

COMPREHENSIVE EVERGLADES RESTORATION PLAN

# WESTERN EVERGLADES RESTORATION PROJECT (WERP)

INTEGRATED PROJECT IMPLEMENTATION REPORT  
& ENVIRONMENTAL IMPACT STATEMENT

South Florida Ecosystem Task Force Briefing

Presented by: Angela Dunn, USACE; Jennifer Reynolds, SFWMD

November 15, 2023



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US Army Corps  
of Engineers



Images courtesy of Big Cypress National Preserve,  
South Florida Water Management District, and the  
Conservancy of Southwest Florida





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# WESTERN EVERGLADES RESTORATION PROJECT (WERP)



Images Courtesy of Big Cypress National Preserve

## WERP Study Objectives:

- Restore freshwater flow paths, flow volumes and timing, seasonal hydroperiods, and historic distributions of sheetflow to reestablish ecological connectivity and ecological resilience of the historic wetland/upland mosaic.
- Restore water levels to reduce wildfires associated with altered hydrology, which damage the underlying geomorphology and associated ecological conditions of the western Everglades.
- Restore aquatic low nutrient (oligotrophic) conditions to reestablish and sustain native flora and fauna.

## STATUS:

- Waiver package under review to complete the study for consideration in WRDA 2024.
- Wingate Mill STA feature removed from TSP, restoring more natural overland flows.
- Additional modeling and performance measures complete for Alternative HNFR.
- Ongoing engagement with stakeholders and partners.





# ALTERNATIVE HYBRID NATURAL FLOW (HNFR)

The WERP Tentatively Selected Plan (ALT HNFR) honors the project objectives and constraints by:

- Redirecting water back to natural flow paths

**LEGEND**

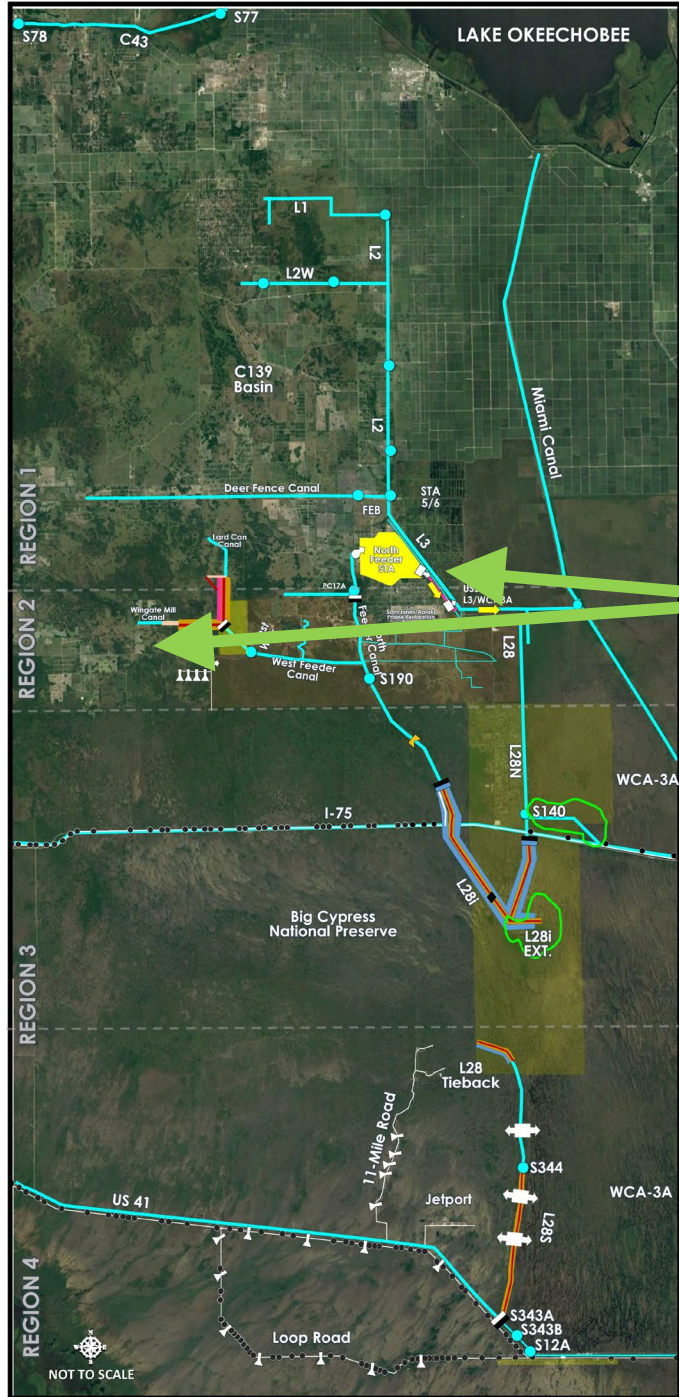
- Seminole Tribe of Florida Reservation
- Miccosukee Tribe of Indians Reservations
- Existing Culverts
- Existing Structures
- Existing Canals
- Existing Roads

**Features\***

- Water Treatment
- Inline Weir
- Embankment
- Pump
- Bi-Directional Control Structure
- Gated Culvert
- Culvert
- Plug
- Plug with Levee Tie-In
- Treated Water
- Spreader Canal
- Canal Backfill
- Canal Backfill/Degrade Levee
- Vegetation Restoration
- McCormack's Landing Restoration

\*Features are not to scale and do not represent final placement

Last Updated: 04-AUG-2023





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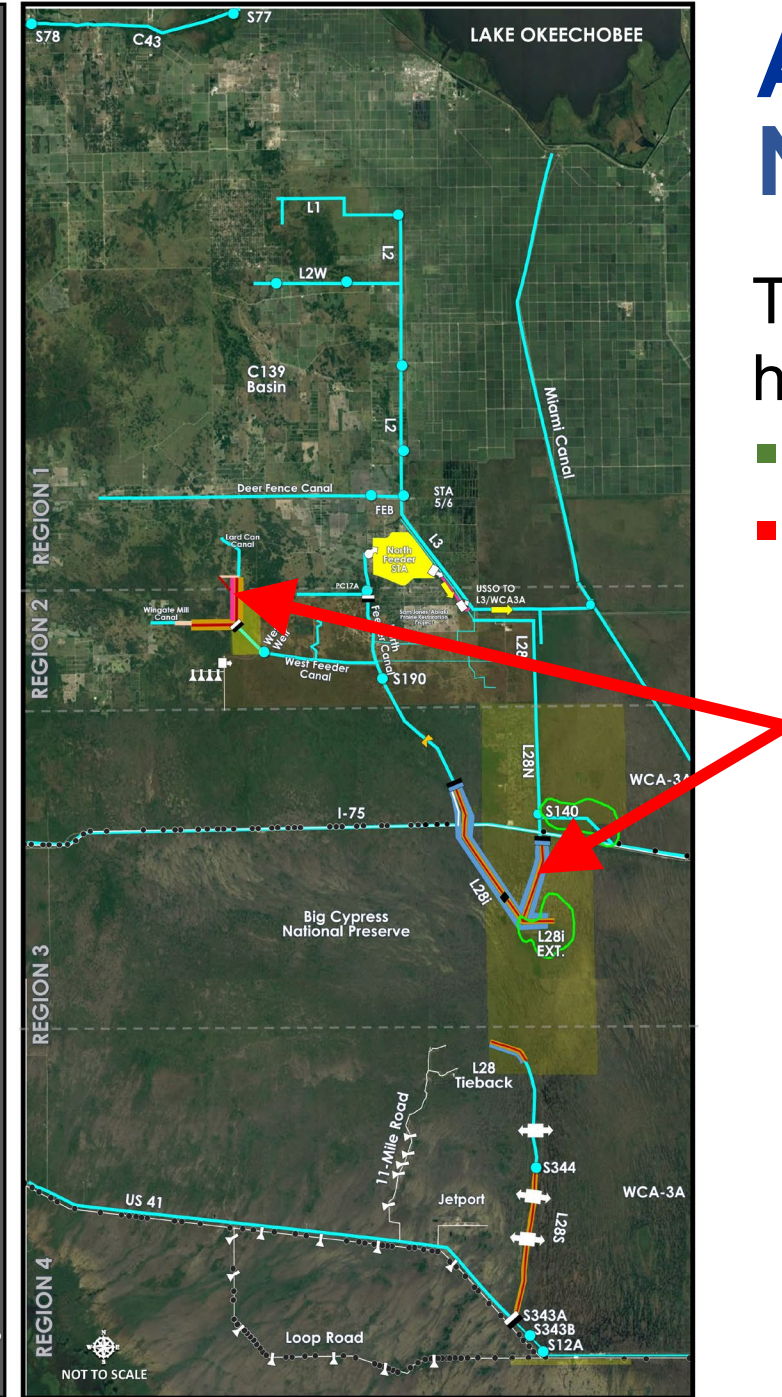
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- Removing levees that obstruct natural flow patterns (or adding structures across levees)

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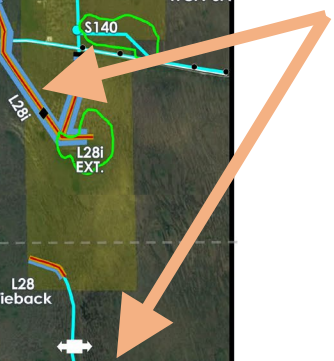
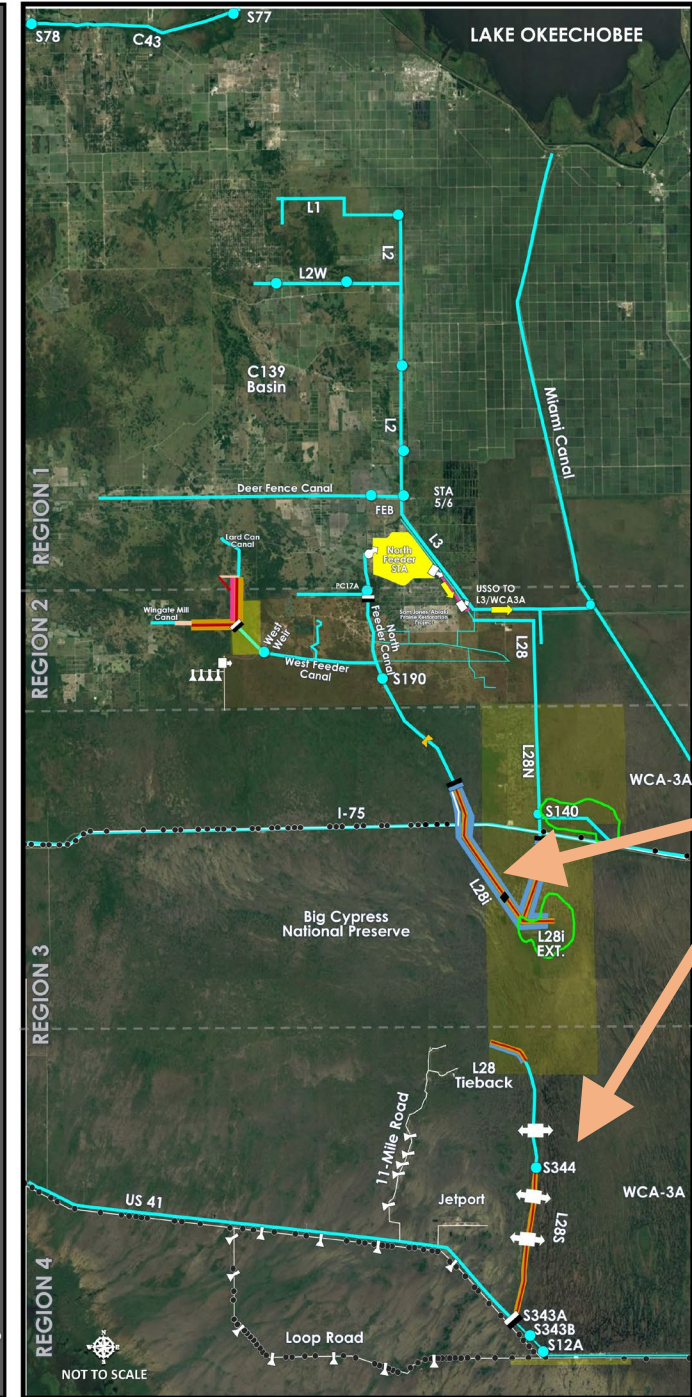
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- Maintaining flood water conveyance to avoid impacts to built infrastructure

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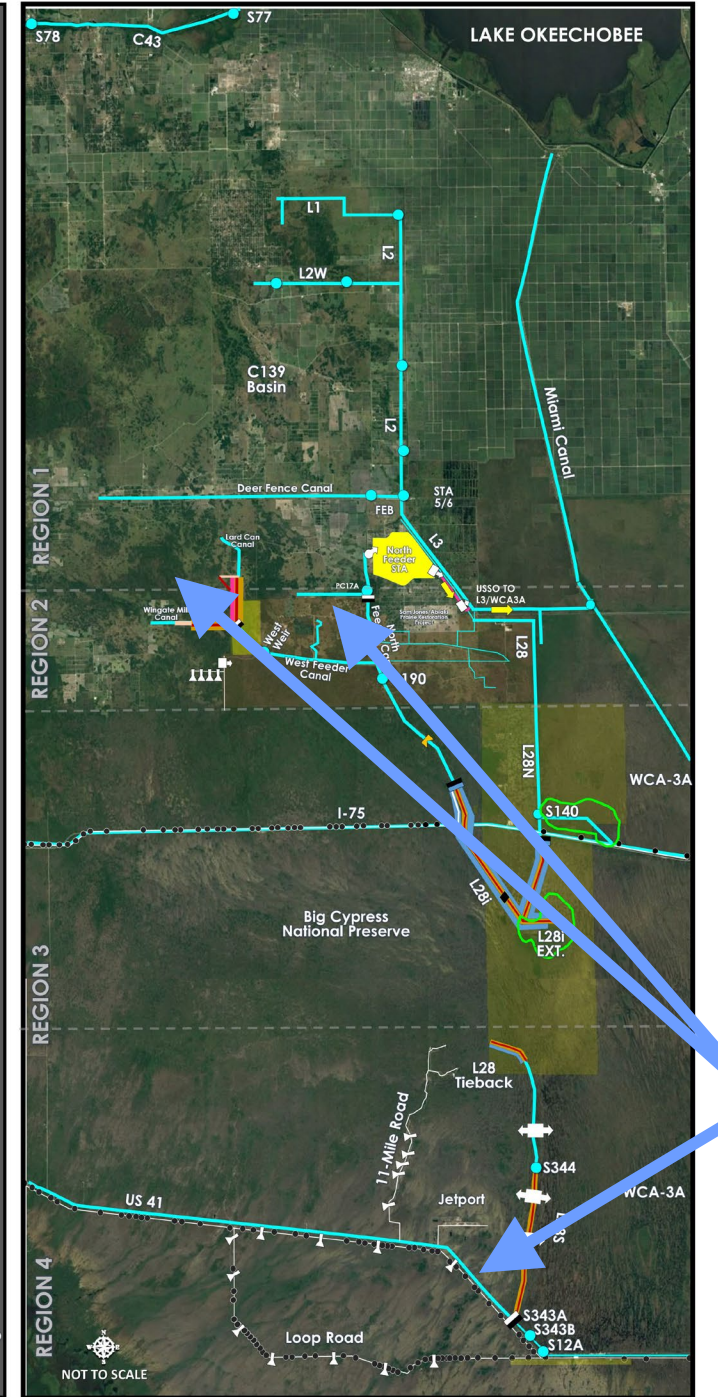
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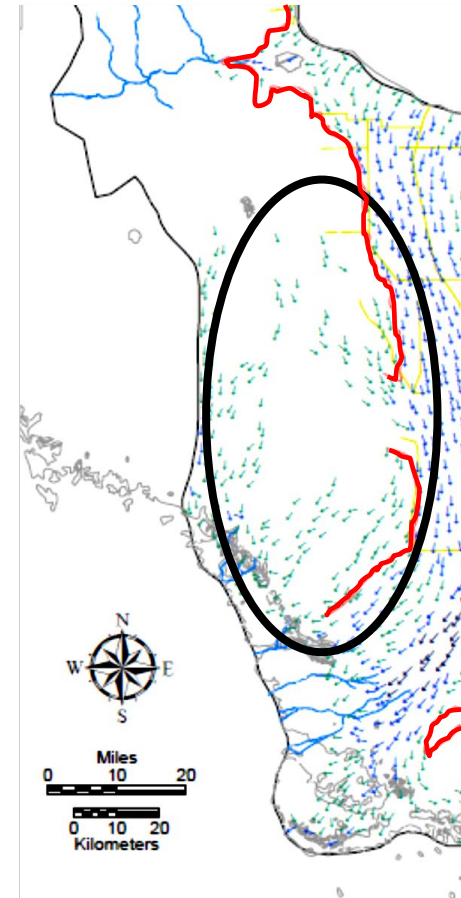
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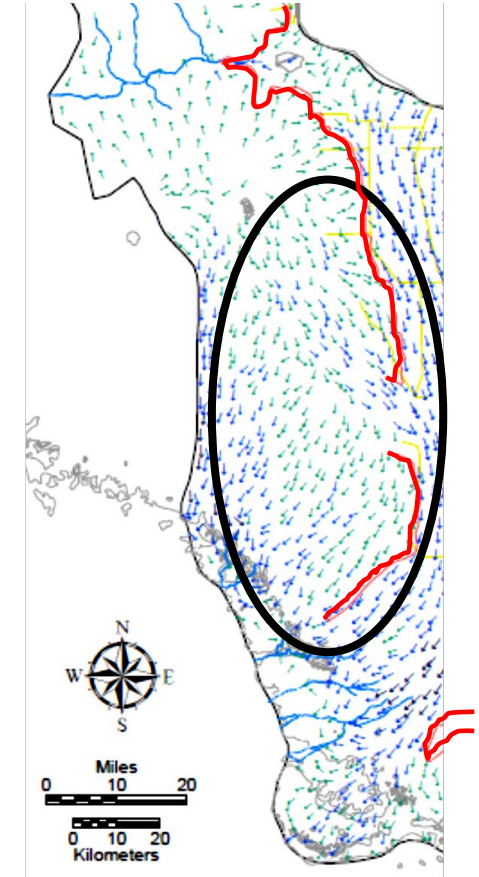
## Illustration of “Natural Flow”

- Application of the Natural System Regional Simulation Model (NSRSM), which is designed to estimate pre-drainage (canals) conditions with no man-made features, shows that for much of the WERP study area, there is little to no surface flows (green and blue arrows) in the dry season and more frequent surface flows in the wet season.
- The NSRSM flows cross current system canal and levee locations. This and other sources of information helped to inform where a natural flowpath existed.

DRY SEASON (DEC-APR)



WET SEASON (JUN-OCT)



NSRSM v3.5.2 long-term (1966-2005) average monthly flow vectors for the dry and wet seasons.

**Note: The red line on the maps shows the historic edge of the Everglades and the light-yellow traces show some of the current system canals (added for reference but were not part of the simulation).**



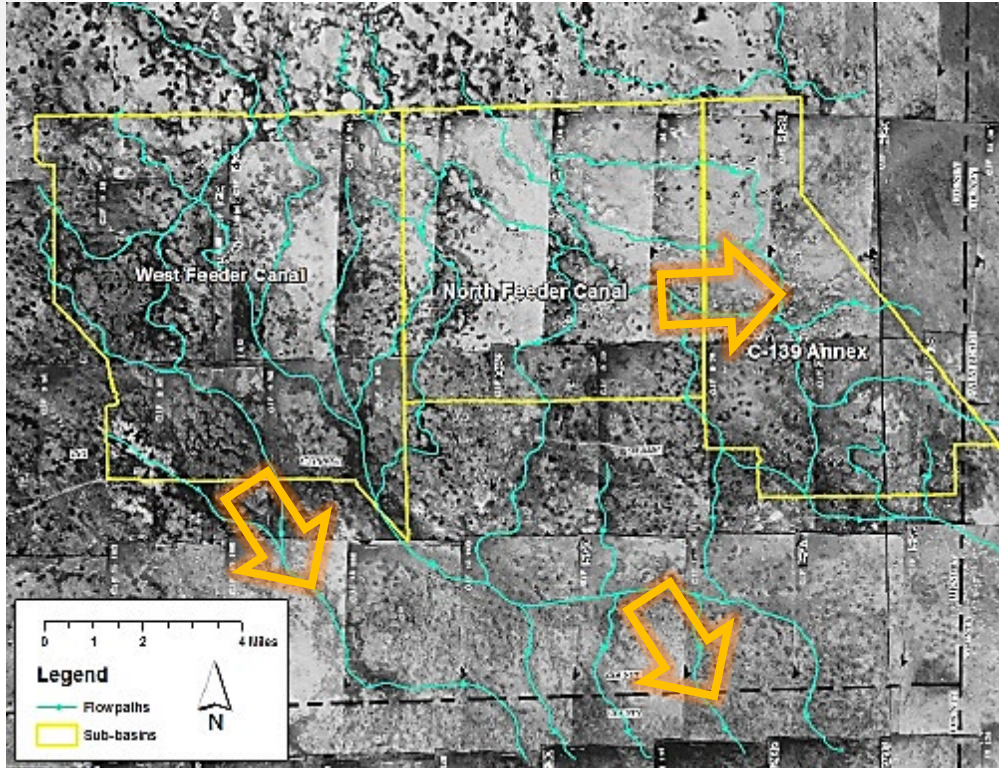


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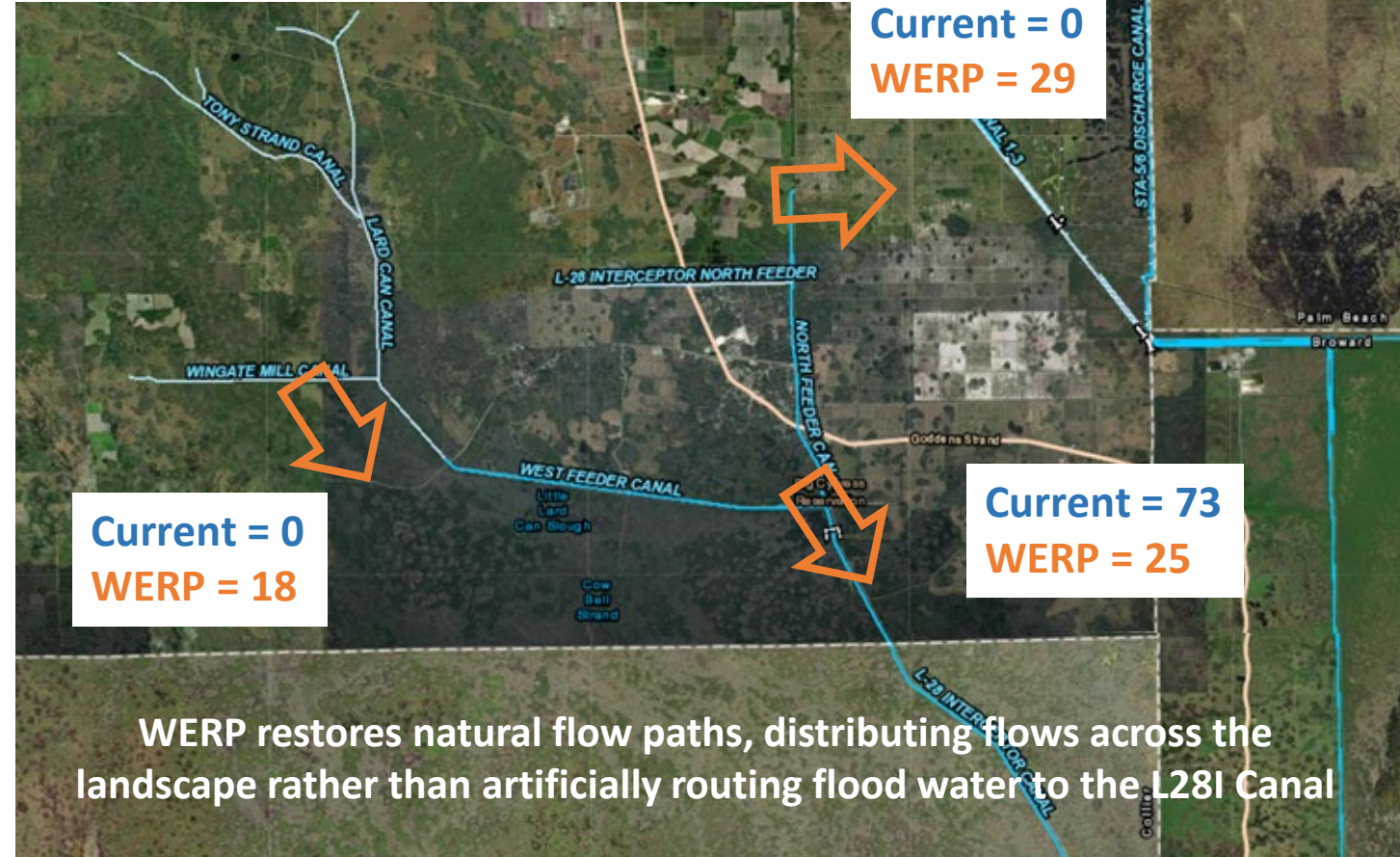
Historic 1940s aerial photography with orange arrows identifying flow paths based on observed hydric soils.



Legend:

# = Current Avg Annual Flows (kacft)

# = WERP Restored Avg Annual Flows (kacft)



WERP restores natural flow paths, distributing flows across the landscape rather than artificially routing flood water to the L281 Canal

Note: All Volumes Shown are Average Annual Simulated for 1965-2005 Record in kacft





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# WESTERN EVERGLADES RESTORATION PROJECT (WERP)



**How will the Project Address  
the Water Quality?**





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# INTEGRATED IMPLEMENTATION PLAN



## Includes Non-WERP and WERP Features

- SFWMD will continue to develop, design and conduct nutrient source control activities within the Feeder Canal Basin as a Non-WERP action.
- The implementation plan will describe the timing of the source control activities, which are anticipated to generally occur in the Feeder Canal Basin.
- The desired outcome of the source control activities in the North Feeder sub-basin are a downward trend in the total phosphorus concentrations at project culvert 17a.
- The sequencing of construction of components that make up the western flow way are dependent on the success of the source control activities in the West Feeder sub-basin and an effective monitoring plan.





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# KEY TAKEAWAYS



- WERP intends to rehydrate Western Everglades habitats and natural areas primarily through ground water.
- Private lands in the western flow way will have increased hydration as the Kissimmee Billy Slough is restored.
- Outside the Kissimmee Billy Slough, drainage and surface water ponding on private lands will remain within the range of current conditions.
- Ground water levels of private lands in Big Cypress National Preserve will increase. WERP intends to ensure those landowners continue to have access and functional use of their properties.
- There is no place in the WERP planning area where this plan increases water levels above the natural ecological ranges of the diverse mosaic habitat types present across the landscape.



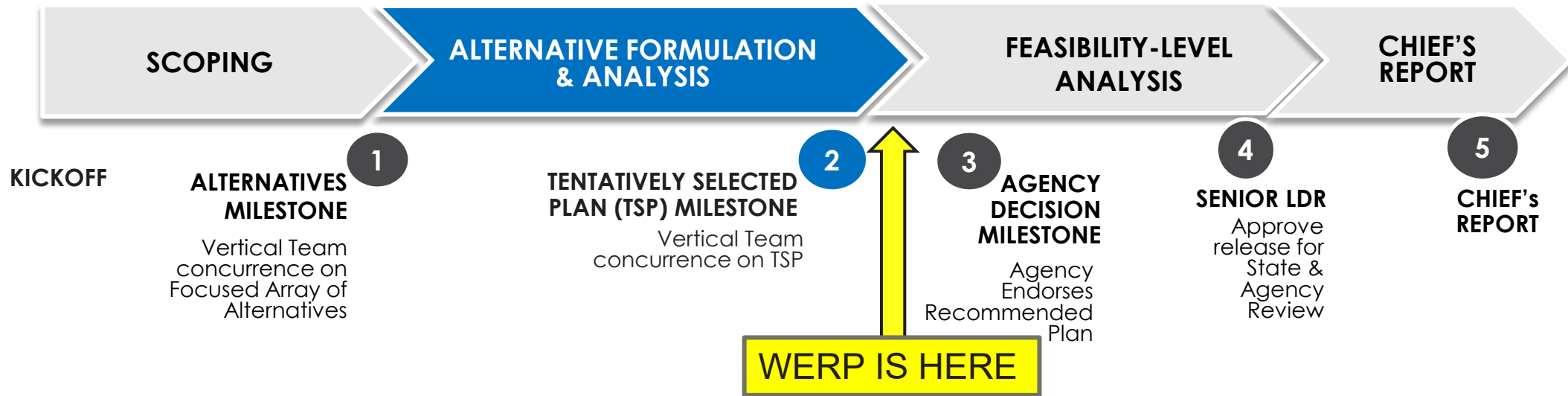


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# USACE PLANNING SCHEDULE



Kickoff: 2016	AMM: NOV 2016	TSP: AUG 2022 TSP abbrev: AUG 2023 Draft Report: DEC 2023	ADM: Mar 2024 Final Report: Jun 2024	Chief's Report: Sep 2024
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# UPCOMING WERP PUBLIC ENGAGEMENTS



- Release the Draft Report for Public Review **December 2023**
- Open House Meetings **December 2023**
- NEPA Review Meeting **January 2024**
- Public Comments due **February 2024**
- Complete Final Report June 2024
- Chief's Report signed September 2024
- Project Authorization Water Resources Development Act 2024