ENP Evaluation of CSOP Alternatives

NATIONAL PARK SERVICE

Task Force Briefing
May 10, 2005

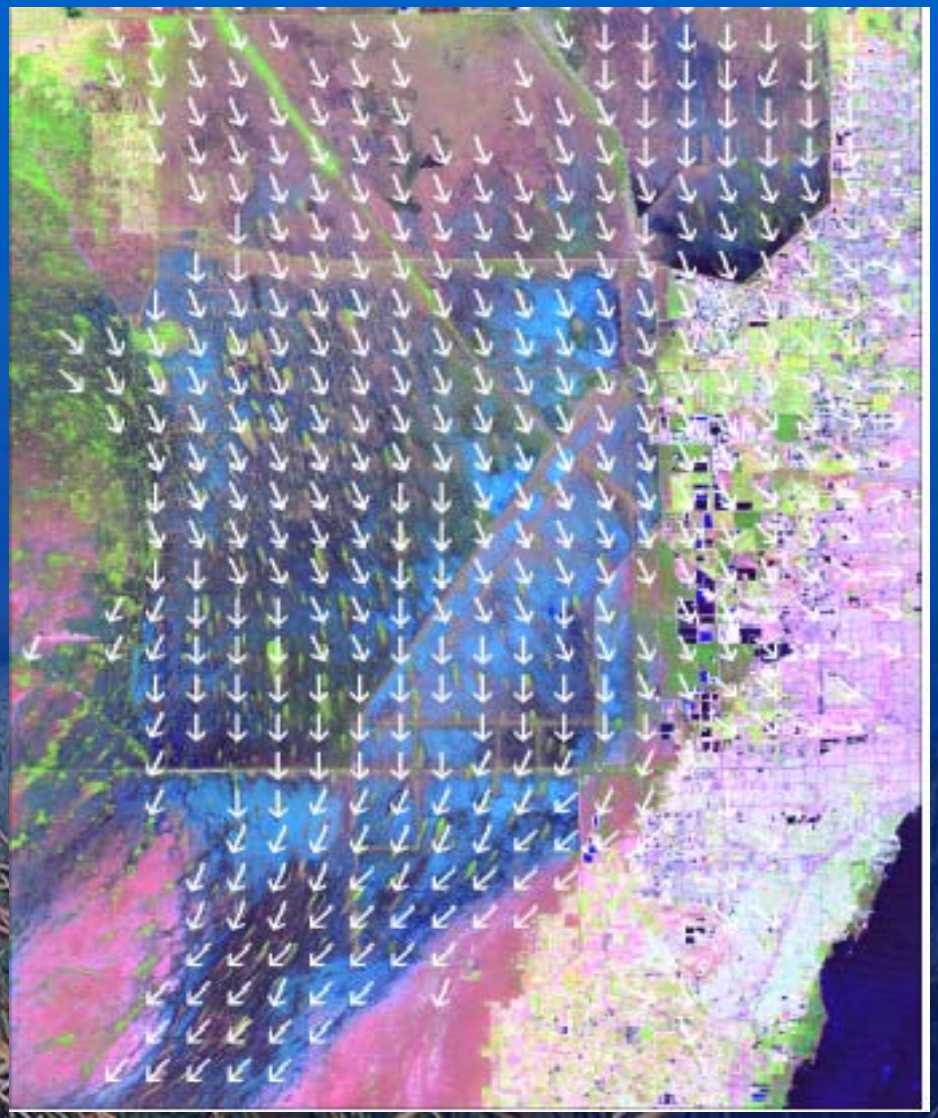
MWD Project Purpose: Improved Water Deliveries to NESRS

Construct modifications to improve water deliveries into ENP and take steps to restore natural hydrologic conditions in ENP by meeting 3 interrelated criteria: timing, volume and location.

“Location: Restoring WCA- 3B and Northeast Shark Slough as a functioning component of the Everglades hydrologic system”

Historic Flow Patterns Based on Landscape Features

- **Flow patterns in present-day WCA 3A were primarily to the southeast across the L-67 canal/levee.**
- **Flows into Shark Slough were primarily through the area of WCA 3B and into Northeast Shark Slough.**



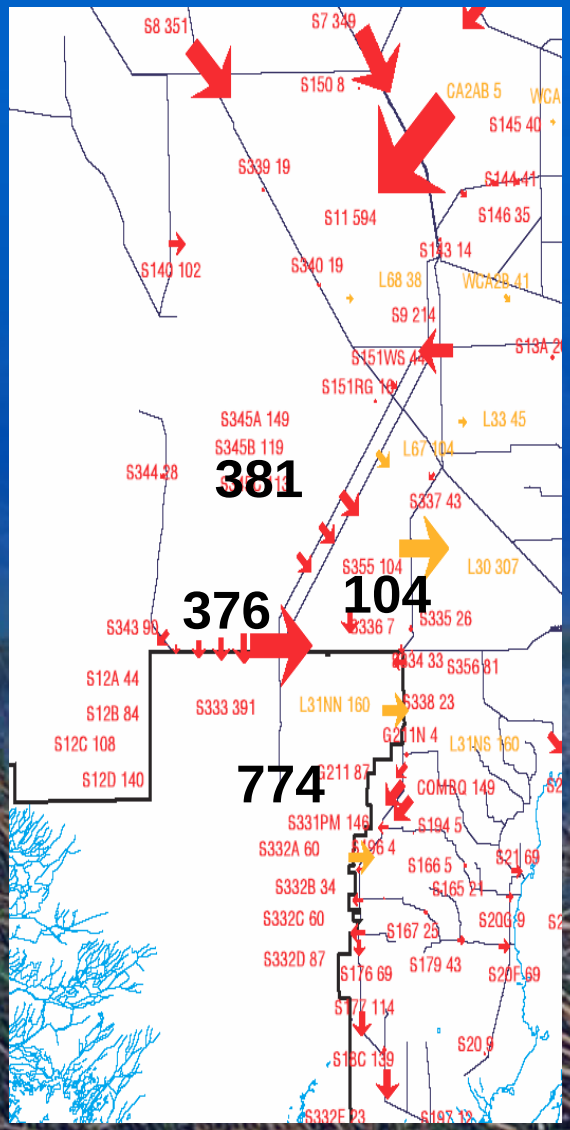
Source: SFWMD, 2004.

How will the Objective of Improved Water Deliveries to NESRS be Met?

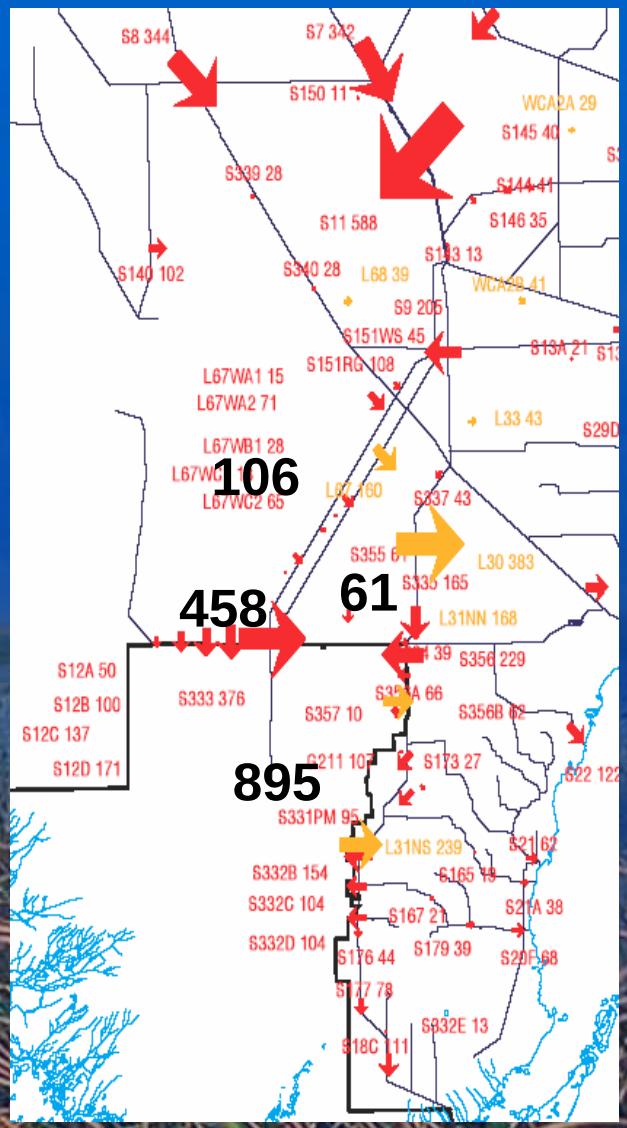
- The 1992 GDM states that the goal of restoring natural hydrologic conditions in NESS "will be met in terms of all three of its dimensions: location, timing and volume." Importantly,
- "The historic path of Shark Slough will be restored by bringing WCA-3B and NESS back into the flow-way between WCA-3A and Everglades National Park."

Average Annual Structure Flows (kacre-ft)

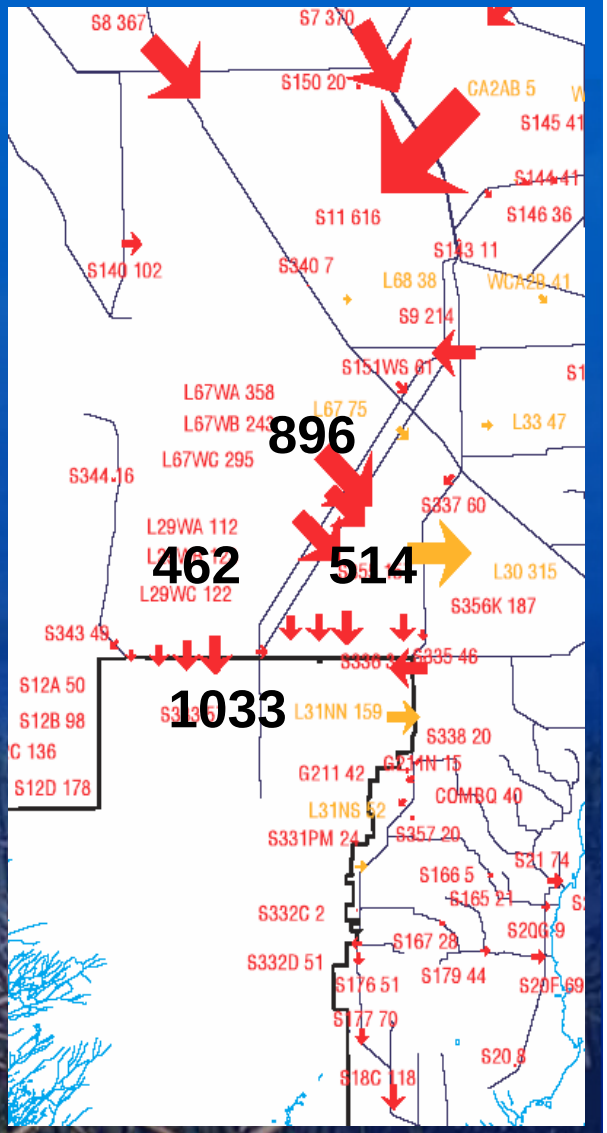
No Action



EAST

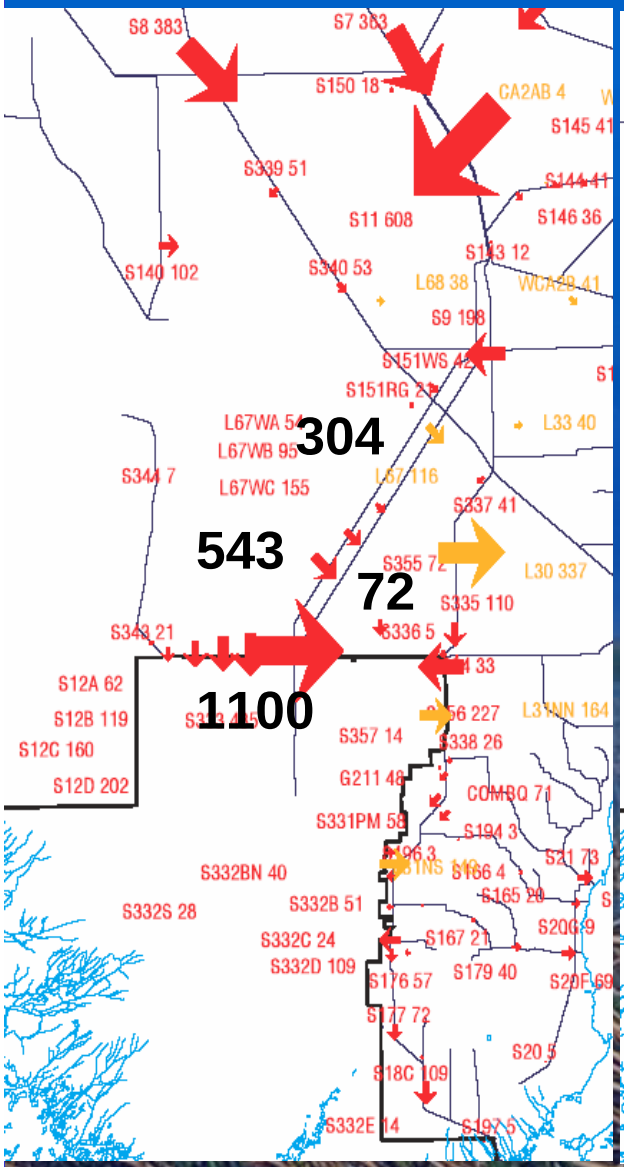


West

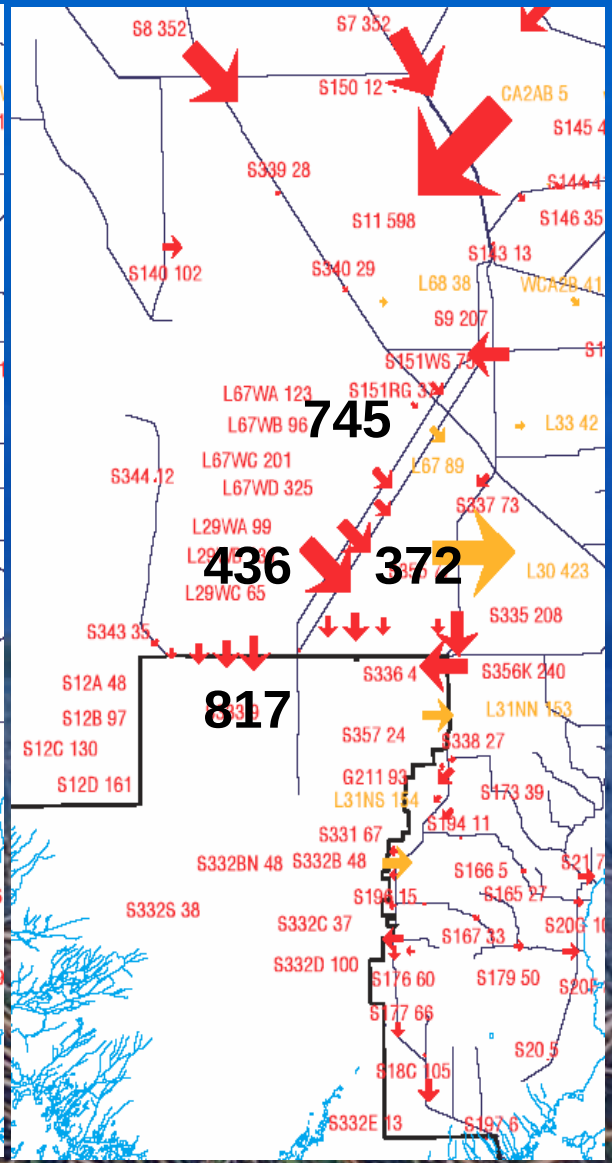


Average Annual Structure Flows (kacre-ft/year)

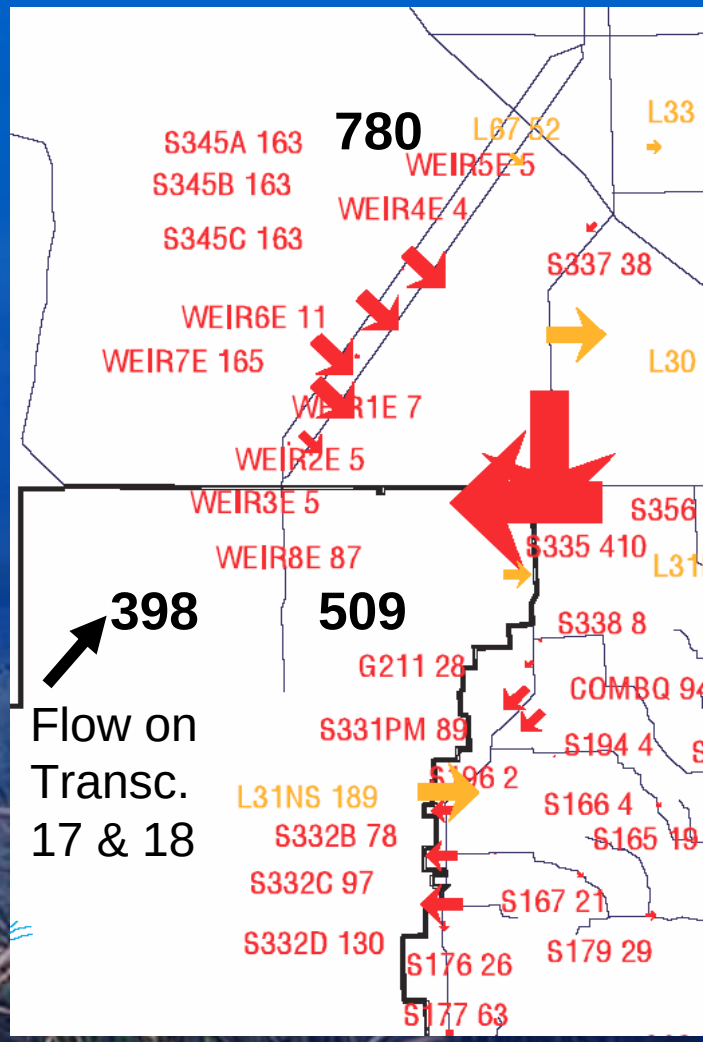
ALT3



ALT4



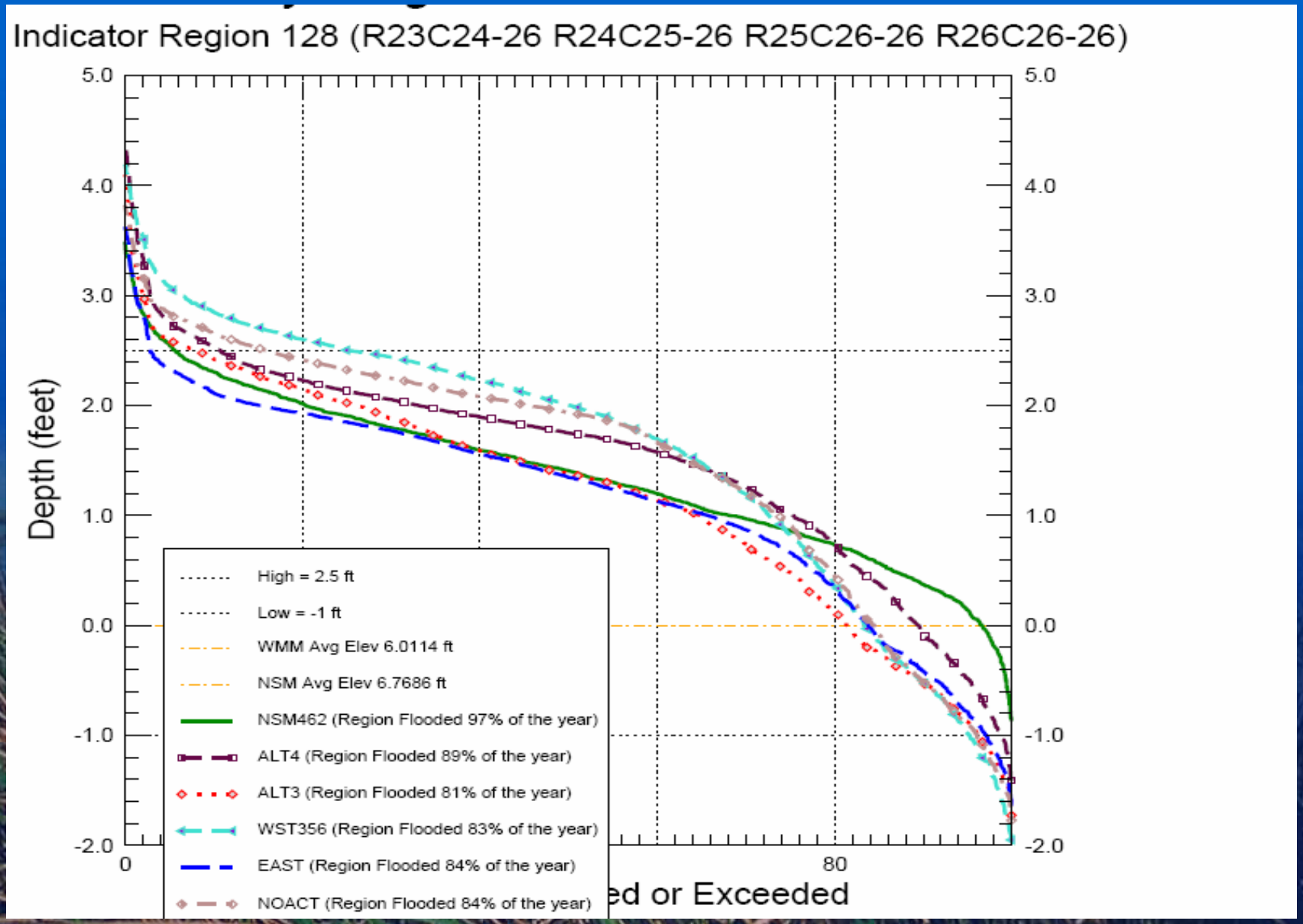
CERP0

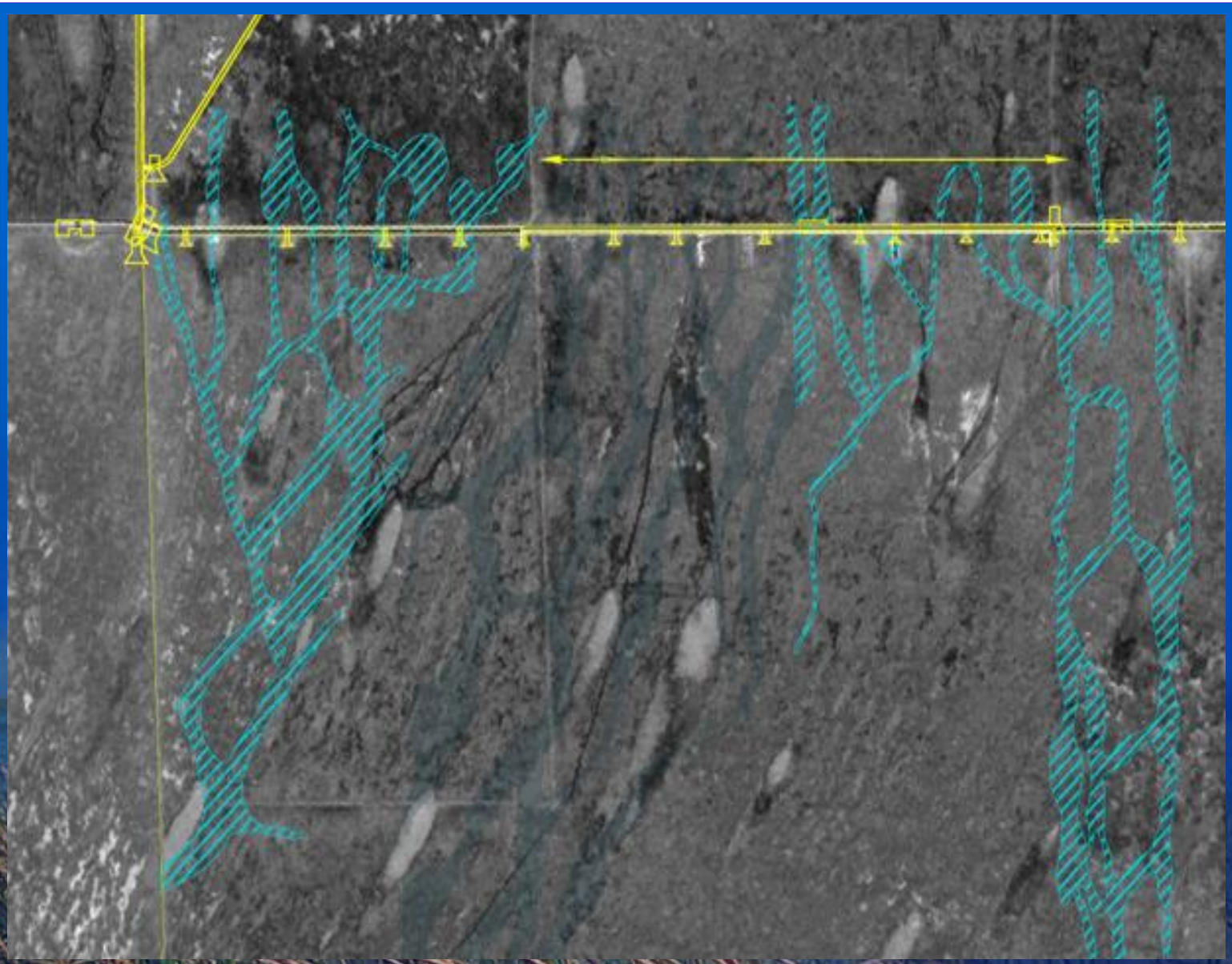


Performance Measure: % of Total ENP Flow is Sheetflow from WCA-3B to NESS

- No Action—13%
- East—7%
- Alternative 3—7%
- Alternative 4—45%
- West—50%
- CERPO—56%

Normalized Weekly Stage Duration Curves for WCA-3B East

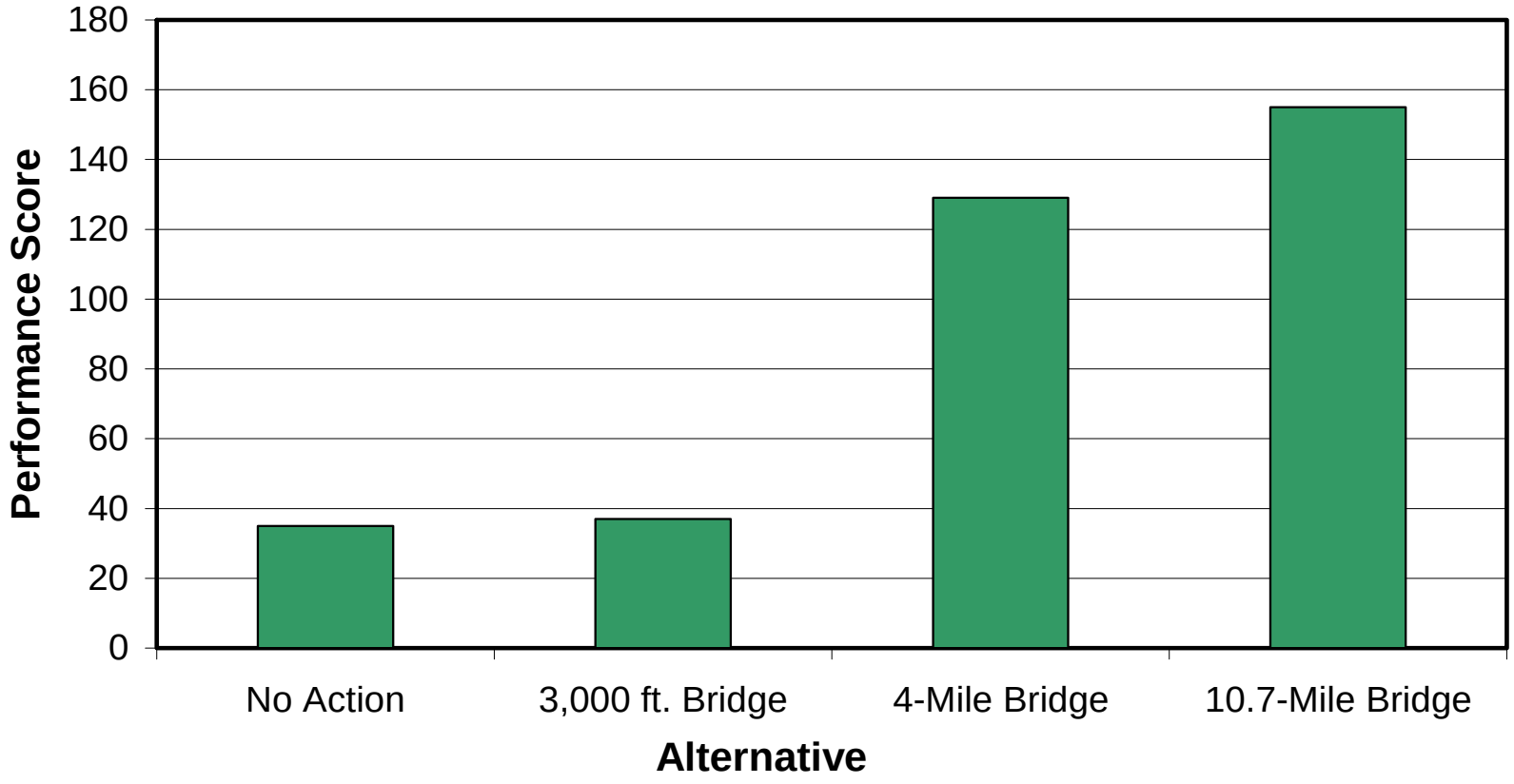




<u>1917 King Survey</u> (blue hatched) on a 2002 Enhanced Thermatic Map image. Theoretical sloughs (blue shade) have been placed in the gap between the two areas mapped by King.

<u>Photographic view of Western portion of Central Basin</u> taken during February 1917, in Section 24 on its Western boundary, Range 37 E, Township 54 South, looking west (King, 1917). Note the stream-like character of the slough.

Photographic view of “Shark River Headwater” and “lake like” conditions, taken late February 1917 at or near Section 20, Range 37 E, Township 54 South.

Tamiami Trail Alternative Plans

Performance for All Objectives