WESTERN EVERGLADES RESTORATION PROJECT



MEETING PURPOSES

- Introduce team members to the Western Everglades
 Restoration Project (WERP) and to each other
- Introduce USACE SMART planning
- Share perspectives on restoration in the western basins
 - Clarify restoration problems, opportunities, objectives, and constraints

Special thanks to the Southwest Florida Conservancy & the Big Cypress National Preserve for the use of their images.











INTENDED OUTCOMES & PRODUCTS OF THIS MEETING

- Understanding of general scope of the study
- Understanding of perspectives on western Everglades restoration and how the variety of perspectives will influence our work
- Improved understanding of SMART Planning
- Introduction to Risk Register
- List of WERP problems to address and WERP objectives
- Preliminary maps of conditions in the study area











OPENING REMARKS & PARTICIPANT INTRODUCTIONS











CERP & WERP OVERVIEW WESTERN EVERGLADES RESTORATION PROJECT

SOUTH FLORIDA ECOSYSTEM PROJECT OVERVIEW

Presenter:

Matt Morrison, Federal Policy Chief, Everglades Policy & Coordination Chief South Florida Water Management District (SFWMD)



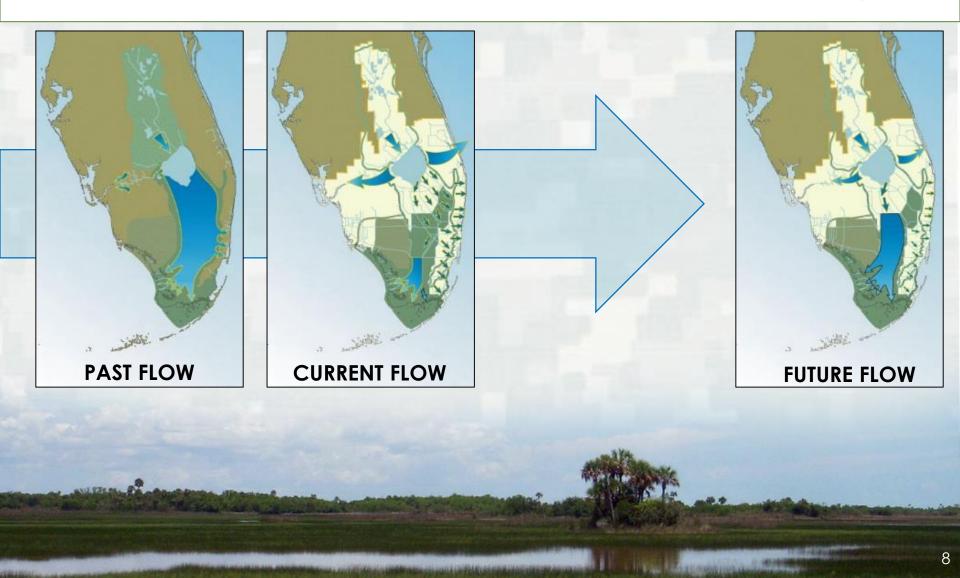
WHY WERP? WHY NOW?

WERP IS A KEY COMPONENT OF EVERGLADES RESTORATION

- National-level interest in initiating western basins restoration now
- Important Tribal contributions to Central Everglades
 Planning Project
- Following Integrated Delivery Schedule (IDS)
- May increase operational flexibility of Lake Okeechobee
- Need to examine inflows into Tribal Reservations,
 Water Conservation Area 3 and Big Cypress National Preserve

SYSTEM-WIDE PERSPECTIVE

Increased Operational Flexibility = Relief to Estuaries and Restoration of Flows to Everglades



COMPREHENSIVE EVERGLADES

RESTORATION PLAN

Includes 68 components to be implemented over 30+ years

Features include:



Aquifer Storage & Recovery



Surface Water Storage Reservoirs



STAs for Water Quality

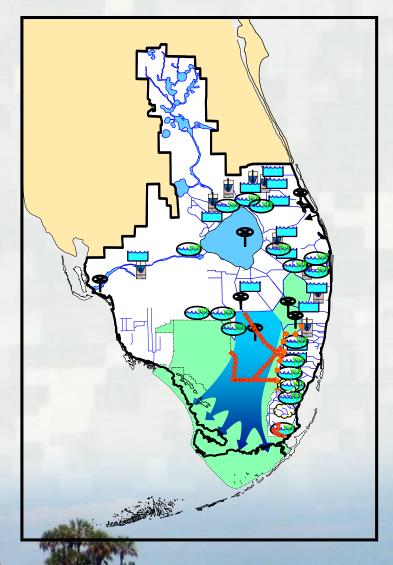
Seepage Management



Removing Barriers to Flow



Revised Operations



SOUTH FLORIDA ECOSYSTEM RESTORATION



Pre-CERP Foundation Projects

- Kissimmee River Restoration
- Modified Water Deliveries
- C-111 South Dade

Significant Progress/ Nearing Completion

What's next?

1st Generation CERP

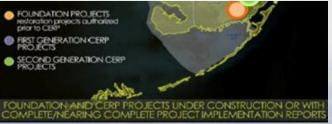
- Melaleuca Eradication Facility Completed
- IRL-South Under Construction
- Picayune Strand Under Construction

2nd Generation CERP

- C-43 Reservoir Under Construction
- Broward County WPA Design
- C-111 Spreader Canal Western Features Operational
- Biscayne Bay Coastal Wetlands Partially Constructed
 & Operational

Completed and Active Planning Studies

- Central Everglades Planning Project Authorization Pending
- Loxahatchee River Watershed Restoration Planning Underway
- Lake Okeechobee Watershed Project Planning Underway
- Western Everglades Restoration Project Planning Underway



SYNCHRONIZING PRIORITIES INTEGRATED DELIVERY SCHEDULE (IDS)

	Yellow	FISCAL YEAR														
Project	Book Code				2018						2024	2025	2026			
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Big Cypress/L-28 Interceptor (Western Everglades)	CCC		€xxxx	• •••••	0000000											
EAA Storage & ASR/Decomp Ph2	G, GG															
C-111 Spreader Canal Eastern & BBC₩ Ph2	₩₩,FFF						€x000	•	0000000		•					

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- Developed through a public process
- Based on technical information
- Integrated Delivery Schedule (IDS) was completed in November 2015
- Identifies two upcoming CERP planning efforts

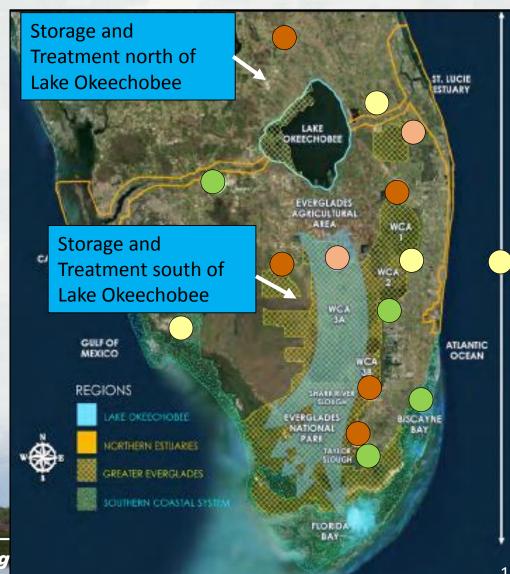


SOUTH FLORIDA ECOSYSTEM RESTORATION "WHAT'S NEXT"



BUILDING STRONG

- Foundation Projects
- Generation 1 Projects
- Generation 2 Projects
- Existing Planning Studies
- Upcoming Planning Studies







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WESTERN EVERGLADES RESTORATION PROJECT OVERVIEW

Presenter:

Dr. Kelly Keefe Restoration Biologist, Planner

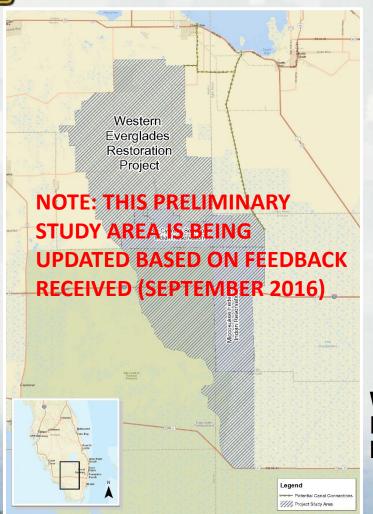
U.S. Army Corps of Engineers (USACE)



WERP'S PURPOSE



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The purpose of the Western Everglades Restoration Project is to improve the quantity, quality, timing, and distribution of water needed to restore and reconnect the western Everglades ecosystem.

WESTERN EVERGLADES
RESTORATION PROJECT
PRELIMINARY STUDY AREA



WESTERN EVERGLADES RESTORATION PROJECT PRELIMINARY STUDY AREA

RESERVATIONS IN PLANNING AREA



- SEMINOLE TRIBE OF FLORIDA
- MICCOSUKEE TRIBE OF INDIANS OF FLORIDA
- ~589,500 acres (~920 sq. miles)
- Historically dominated by wetlands
- Current land use and land cover include:
 - Natural Land/ Wetlands
 - ▶ Agriculture
 - ▶ Urban/Infrastructure



PRELIMINARY WERP RESTORATION OBJECTIVES



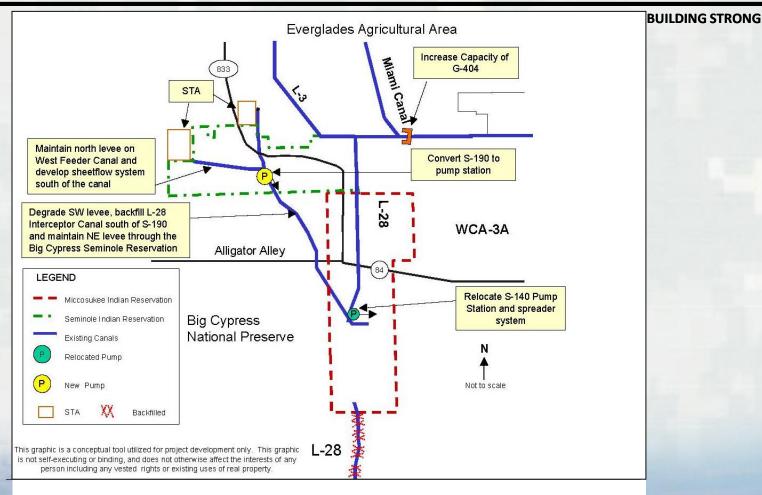
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- Restore and improve seasonal hydroperiods and freshwater distribution to support a natural mosaic of wetland and upland habitat in the western Everglades ecosystem.
- 2) Reestablish and improve sheetflow patterns, surface water depths, and durations to reduce soil subsidence and the frequency of damaging peat fires.
- 3) Reduce water loss out of the natural system to prevent over drainage and improve ground and surface water elevations.



CERP 'YELLOWBOOK'





CERP CONCEPTUAL PLAN FOR BIG CYPRESS/L-28 INTERCEPTOR MODIFICATION PROJECT



PRELIMINARY WERP OPPORTUNITIES



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- Improve system-wide operational flexibility
- Potential ancillary water supply and flood control benefits
- Coordinate with ongoing restoration activities



PRELIMINARY WERP PLANNING CONSTRAINTS



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Location and project-specific limits and considerations while we create the plan.

- E.g. Savings Clause and Assurances
- We will generate a list during this meeting

"Universal constraints" include laws and policies. We work within them, but do not need to list all of them.

SMART PLANNING INTRODUCTION WILL BEGIN AT 11:10

INTRODUCTION TO USACE SMART PLANNING WESTERN EVERGLADES RESTORATION PROJECT

S: Specific

M: Measurable

A: Attainable

R: Risk Informed

T: Timely



SAVE THAT THOUGHT!



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Question for YOU, after this presentation...

For you, what is "clearest" vs. "murkiest" about SMART planning and the work we have ahead of us after this kick-off?



USACE PLANNING: WHAT'S THE END PRODUCT?



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A written plan of actions to accomplish the objectives of our project. The best plans engage readers, like a story.

"A story"?

- Compelling for multiple audiences
- Logical, without leaps or missing steps
- Memorable, unique, valuable to wide audiences

We have several criteria such as:

- Clear connection to the "problems, opportunities, objectives, constraints"
- Complete, effective, efficient, acceptable, adaptive



NEPA PROCESS & ESTIMATED PLANNING SCHEDULE



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SMART FEASIBILITY STUDY PROCESS 18-36 MONTHS Circulate Draft EIS Respond to Circulate FEIS **Prepare Draft** Signed **Publish Conduct NEPA Comments Record of** ROD & File with EPA & File with EPA Notice Scoping **Decision** of Intent Concurrent Public. **State & Agency** Technical, Policy & **NOI Federal Register Review Legal Review** and Scoping Letter: July 2016 **ALTERNATIVE FEASIBILITY-LEVEL EVALUATION CHIEF'S REPORT** SCOPING **ANALYSIS** & ANALYSIS Final Report Milestone Chief's Report **Alternatives Milestone TSP Milestone** Vertical Team DCG Releases Report -Vertical Team State & Agency Review Concurrence Concurrence on Array of Alternatives on Tentatively Selected Plan November 2016 **Agency Decision Milestone** Agency Endorsement of Recommended Plan





BUILDING STRONG

1. PROBLEMS, OPPORTUNITIES, OBJECTIVES, CONSTRAINTS (POOC)

- Unique, memorable, have value to wide audiences.
- Where the logic begins: the story must relate to them.

2. INVENTORY & FORECAST CONDITIONS

Add to the POOC with more information:

- Historic conditions. What was it like before the problems?
- Existing conditions. What is it like now, with the problems?
- Future-without Project conditions. What will it be like in the future if we do not do this project?





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3. FORMULATE ALTERNATIVE PLANS

- Keep the logic: All aspects of the alternatives must focus on the POOC.
- SMART PLANNING: Alternatives are concepts of how to achieve the opportunities.
- SMART PLANNING: Some alternatives are screened early.
- Ideal: Small final array so we can focus on them.





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4. EVALUATE THE FINAL ARRAY OF ALTERNATIVES

- Keep the logic: What we evaluate must relate to the POOC.
- Measure how well each alternative achieves the POOC (use team's criteria and performance measures).
- Much quantitative modeling in this step.
- Consider how well alternatives meet universal criteria: completeness, effectiveness, efficiency, acceptability, adaptability.





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5. COMPARE THE FINAL ARRAY OF ALTERNATIVES

- Side-by-side comparison, ranking.
- Keep the logic: Rank how well each alternative achieves the POOC criteria.
- USACE and SFWMD Governing Board will review.

6. SELECT THE PLAN (TSP)

- Keep the logic: Choose the plan that ranks best across the criteria.
- "Tentatively Selected Plan" (TSP) then undergoes agency and stakeholder reviews before becoming the "Recommended Plan".



USACE "3X3X3" GUIDELINES



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U.S. Federal Law as of 2014:

- \$3 million dollars for planning
- 3 years from kick-off to Chief's Report
- 3 levels of USACE vertical team engagement throughout planning

Ways to accomplish 3x3x3 include team prioritization of work and staying focused on the POOC.



To-do List: First 90 Days



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WERP KICK-OFF CHARRETTE (AUG 16-17, CLEWISTON)

- Perspectives, orientation, discuss POOC
- <u>Preliminary mapping</u> of existing conditions baseline (ECB) related to the POOC, and forecast of future with WERP (FWP)
- Identification of key uncertainty areas

PUBLIC NEPA SCOPING MEETING (AUG-16 EVENING, CLEWISTON)

SUBSEQUENT MEETINGS & TEAMWORK (AUGUST – EARLY NOVEMBER)

- Refine maps of ECB, FWP, and historic conditions
- Define criteria for screening
- Propose management measures, alternatives
- Screening of measures and alternatives to 'final array'

COMMUNICATE WITH VERTICAL TEAM; BEGIN 'WRITING THE STORY'

 3x3x3 Compliance Memo, Project Management Plan, Report Synopsis, Decision Log, Risk Register, Project Study Issue Checklist, Review Plan, Model Review Plan



SMART PLANNING IMPLICATIONS FOR WERP



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- Consider available data and models
- Need teamwork and problem solving
- Early, often USACE vertical team coordination
- Detailed plans are not required for the early steps in planning but will need detail in the final plan in the Project Implementation Report (PIR)
- Less budget overall; including less for travel



QUESTIONS/DISCUSSION



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What is the "clearest" vs. "murkiest" for you regarding SMART planning and the work ahead of us?



FOR YOUR REFERENCE: USACE PLANNING MILESTONES



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USACE Milestones are simply check-ins with Vertical Team as we proceed through planning.

ALTERNATIVES MILESTONE (90-DAY MILESTONE)

- USACE Vertical Team concurrence on story and logic
- POOC, ECB, FWO, screening to final array of alternatives

TENTATIVELY SELECTED PLAN MILESTONE

 USACE Vertical Team concurrence on a single plan (TSP); once endorsed, NEPA released for public review

AGENCY DECISION MILESTONE

- Several concurrent reviews, then team address comments;
- USACE endorsement of Recommended Plan

CIVIL WORKS REVIEW BOARD MILESTONE

 USACE Commend checkpoint to determine if final plan and NEPA are ready to be released for final state and agency reviews

CHIEF'S REPORT MILESTONE

Certifies policy compliance of plan for signature by Assistant Secretary of the Army

LUNCH PLEASE RETURN AT 1:15

SEMINOLE TRIBE OF FLORIDA, MIKKOSUKEE TRIBE OF INDIANS OF FLORIDA, & DEPARTMENT OF THE INTERIOR PERSPECTIVES & DISCUSSION

BREAK! NEXT PRESENTATION WILL BEGIN AT 3:00

BIG CYPRESS NATIONAL PRESERVE, NATURAL RESOURCE CONSERVATION SERVICE PERSPECTIVES & DISCUSSION

QUICK REVIEW, ADJOURN WESTERN EVERGLADES RESTORATION PROJECT

THIS EVENING: NEPA PUBLIC SCOPING MEETING 6:00 OPEN HOUSE 6:30 BEGIN PRESENTATIONS

WEDNESDAY AUGUST 17, 2016

WESTERN EVERGLADES RESTORATION PROJECT AGENCY "KICKOFF" CHARRETTE

SFWMD WESTERN BASINS PERSPECTIVE, U.S. ARMY CORPS OF ENGINEERS EFFORTS PERSPECTIVES & DISCUSSION

BREAK!

REVIEW OF WERP "PROBLEMS, OPPORTUNITIES, OBJECTIVES, CONSTRAINTS" WILL BEGIN AT 11:15

PROBLEMS/OPPORTUNITIES/OBJECTIVES/CONSTRAINTS WESTERN EVERGLADES RESTORATION PROJECT



CERP GOALS AND OBJECTIVES



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CERP GOAL: Enhance Ecological Values

Objectives:

- Increase the total spatial extent of natural areas
- Improve habitat and functional quality
- Improve native plant and animal species abundance and diversity

CERP GOAL: Enhance Economic Values and Social Well Being Objectives:

- Increase availability of fresh water (agricultural/municipal & industrial)
- Reduce flood damages (agricultural/urban)
- Provide recreational and navigation opportunities
- Protect cultural and archaeological resources and values



PRELIMINARY WERP RESTORATION PROBLEM STATEMENTS



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See Aug-23 slides for draft problem statements



PRELIMINARY WERP RESTORATION OBJECTIVES



BUILDING STRONG

See Aug-23 slides for draft objective statements



PRELIMINARY WERP OPPORTUNITIES



BUILDING STRONG

See Aug-23 slides for draft opportunities statements



PRELIMINARY WERP CONSTRAINTS



BUILDING STRONG

See Aug-23 slides for draft constraints

LUNCH PLEASE RETURN AT 1:15

PARTICIPATORY MAPPING: EXISTING CONDITIONS MAP



PARTICIPATORY MAPPING INSTRUCTIONS, part 1.



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Add the following to the aerials:

a) Name, agency, your area of expertise

b) Existing conditions related to the POOC:

- Mark and label WERP restoration problem areas (2-3 words).
- Label WERP restoration objectives in specific locations. These should be things we can accomplish when we address the problems.
- Label locations of synergistic opportunities.

c) Additional existing conditions:

- Draw flowpaths & hydrology, as you know it
- Note ranges of hydroperiods, ranges of depths, seasonality, and other hydrologic information that affects restoration in specific areas
- Names of sloughs and other relevant features
- Label important areas of landcover



PARTICIPATORY MAPPING INSTRUCTIONS, part 2.



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Add the following to the aerials:

d) Future with WERP:

- What actions can be taken or structures can be added to solve the restoration problems in WERP? Where would they be on the map? Mark them on the map>
- Label what the actions or structures are.
- Briefly note what they would accomplish (just a few words).
- Label areas where we would see benefits if we address the problems.
- Briefly note what the benefits would be.



LET'S DO THAT AGAIN!



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SOUTH FLORIDA RESTORATION TASK FORCE SCIENCE COORDINATION GROUP WERP TECHNICAL WORKSHOP

AUGUST 23, 2016 CLEWISTON, FL (SAME LOCATION)

Add essential information to these maps from an array of experts. You all are welcome to participate!

Please tell colleagues and friends about this workshop if they have knowledge to contribute.

Point of Contact: Allyn Childress

BREAK! MAP REVIEW WILL BEGIN AT 2:45

GROUP REVIEW: CURRENT CONDITIONS MAP



GROUP REVIEW OF MAPS



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- One group present EXISTING CONDITIONS map
- Other groups: check yours for consistency
- Make corrections as needed
- Discuss any major discrepancies. How can we resolve them?
- If time, groups share any exceptional "future with WERP" ideas.

GIVE YOUR MAPS TO KELLY KEEFE OR TIM BROWN BEFORE DEPARTING. MAKE SURE YOUR NAMES ARE ON THE MAPS! ©

NEXT STEPS/ACTION ITEMS WESTERN EVERGLADES RESTORATION PROJECT



ENGAGEMENTS IN THE 1ST 90 DAYS



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- Weekly technical subteam webmeetings.
 Sign up for subteams!
- Monthly PDT meetings. Location TBD.
- Opportunities for updates, integration, and public engagement:
 - WRAC and Governing Board meetings
 - Regularly scheduled Task Force/Working Group/Science Coordination Group meetings
 - PDT meetings with public comment periods
 - Potential additional workshops



TASK FORCE-HOSTED WORKSHOP



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- August 23 (all day)
- Clewiston (same location)
- Deep-dive into Participatory Mapping
 - Historic conditions
 - More detail on existing and future-with WERP
 - Future-without WERP
 - Reach common understanding of the scenarios

Please participate and/or invite knowledgeable colleagues!



90 DAYS TO ALTERNATIVES MILESTONE



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- Agreement on POOC, study area, historic and existing conditions maps
- Discuss Future-with WERP measures and alternatives (we started this today with the 'future with WERP mapping')
- Agreement on Future-without WERP conditions and assumptions
- Screen the measures and alternatives to small number before 90 days
- Team will be building H&H model in parallel



REVIEW ACTION ITEMS



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Review, make sure everyone heard the same thing:

- We accomplished a lot in this meeting!
 Check the meeting purposes and products list...
- Did we commit to follow-up actions during this meeting? Who will do them, and when?
- Were decisions made during this meeting?
 Review them to make sure all are on-board.

THANK YOU FOR YOUR PARTICIPATION!

WESTERN EVERGLADES RESTORATION PROJECT

EVERGLADES RESTORATION PROGRESS

