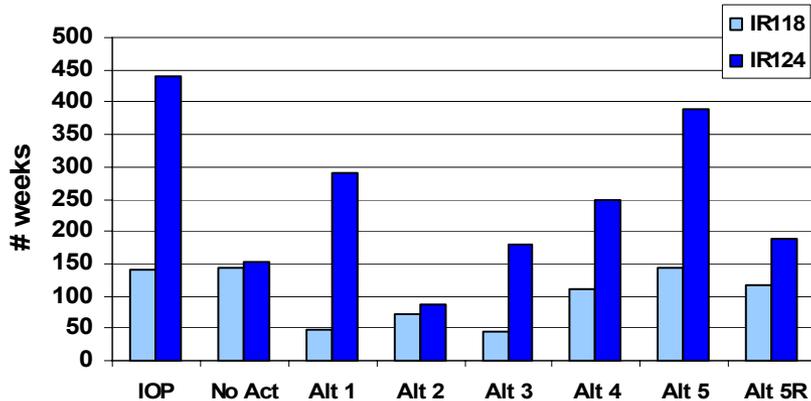
Average Annual Inflows to WCA-3B



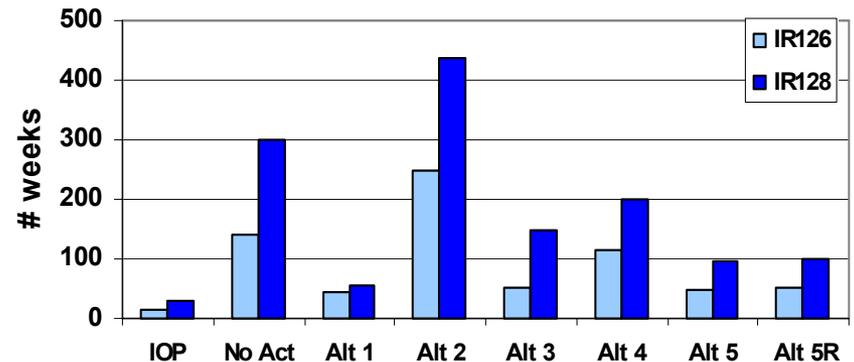
WCA-3B Outflows



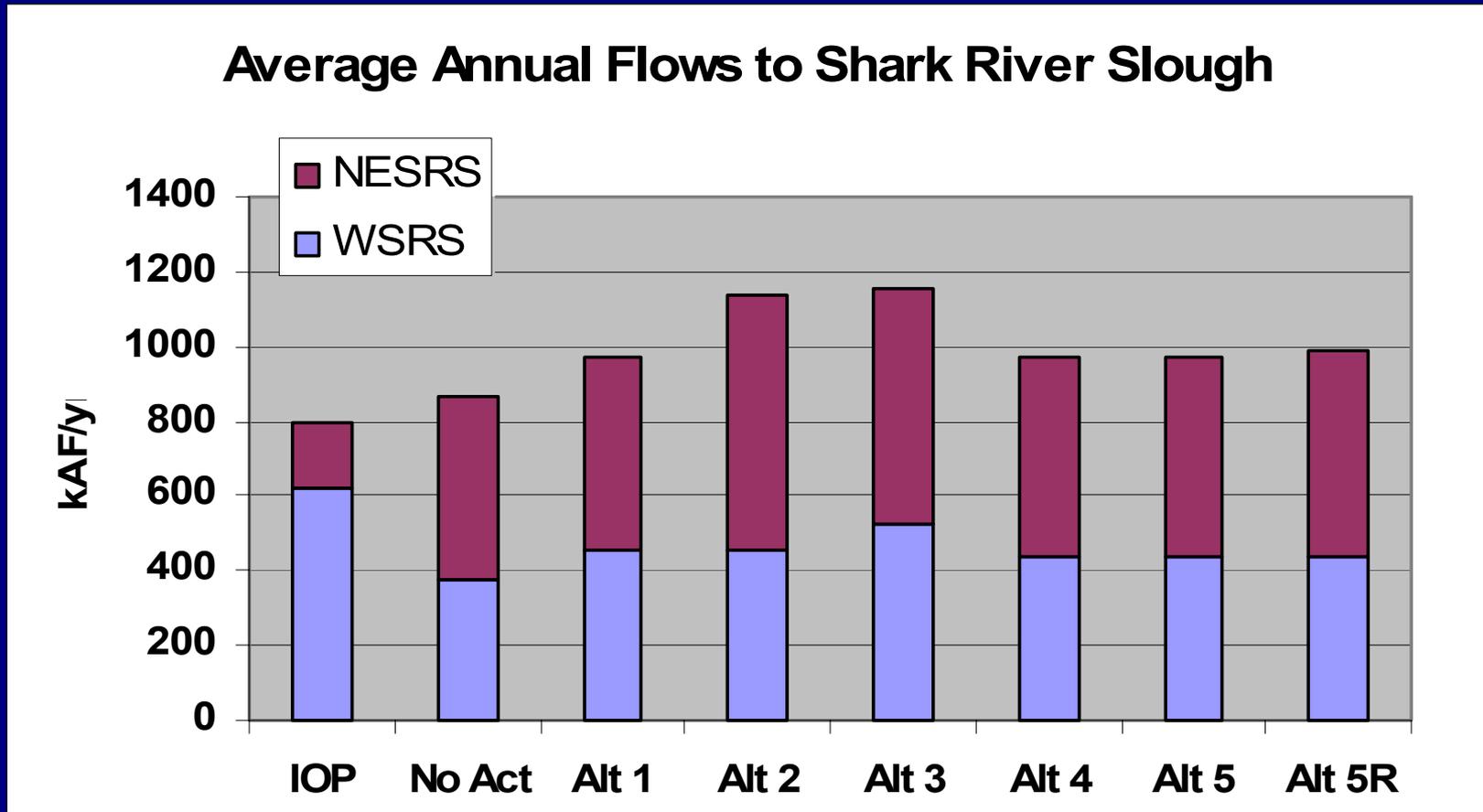
WCA-3A: Weeks Depth > 2.5 ft



WCA-3B: Weeks Depth > 2.5 ft

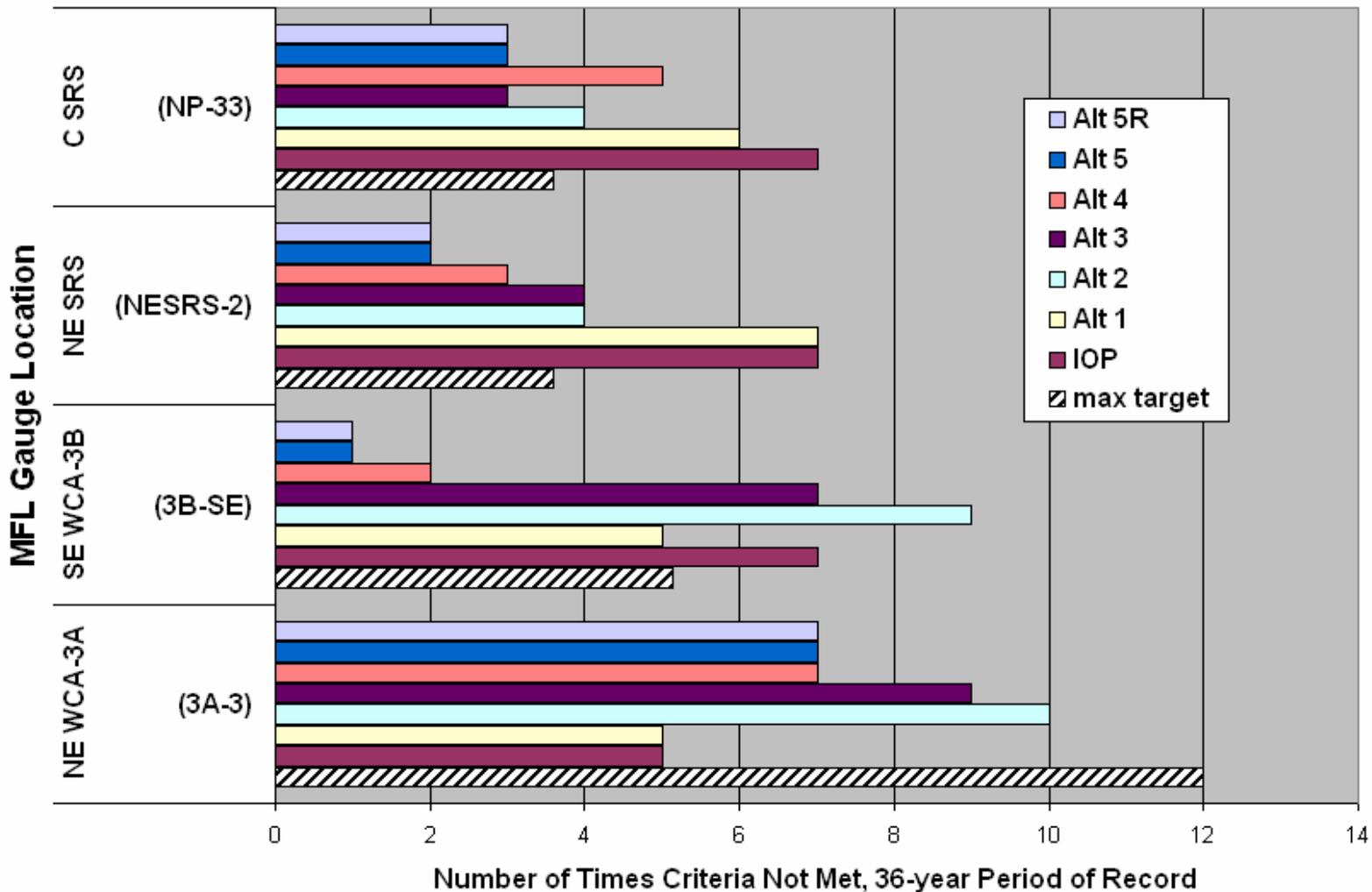


Restoration of water deliveries to NE Shark River Slough...Volume



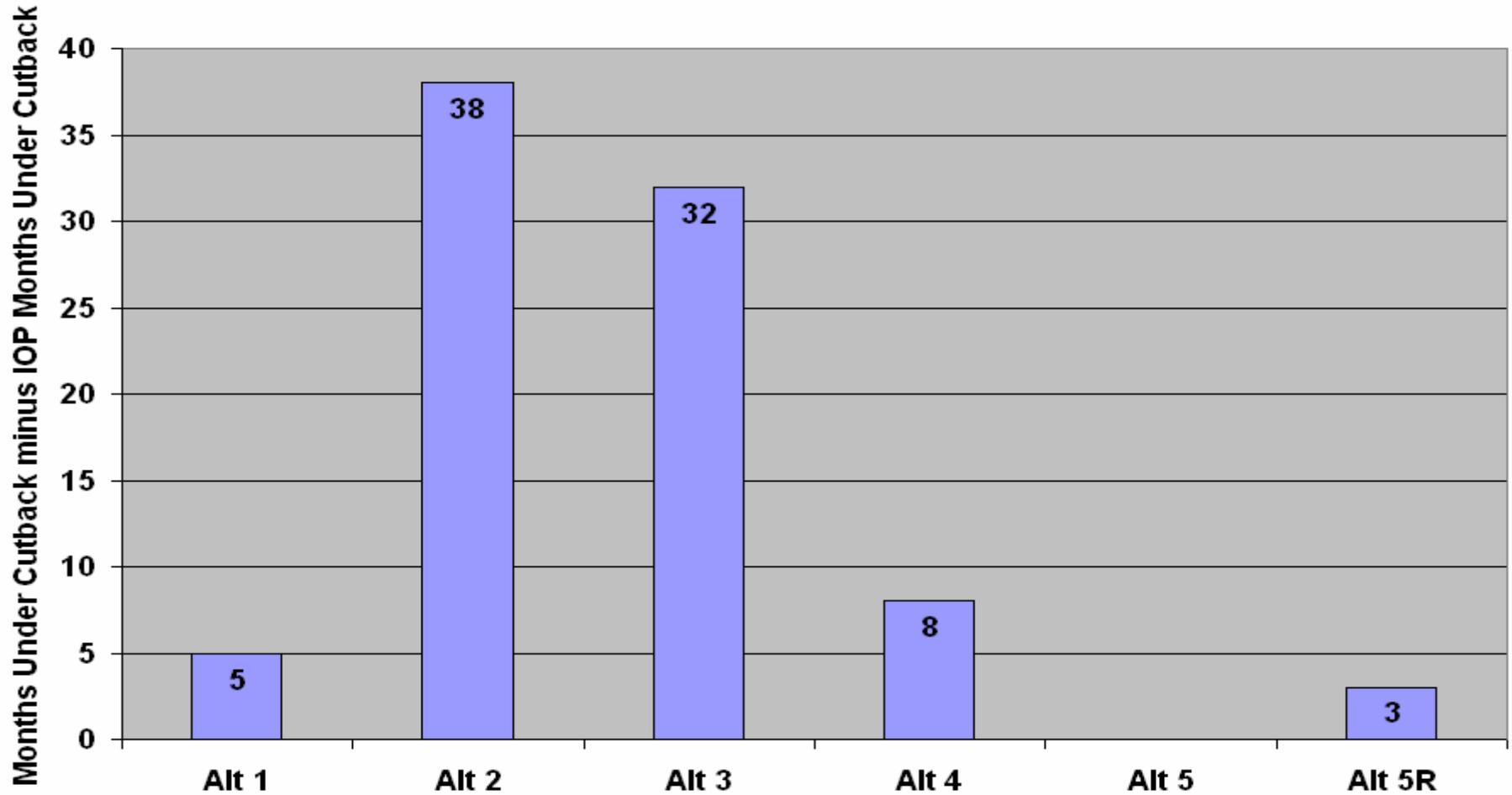
Minimum Flows and Levels (MFLs)

CSOP Key Gauges: MFL Exceedance Comparison



Increase in Months of LEC Water Supply Cutbacks, Totals

LEC Increased Simulated Months Under Cutback, compared to IOP

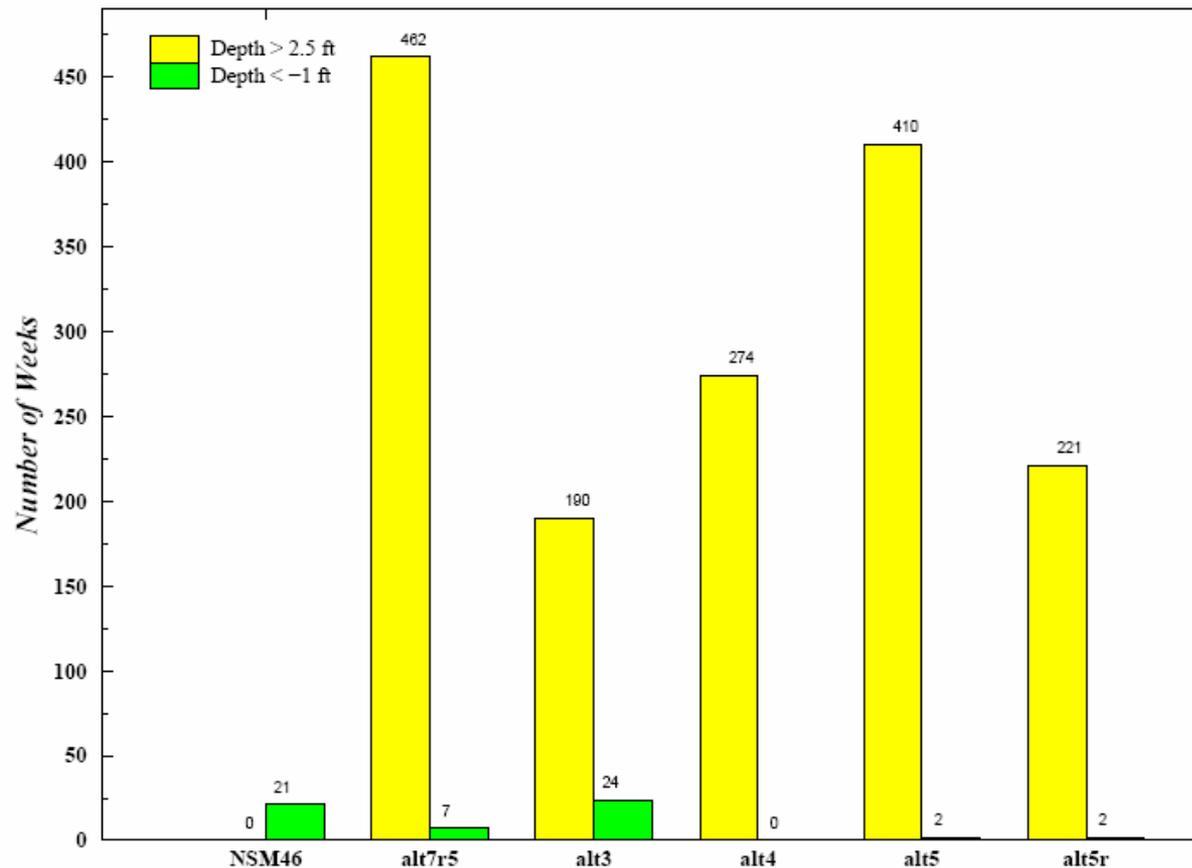


Miccosukee Reserve Area

(IR 14 Weeks Depth > 2.5 ft, Depth < -1.0)

Number of Weeks High/Low Water Depth Criteria Exceeded

Indicator Region 14 (R23C17-20 R24C17-20 R25C17-21)



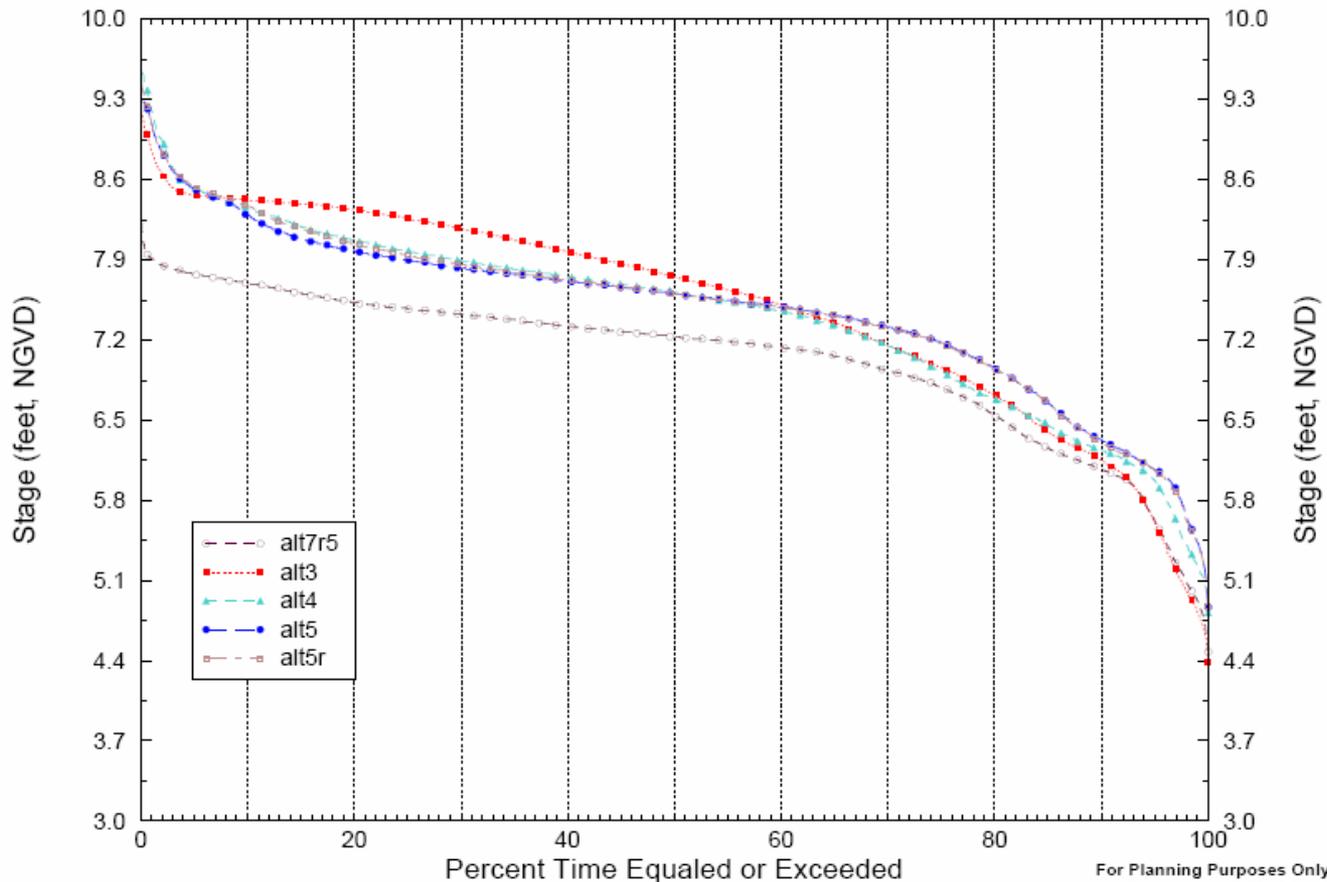
Note: The desired condition is to exceed the high water depth as few times as possible and go below the low water depth as few times as possible.

Run date: Thu Nov 17 00:52:14 EST 2006
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SFWMM V5.5.6

Osceola and Tiger Tail Camps

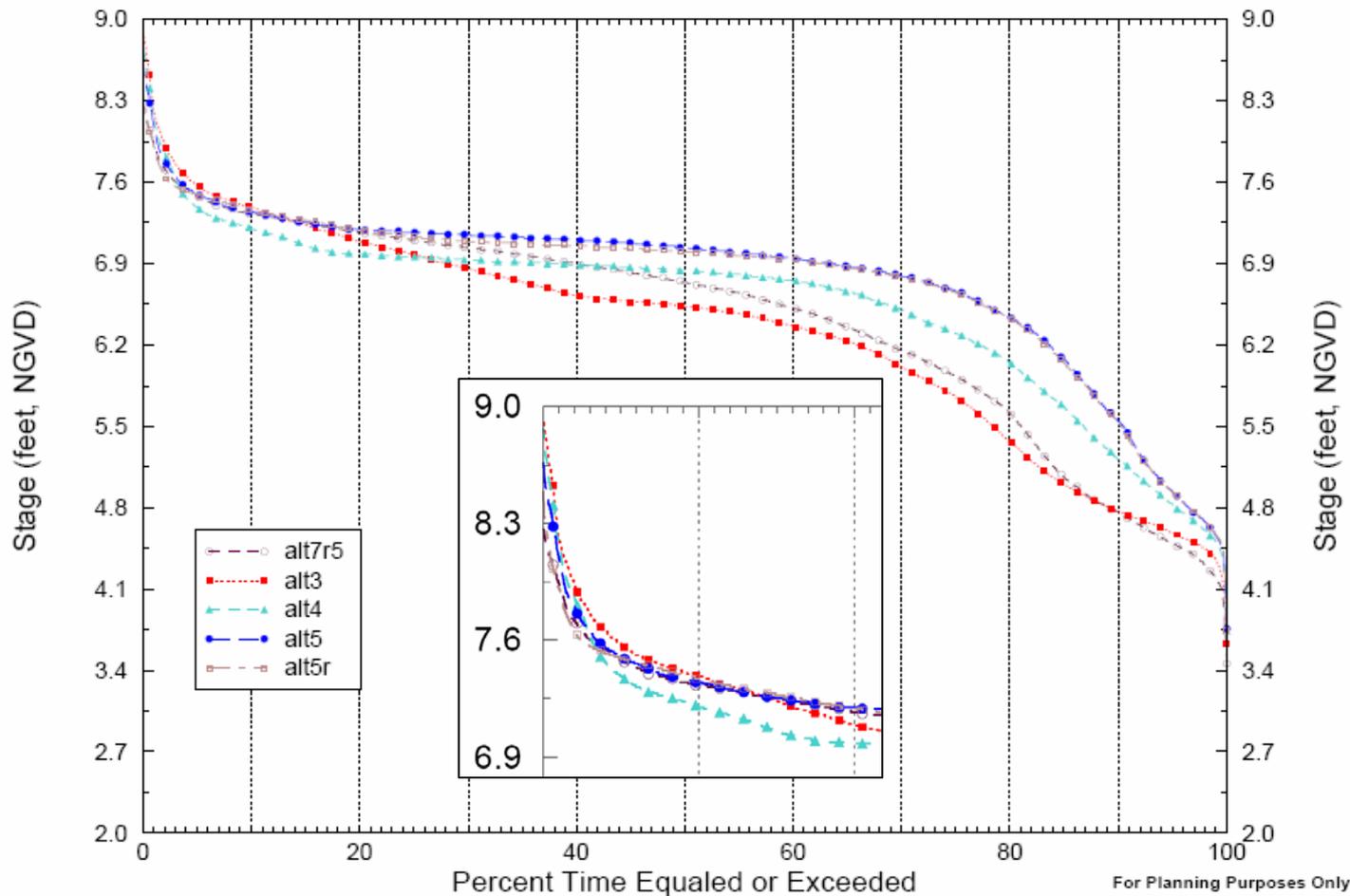
(Stage Duration Curve in L-29)

Stage Duration Curves for L-29 Canal at S-334



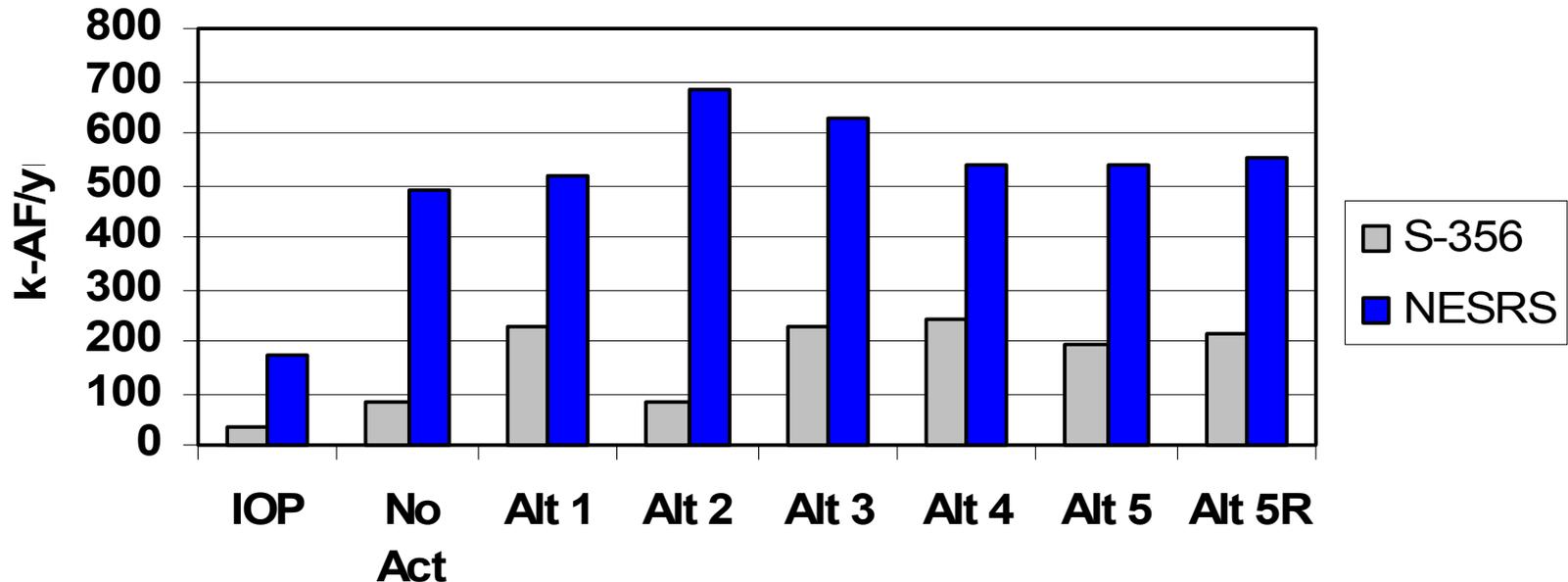
L-30 Stage Canal Stages

Stage Duration Curves for L-30 Canal at S-335



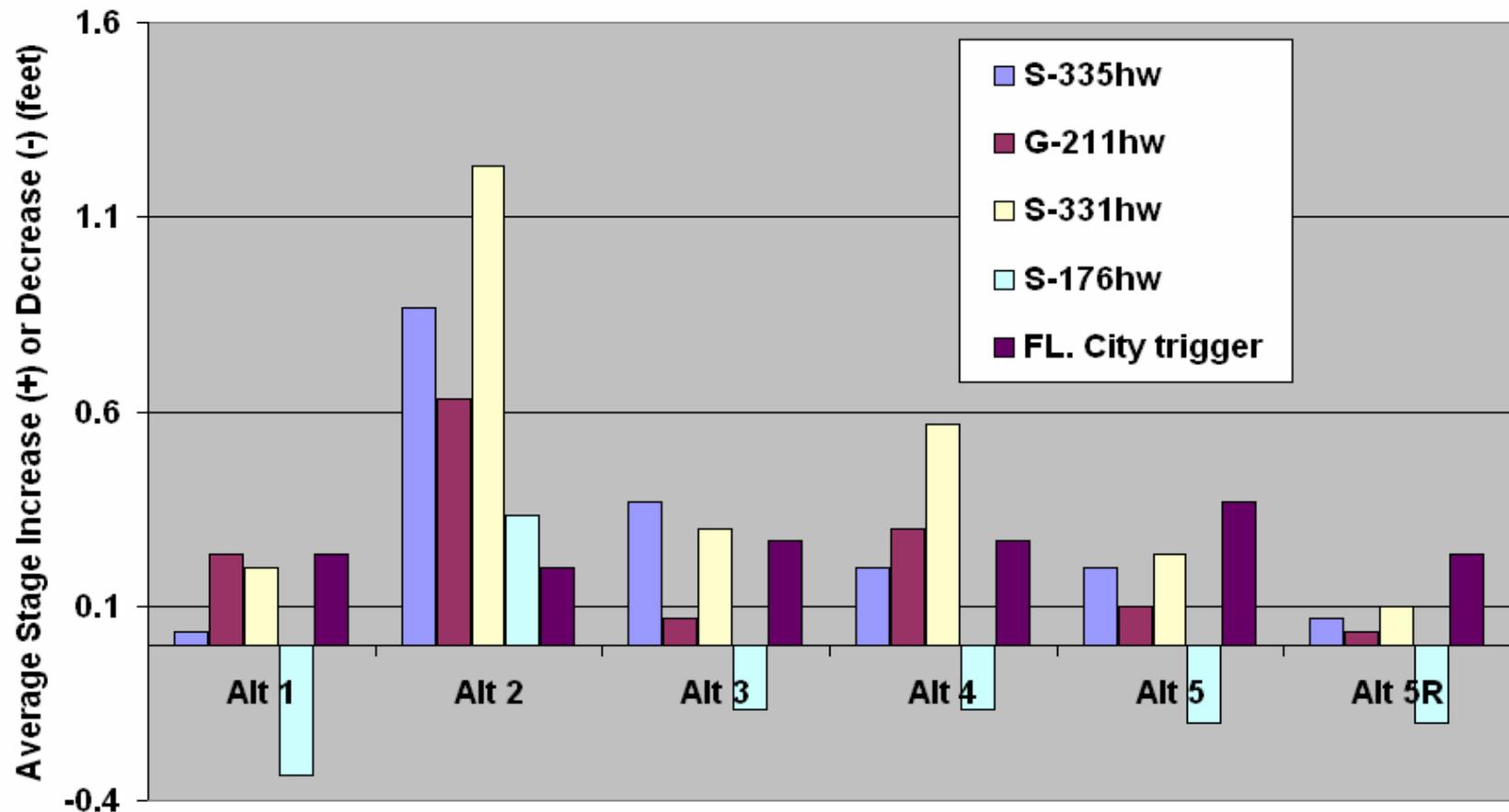
Mitigate Seepage Effects from Improved Deliveries to NESRS

Average Annual Flows NESRS, S-356



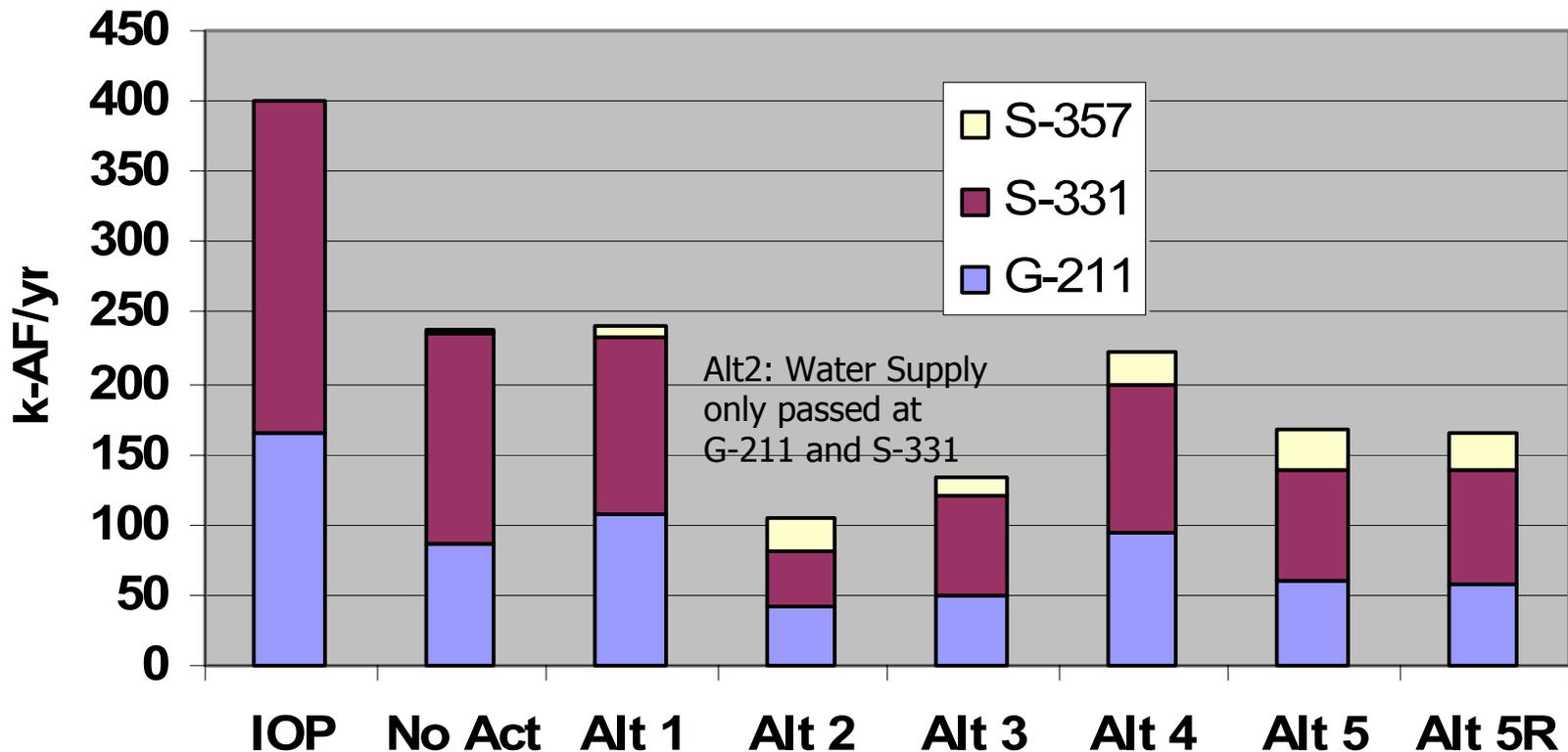
Maintain Level of Service in LEC

Stage Increase compared to IOP: Average of Peak, 2%, and 10% high-water levels



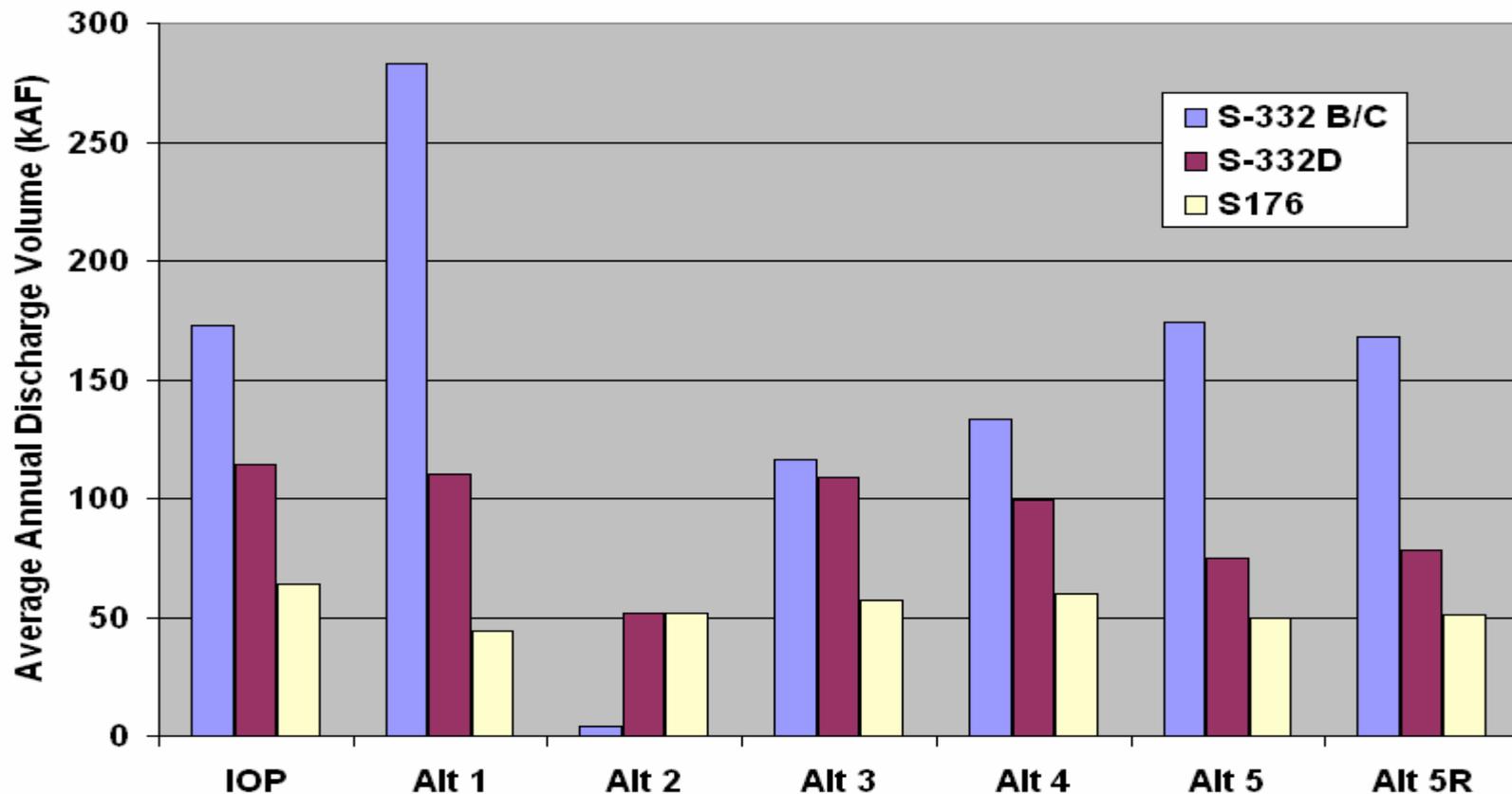
Minimize Flood Releases to SDCS

Average Annual Structure Flow



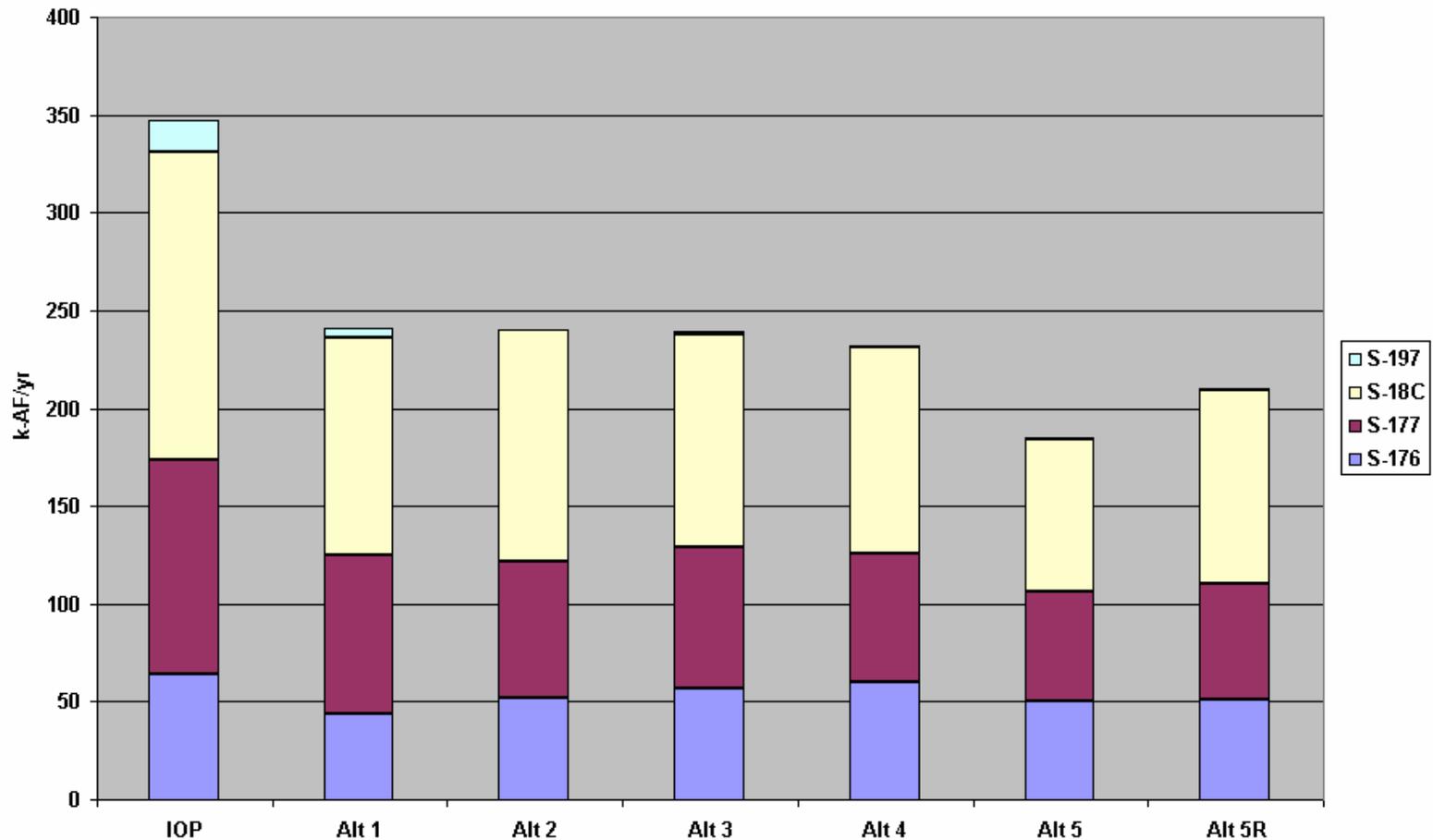
Utilization of C-111 Detention Area, Flows to Taylor Slough

Utilization of C-111 Detention Area Reservoirs / Taylor Slough to Limit S-176 Discharges



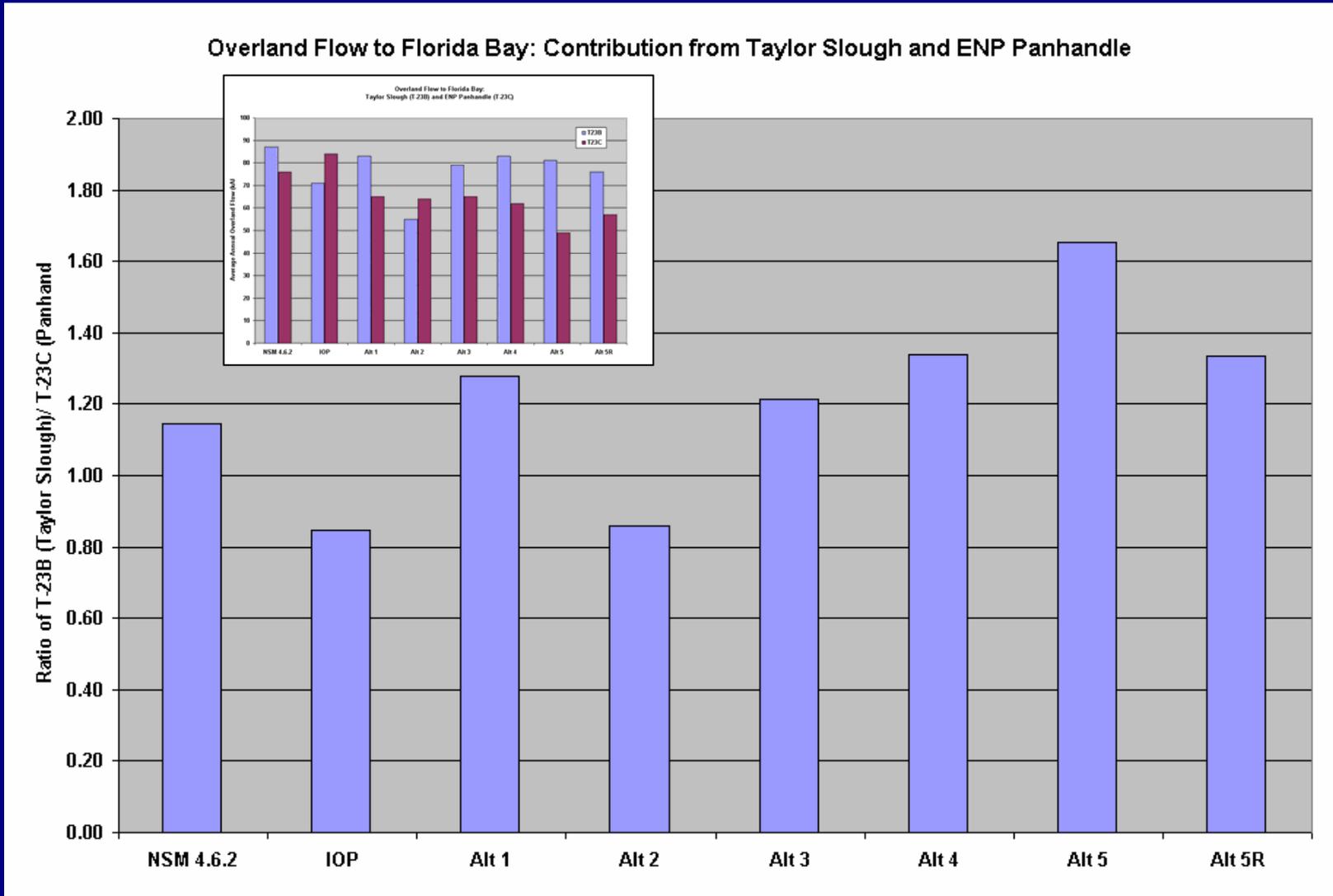
Reduce Damaging Discharges to Barnes Sound

Average Annual Discharges Lower C-111



Overland Flow to Florida Bay

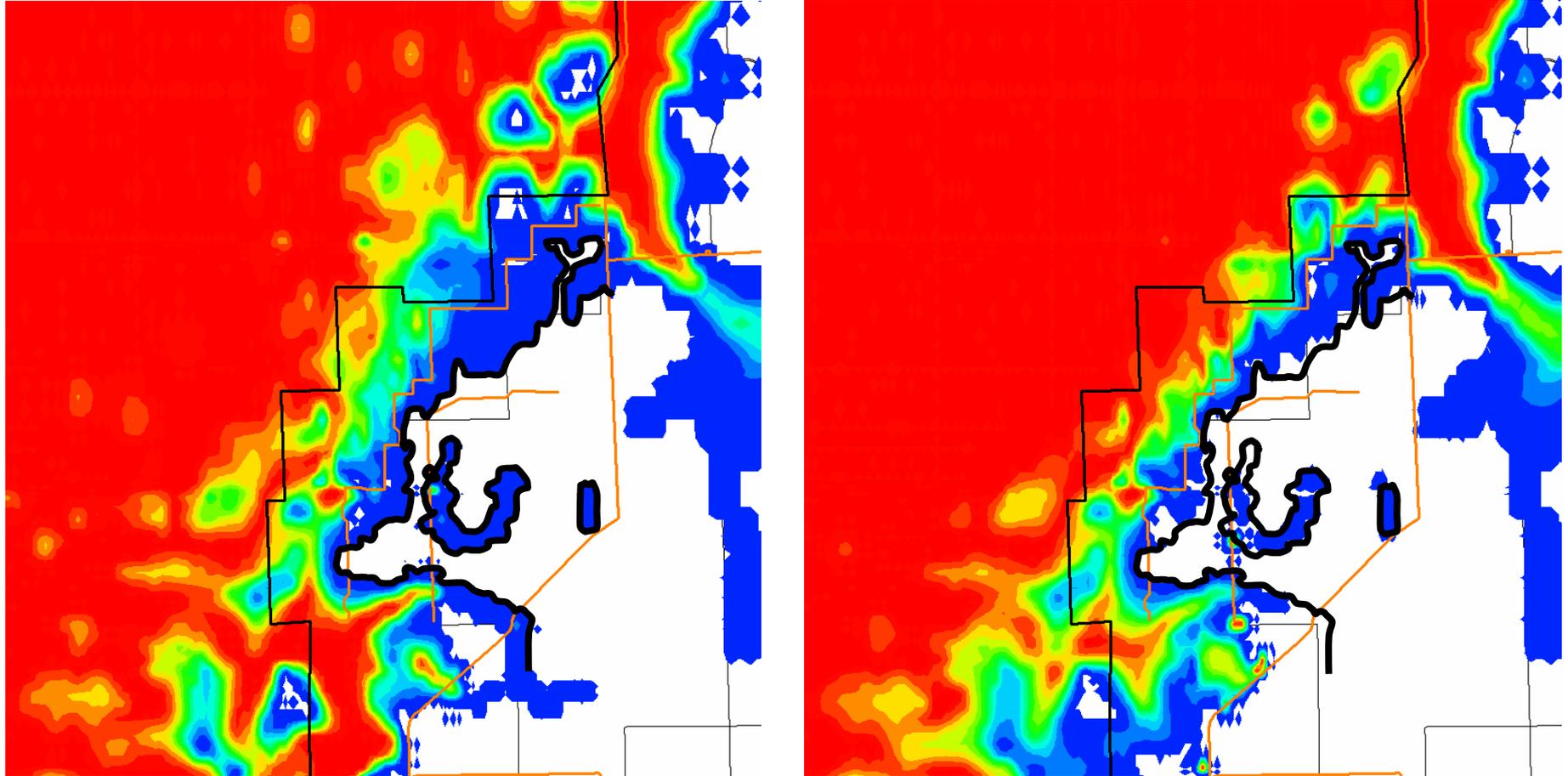
Ratio of contribution from T-23B(Taylor slough) and T-23C (ENP Panhandle)



CSOP Alternatives: Performance Evaluation Summary

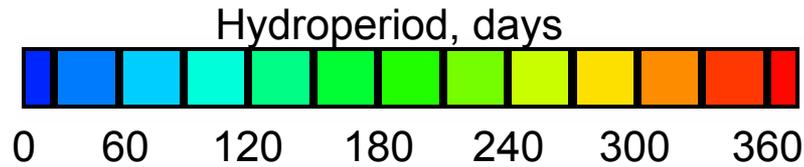
	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 5R
Deliver MWD Conveyance Volumes through WCA-3B to NESRS		√		√	√	√
Reduce Extreme High-Water Conditions throughout WCA-3A		√	√			√
Limit Increase in High-Water Conditions in WCA-3B	√				√	√
Deliver MWD Volumes to NESRS	√	√	√	√	√	√
Minimize Increase in Extreme Low-Water Conditions in WCA-3A	√			√	√	√
Reduce Low-Water MFL Exceedance Frequency in WCA-3B	√			√	√	√
Reduce Low-Water MFL Exceedance Frequency in SRS	√	√	√	√	√	√
Limit Potential Demand Cutbacks for LOSA Water Supply	√	√		√	√	√
Limit Potential Demand Cutbacks for LEC Water Supply	√			√	√	√
Maintain Level of Service, L-30	√					√
Maintain Level of Service, L-31N (G-211)			√			√
Maintain Level of Service, L-31N (8.5 SMA)						√
Maintain Level of Service, L-31N (S-176)	√		√	√	√	√
Reduce Flows to SDCS; Minimize Inter-Basin Transfer		√	√		√	√
Utilization of C-111 Detention Reservoirs as 'Hydraulic Ridge'	√		√	√	√	√
Reduce Damaging Discharges to Barnes Sound	√	√			√	√
Improve Flow Distribution for Taylor Slough / Florida Bay	√		√	√	√	√

MODBRANCH: 8.5 SMA, Plan 6D with ALT5R



Plan 6D

Alternative 5r



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