

OVERVIEW AND CURRENT UNDERSTANDING OF THE WATER AVAILABLE IN THE REGIONAL WATER BUDGET

Interagency Modeling Center

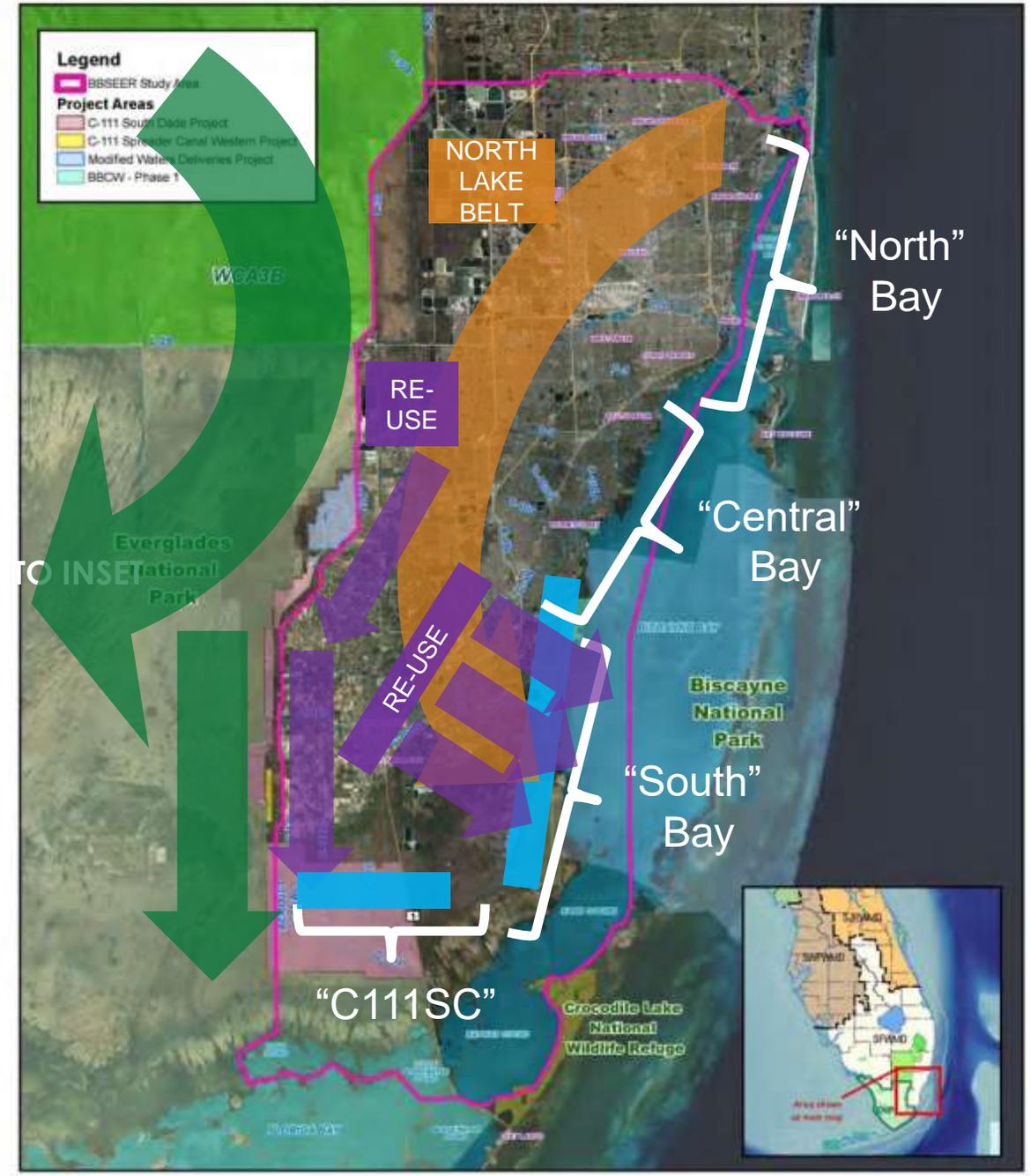
CERP's VISION:

Keep Everglades Water in the Everglades

Improve Coastal Wetlands and Nearshore / Sheet Flows

Store Water and Move from North to South Bay

Supplement Regional Water Budget with REUSE



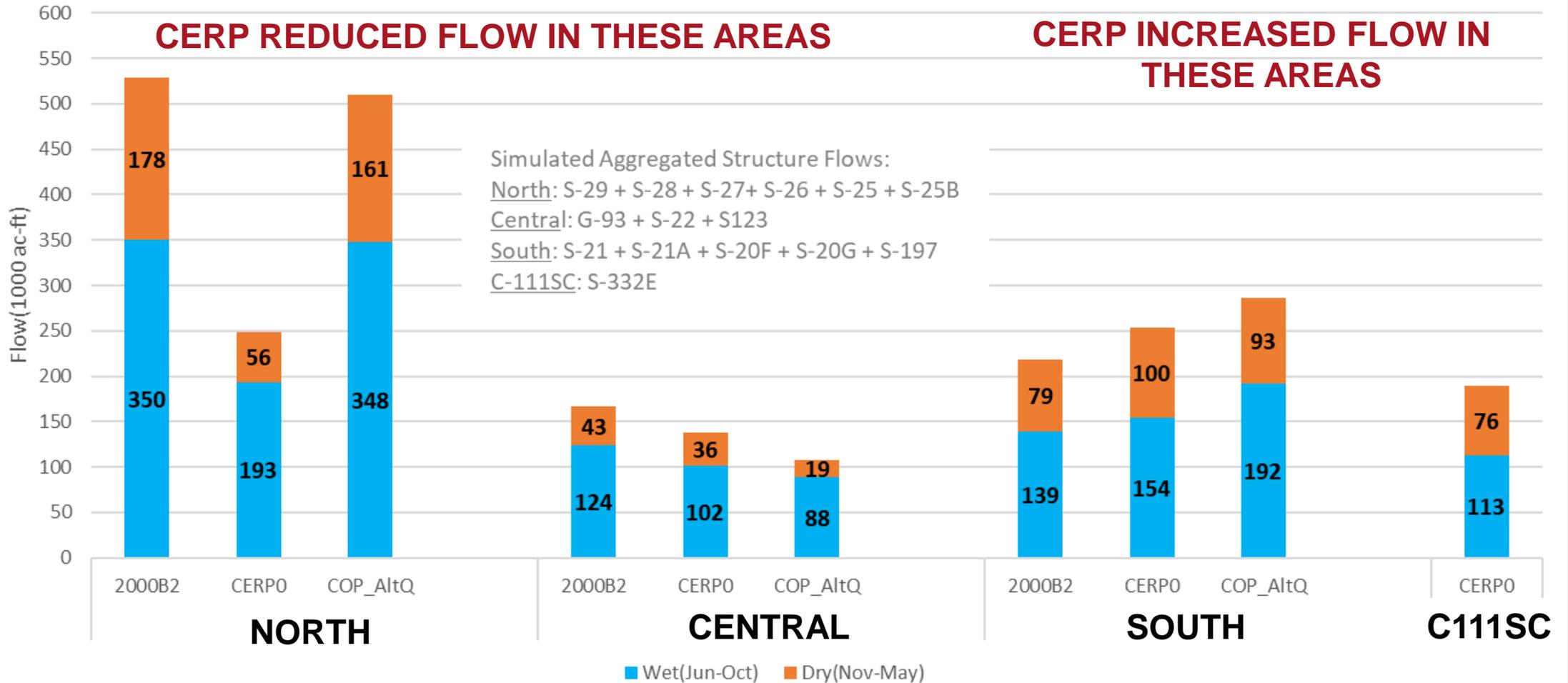
BBSEER AVAILABLE WATER BUDGET – THEN VS NOW

For comparative purposes, the following 3 model scenarios were reviewed

- **2000B2 (SFWMM):** A baseline scenario showing Pre-CERP conditions.
- **CERP0 (SFWMM):** Comprehensive Everglades Restoration Plan - a future with project run that incorporates all CERP components.
- **COP_ALTQ (RSMGL):** “Current” conditions taken from recent planning for the Combined Operations Plan (COP) – e.g. starting point for BBSEER

Note: Scenarios are from different models, but today’s presentation shows a common simulation period (1965-2000) to help illustrate comparisons

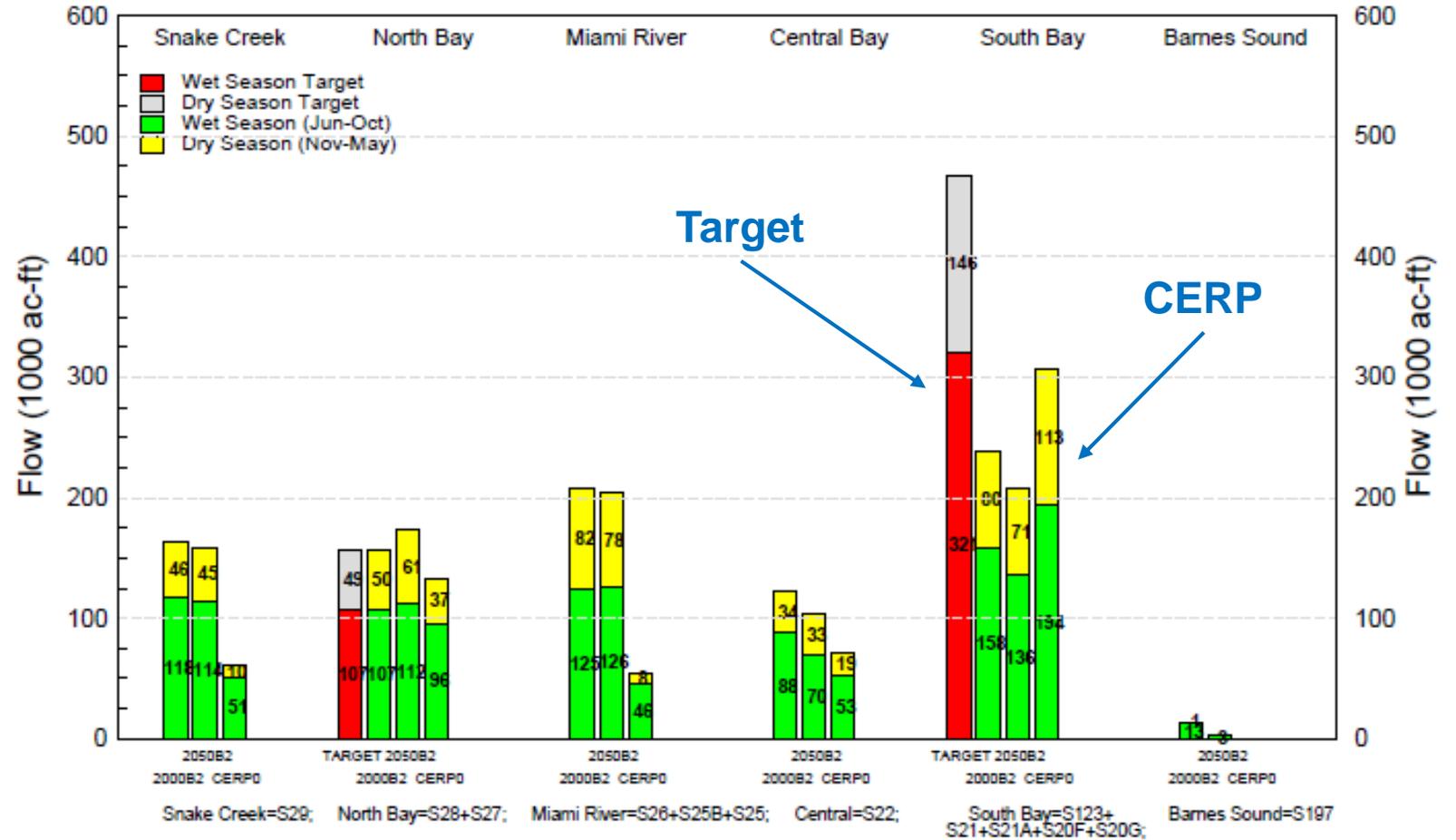
Simulated Mean Wet & Dry Seasonal Structure Flows Discharged into Biscayne Bay for 1965 - 2000



For Context:

This Performance Measure from CERP planning shows that while CERP improves flow in South Bay, it still fell short of Legacy Targets

Simulated Mean Wet & Dry Seasonal Structure Flows Discharged into Biscayne Bay for 1965 - 2000

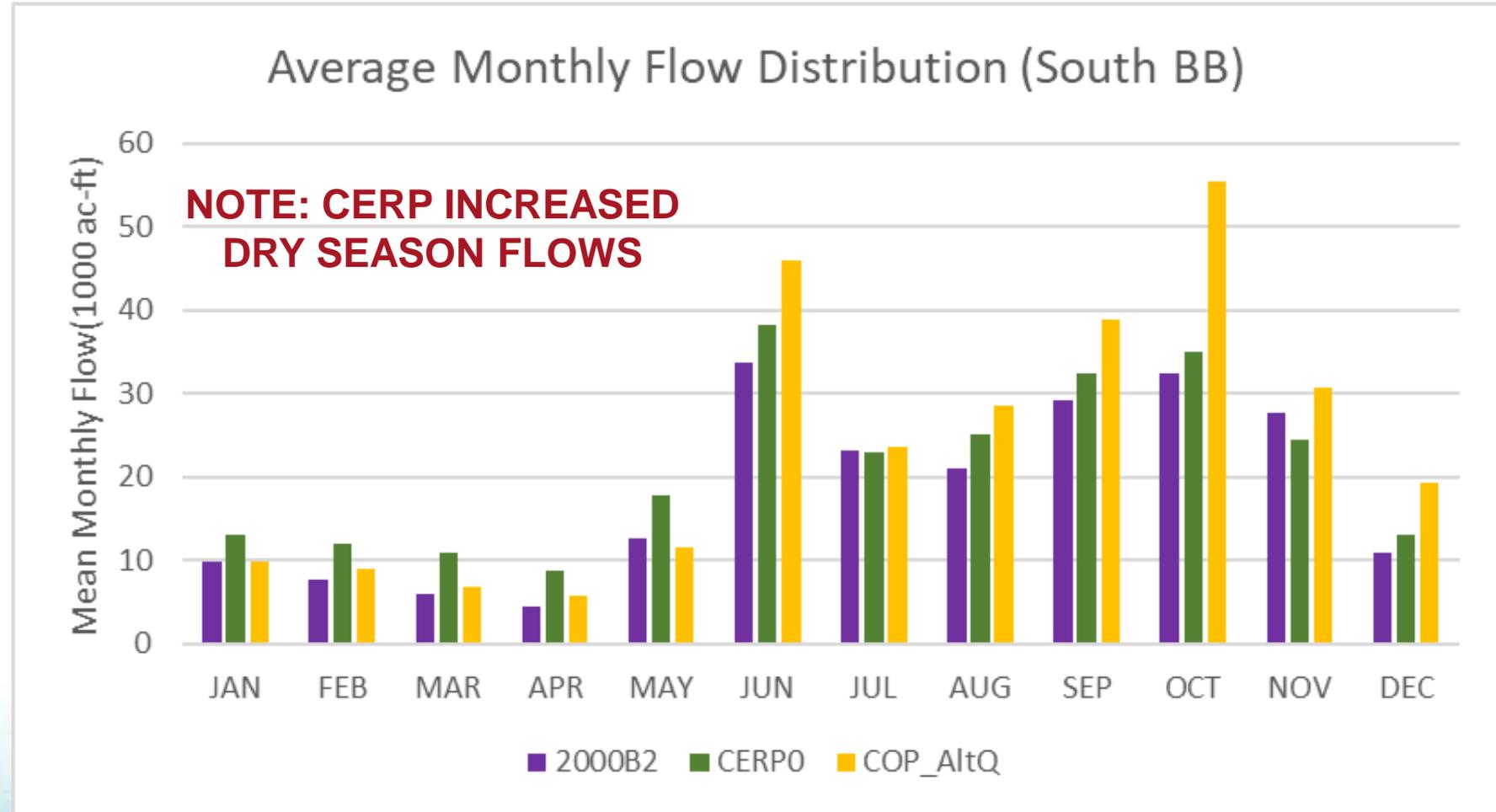


Targets for Central and South Bay reflect a 30% increase in the mean annual dry season flows over the 2000 Base. Targets for South Bay provide sufficient flows to create an average bottom salinity of 20 ppt in a zone extending 500 meters from shore during the wet season and in a zone extending 250 meters from shore during the dry season.

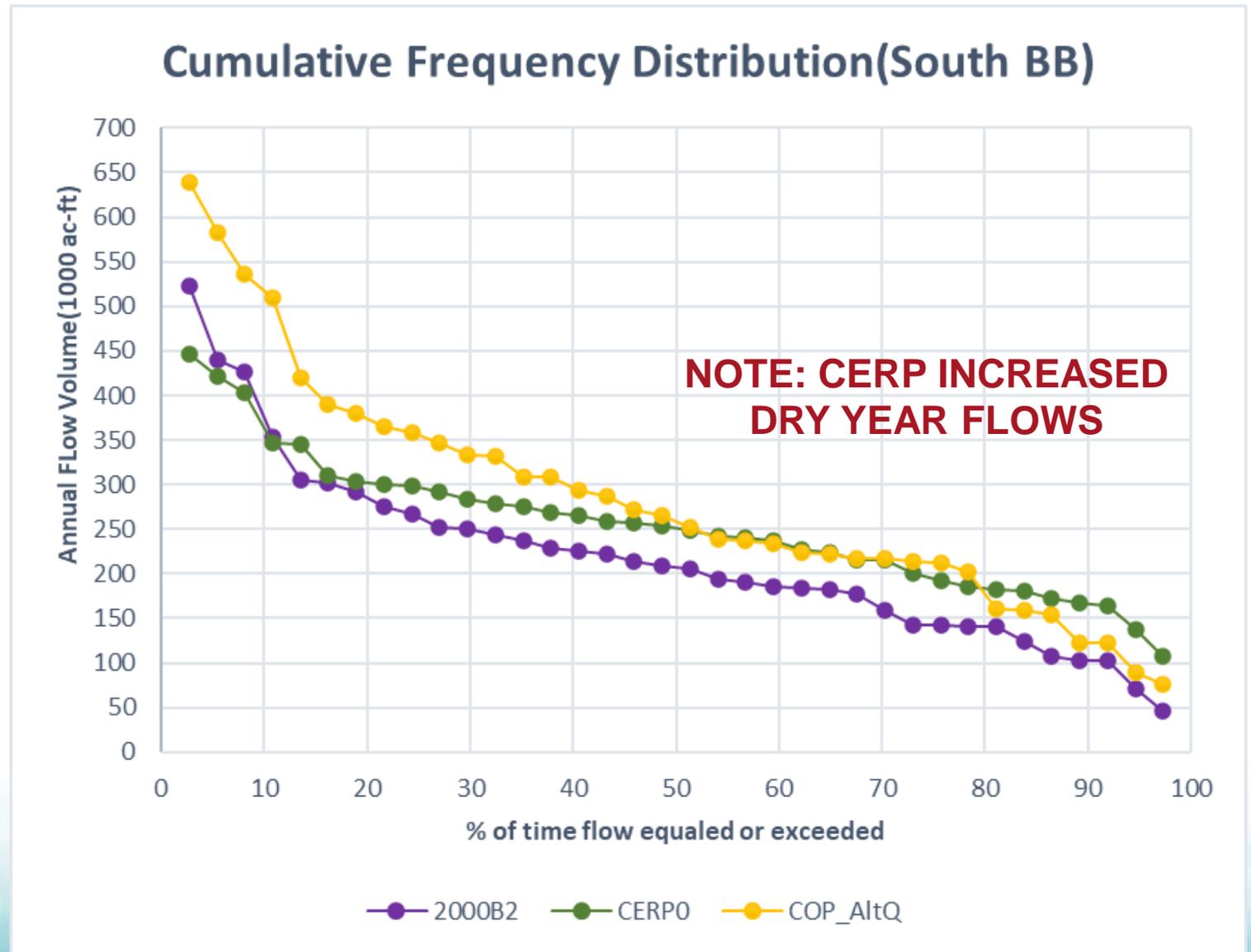
RECOVER Performance Measure

Run date: 11/16/16 15:50:49
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Intra-Annual (Seasonal) Flow Distribution for Southern Biscayne Bay

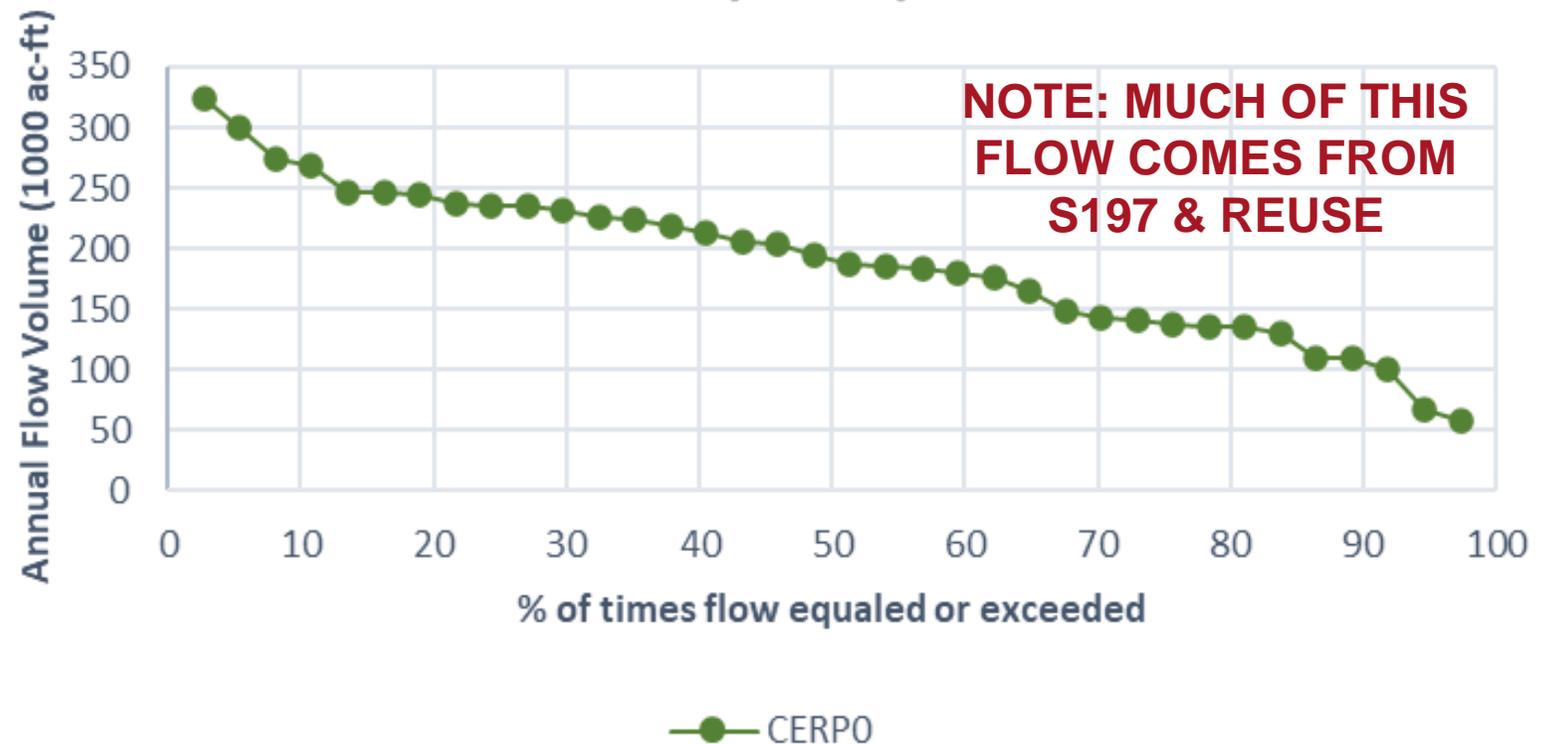


Inter-Annual (Year to Year) Flow Distribution for Southern Biscayne Bay



Inter-Annual (Year to Year) Flow Distribution to C111 Spreader Canal Area

Cumulative Frequency Distribution C- 111(CERP)



SUMMARY & KEY FINDINGS

- From a regional water budget perspective, initial reviews indicate that a similar water budget is available in the BBSEER effort relative to what was considered by the Comprehensive Everglades Restoration Plan (Dependency on REUSE Volumes remain)
- CERP envisioned projects that would result in significant redistribution of water both spatially and temporally (increase flows in drier times), but did not achieve legacy targets for Biscayne Bay
- BBSEER will need to examine the feasibility of CERP's conceptual plan (e.g. use of REUSE water, significant canal construction, etc...) and new information about system needs (ecology, vulnerability to sea level change, etc...)