

# WESTERN EVERGLADES RESTORATION PROJECT

PROJECT DELIVERY TEAM (PDT)  
MEETING

SEPTEMBER 16, 2016

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US Army Corps of Engineers  
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# MEETING PURPOSE

## WESTERN EVERGLADES RESTORATION PROJECT

- Communicate with PDT members who have not been able to participate on subteams
- Gain feedback from public, encourage public involvement
- Provide updates since August meetings
- Relay next steps, forums for communication

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



# MEETING AGENDA

- Log-in, Welcome, Virtual Meeting Skills & Etiquette, Introductions
- **“What we heard”** – PDT kickoff & SCG-hosted workshop
- Updated study area
- WERP Plan formulation strategy
- **Description of the “future without WERP”**
- Updated WERP Objectives
- Progress on planning steps: screening management measures, grouping management measures
- **What’s next?**
- Public Comment





# LOG-IN, WELCOME, VIRTUAL MEETING SKILLS & ETIQUETTE, INTRODUCTIONS

- WELCOME & VIRTUAL MEETING ETIQUETTE
  - Mute phone when you are not speaking
  - Limit background noise (i.e. pets, coffee shops, etc)
  - State your name each time you speak
  - Do not place meeting on hold, simply drop and rejoin when you can
- PUBLIC COMMENT\*
  - Before lunch
  - Before end of meeting

\*FACA Regulations allow public to comment during designated time. FACA Regulations prohibit dialogue or Q&A with team members.

- INTRODUCTIONS



# Please...

**Please remember, WERP PDT meetings take place while work is in progress. They are check-ins with you, the team. The materials being presented are “a work in progress.”**

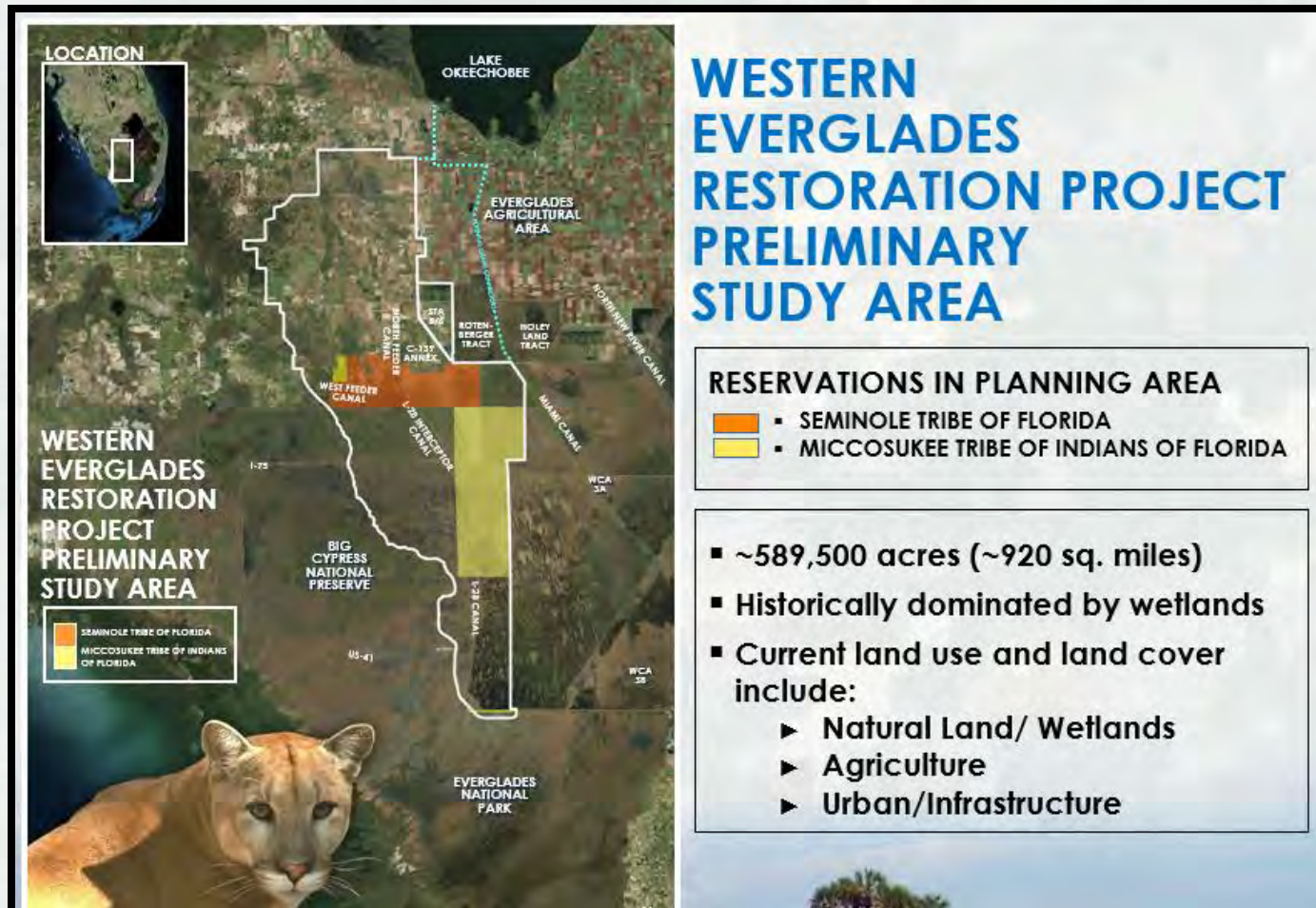




## REMINDER OF WERP'S PURPOSE

**WERP's overall purpose is to improve the quantity, quality,**  
timing, and distribution of water needed to restore and  
reconnect the western Everglades ecosystem.

**(THIS IS A REMINDER OF PREVIOUS MATERIALS. STUDY AREA HAS BEEN UPDATED. SEE FOLLOWING SLIDES.)**





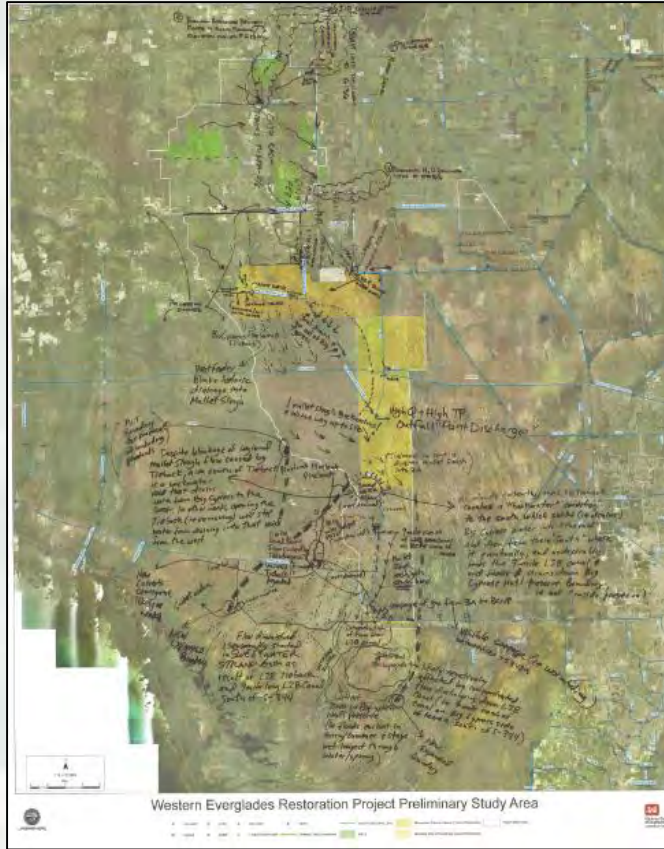
# TEAM KICKOFF & PUBLIC WORKSHOP MEETINGS

- Kickoff Meeting
  - Held August 16 & 17, 2016 in Clewiston
  - Attended by PDT agencies and Tribal Nations
  - Discussed agency perspectives and completed mapping exercise
- Science Coordination Group Sponsored Technical Workshop
  - Held August 23, 2016 in Clewiston
  - Attended by public, agencies and Tribal Nations
  - Completed mapping exercises





## “WHAT WE HEARD”



- Received input on:
  - Agency and Tribal perspectives of the areas and problems within the study area
    - Promote sheetflow into WCA-3A and Big Cypress National Preserve (BCNP)
    - Improve water quality in the area
  - Problems, Opportunities, Objectives and Constraints (POOC)
  - Management Measures
    - Make a connection to Lake Okeechobee
    - Wetland restoration
  - Study Area





# UPDATED STUDY AREA

## ■ **USACE Guidelines on Setting the Study Area:**

- Is the area included in the study's authorization from Congress?
- Does the area include the locations of (potential) alternatives?
- Does the area include the problem locations that you will be addressing with the project?
- Does the area include areas that will be directly affected by the project?\*
- Does it include areas that will be indirectly affected?\*

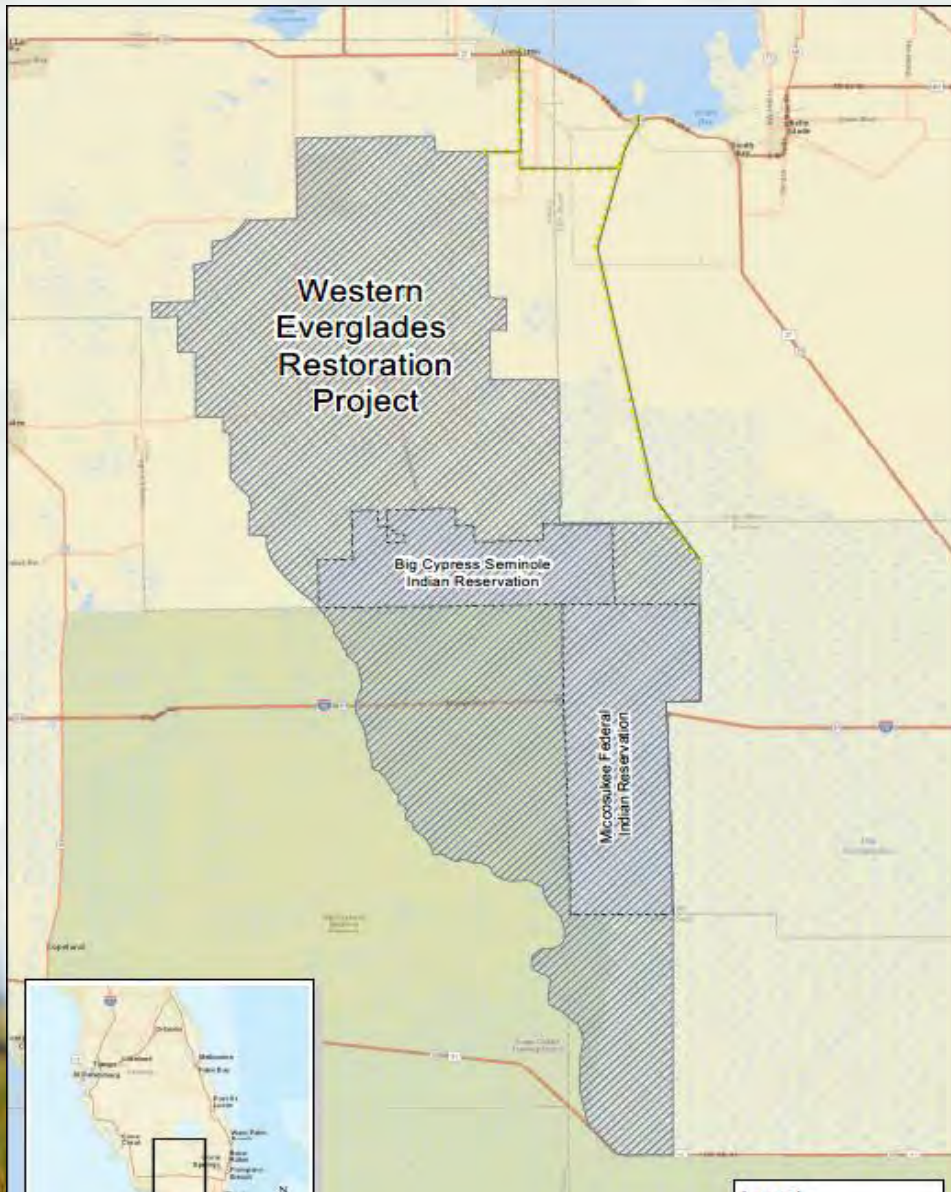
\* But, this doesn't mean include *everything*. Use the other criteria to balance these.

- **Project Area** - The area where a project will be constructed on the ground, *i.e.* the construction zone or footprint.
- **Study Area** - The area of interest. The study area is generally larger than the project area, or possibly the same size, but not smaller.
- **Affected Area** – The affected environment is the area that could be directly or indirectly affected by project implementation. The affected area may extend far beyond the boundaries of the study area to include species populations, etc.

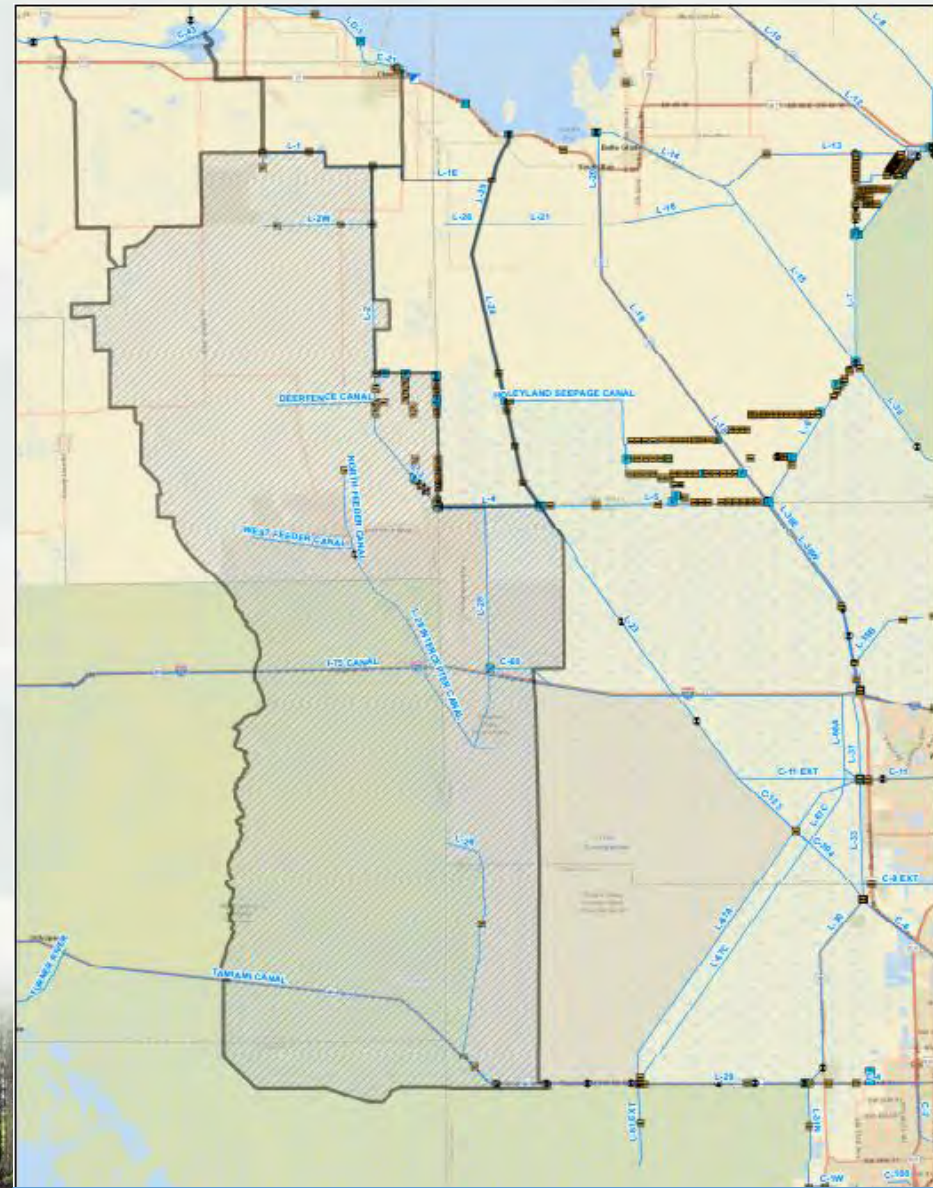




# UPDATED STUDY AREA



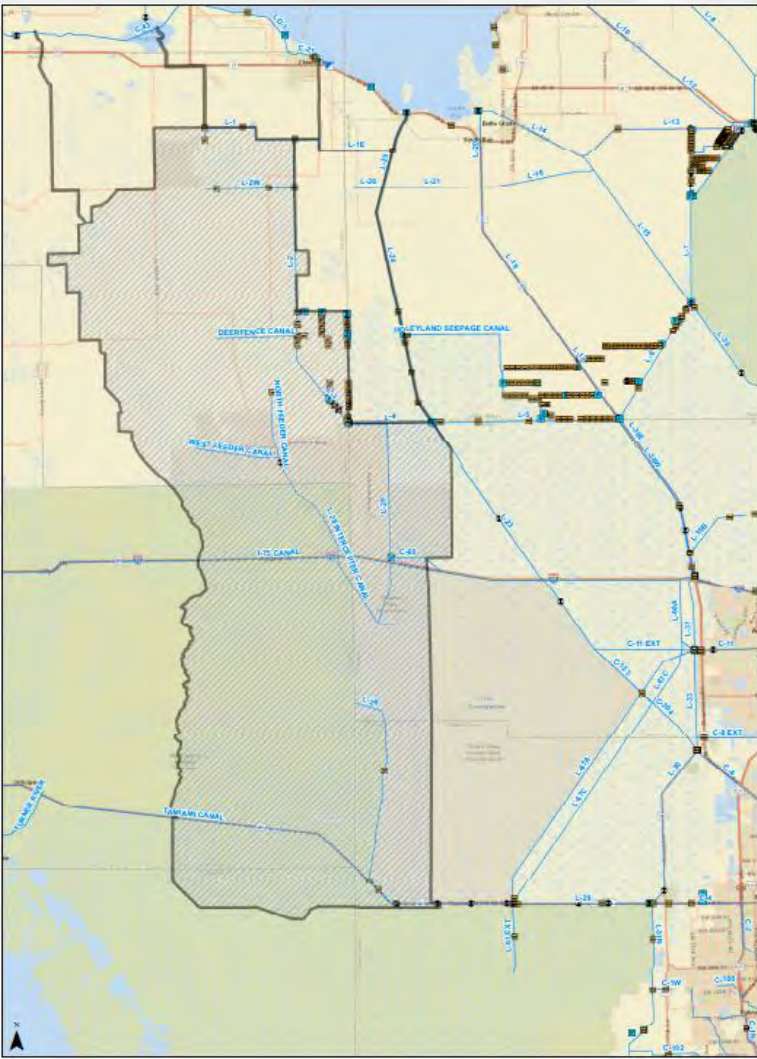
Preliminary WERP Study Area



Revised WERP Study Area



# UPDATED STUDY AREA



- What we heard:
  - Consider connections to Lake Hicpochee and C-43
  - Include more of Big Cypress National Preserve
  - Southern boundary should be increased
- Changes were made based upon input received and criteria
  - Included evaluation additional connections to Lake O to bring water south
  - Increased southern boundary to include Loop Road and Sweetwater Strand (locations of problems to solve and management measures)



# WERP PLAN FORMULATION STRATEGY

WHY DO WE NEED A PLANNING STRATEGY?

**Make sure you understand the history**

**We have this model available here, and this one here, and this one...**

**70 management measure suggestions**

**There is information from past projects**

**Some of the management measures work together**

**Consider the economics**

**Make sure to consider climate change**

**Important species assessments**

**Permit requirements can vary by location**





# WERP PLAN FORMULATION STRATEGY

WHY DO WE NEED A PLANNING STRATEGY?

**A strategy helps a team organize information to progress rationally & deliberately, with focus on each step.**

## **Informal definition in USACE Planning:**

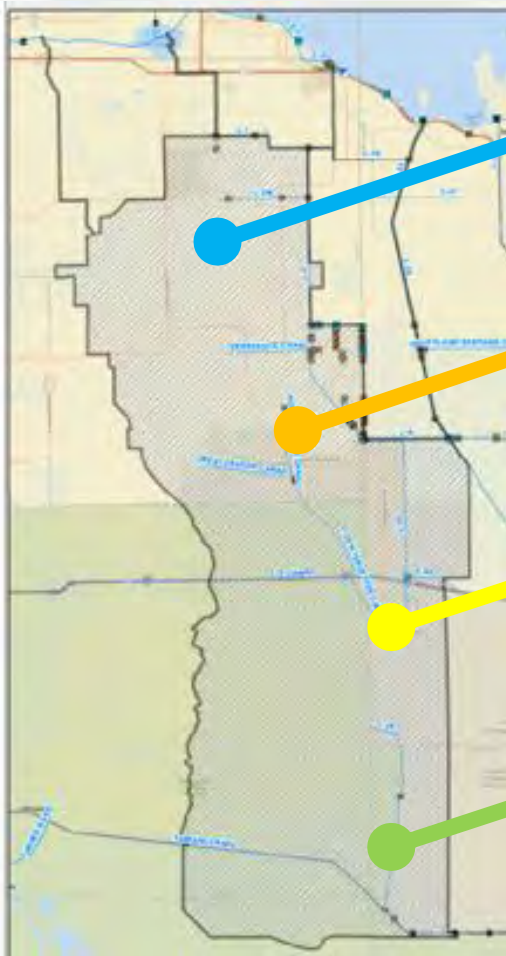
A Plan Formulation Strategy is a systematic “way forward” to consider and combine management measures into alternative plans and then to choose one. The strategy includes obtaining input from the broad PDT and the public.



# WERP PLAN FORMULATION STRATEGY

**WERP OVERALL FORMULATION STRATEGY: FOCUS ON ONE REGION AT A TIME, WITH UNDERSTANDING OF HOW THEY CONNECT.**

Region names are not fixed! Draft names are provided today only to illustrate the regional concept. **Please enter suggestions for region names in the chat box.** 😊



**Lake Okeechobee / Caloosahatchee / C-139 Basin / STA5-6 / North Feeder**

**West Feeder / Seminole Tribal Area**

**Downstream of S-190 / Miccosukee Tribal Area / L-28 Triangle**

**Big Cypress National Preserve**

Effects  
outside of  
study area  
will be  
evaluated.



# WERP PLAN FORMULATION STRATEGY

**OVERALL STRATEGY: CONSIDERATION OF ONE REGION AT A TIME, WITH FULL UNDERSTANDING OF HOW THEY CONNECT.**

## **TO REACH 90-DAY MILESTONE: WEEKLY FOCUS ON REQUIREMENTS**

**MISSION:** ACCOMPLISH 90-DAY MILESTONE REQUIREMENTS AS LISTED BELOW

**Weekly subteams:** H&H/Engineering, Water Quality, Eco-subteam, Real Estate, Plan Formulation

- Finalize study area, descriptions of historic, existing, and future-without WERP.
- Finalize problems, objectives, opportunities, constraints descriptions.
- Generate, screen ALL management measures.
- Generate, screen ALL alternatives to final few.
- Determine performance measures to use next.
- **Documentation in parallel:** NEPA, Report Summary, Risk Register, Decision Management Plan, Decision Log, Study Review Plan, Modeling Strategy, Modeling Review Plan, Project Management Plan, schedule.
- **Not required, but important:** Public workshop, posting online, Documentum site.
- **Modeling** will not be conducted for the first 90 days tasks for WERP.

**Monthly PDT meetings: August, September, October.** Check-in, seek input, communicate.

**Existing forums:** CERP and WERP will continue to be a topic at South Florida Ecosystem Restoration Task Force meetings, Governing Board, WRAC

**WAIT, THERE'S MORE...**

# WERP PLAN FORMULATION STRATEGY

**OVERALL STRATEGY: CONSIDERATION OF ONE REGION AT A TIME, WITH FULL UNDERSTANDING OF HOW THEY CONNECT.**

**TO CHOOSE TENTATIVELY SELECTED PLAN (TSP): REGION BY REGION EVALUATIONS, MONTHLY & WEEKLY FOCUS ON REQUIREMENTS**

**MISSION:** CHOOSE TSP, PER GUIDELINES AND REQUIREMENTS BELOW

**Weekly subteams will focus on each region, one at a time, and effects on the other regions.**

- Continued NEPA, species analyses
- May refine problems, objectives, opportunities, constraints with caution.
- Get USACE approval of underlying hydrologic model, performance measure models/tools, and habitat unit calculator.
- Model existing baseline and future-without-WERP scenarios.
- Determine performance targets per planning metric, per area.
- Evaluate & compare final alternatives, quantitatively (modeling) and qualitatively.
- Calculate habitat unit outputs, costs.
- Conduct Cost Effectiveness/Incremental Cost Analysis (CE/ICA).
- Use performance measures, metrics, CE/ICA to help identify the TSP.
- Targeted USACE reviews (ATR).

Continued...



# WERP PLAN FORMULATION STRATEGY

**OVERALL STRATEGY: CONSIDERATION OF ONE REGION AT A TIME, WITH FULL UNDERSTANDING OF HOW THEY CONNECT.**

**TO CHOOSE TENTATIVELY SELECTED PLAN (TSP): REGION BY REGION EVALUATIONS, MONTHLY & WEEKLY FOCUS ON REQUIREMENTS**

**MISSION:** CHOOSE TSP, PER GUIDELINES AND REQUIREMENTS

## **Continued...**

- **Documentation in parallel:** EIS/Feasibility Report and appendices (!!), Report Summary, Documentation of evaluations, RECOVER contributions, Risk Register, Decision Management Plan, Decision Log, Model Approvals, ATR comment/responses.
- **Not required, but important:** Public workshop, posting materials online.

**PDT meetings: Schedule is TBD.** Check-in, seek input, communicate.

**Existing forums:** CERP and WERP will continue to be a topic at South Florida Ecosystem Restoration Task Force meetings, Governing Board, WRAC.

# DESCRIPTION OF THE “FUTURE WITHOUT WERP” (FWO)

WHY DO WE NEED TO DESCRIBE THE FUTURE WITHOUT WERP?

To show how much of a difference WERP will make.



**EXISTING  
BASELINE**



**FUTURE  
WITH  
WERP**

**WERP  
filled half  
the glass,  
right?**





# DESCRIPTION OF THE FUTURE WITHOUT WERP (FWO)

WHY DO WE DESCRIBE THE FUTURE WITHOUT WERP?

To show how much of a difference WERP will make.



**EXISTING  
BASELINE**



**FWO**



**FUTURE  
WITH  
WERP**



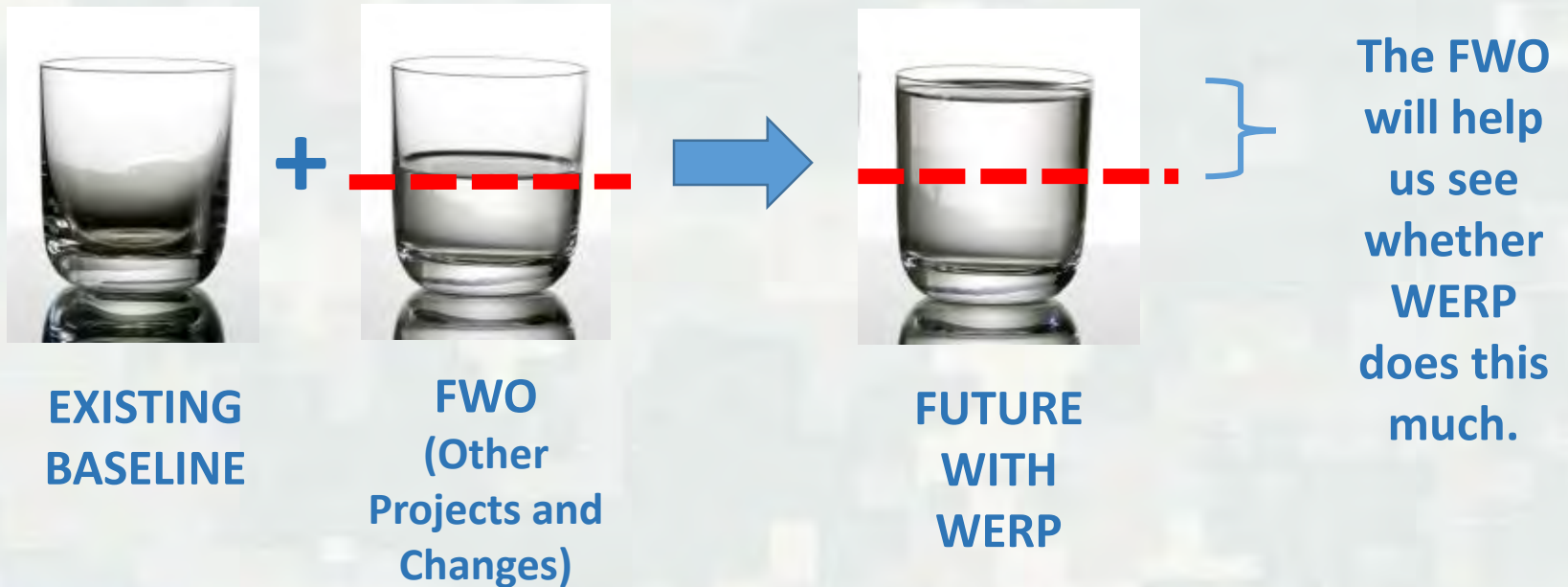
**The FWO  
will help  
us see  
whether  
WERP  
does this  
much.**



# DESCRIPTION OF THE FUTURE WITHOUT WERP (FWO)

WHY DO WE DESCRIBE THE FUTURE WITHOUT WERP?

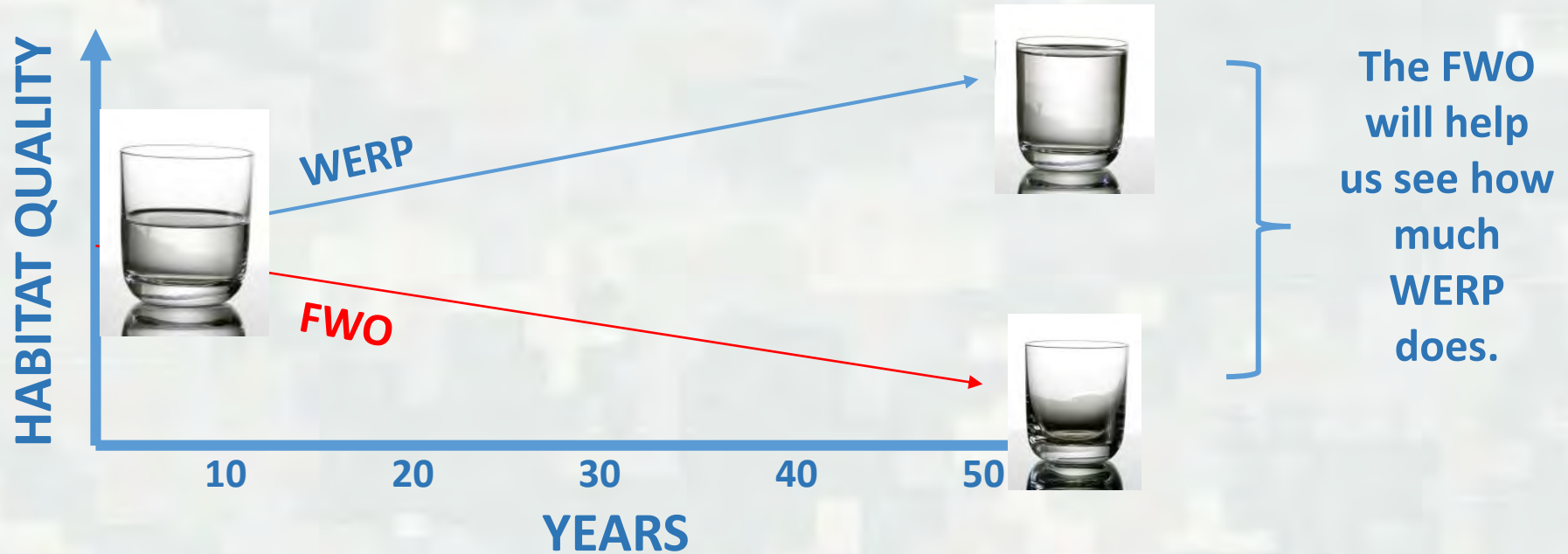
To show how much of a difference WERP will make.





# DESCRIPTION OF THE FUTURE WITHOUT WERP (FWO)

WHY DO WE DESCRIBE THE FUTURE WITHOUT WERP?



# DESCRIPTION OF THE FUTURE WITHOUT WERP (FWO)

## STATUS OF FWO TASKS:

- Qualitative write-up is in progress.
- Modelers are working with other team members to determine the modeling assumptions.
- Using CEPP as starting place (most recent)
- Adding changes such as Tamiami Trail Next Steps **Project's progress, and Everglades Restoration** Transition Plan.





# WERP Problem Statements, Objectives

**WERP DRAFT PROBLEM STATEMENTS HAVE NOT BEEN UPDATED SINCE THE AUG-23 WORKSHOP PRESENTATION.**

They focus on loss of oligotrophic conditions (water quality); altered timing, amount, and flow paths of fresh water; loss of water and over-drainage; disrupted connectivity of the hydrology and landscape; need for resilience to climate change; invasive and nuisance species.



# WERP Problem Statements, Objectives

**WERP OBJECTIVE STATEMENTS HAVE BEEN UPDATED TO ADDRESS THE PROBLEMS AND FOR CLARITY IN PLANNING.**

**Here's how they were updated...**





## Recent version of WERP objectives...

- Restore ecological connectivity, water flow, seasonal hydroperiods and freshwater distribution including historic flow paths to increase resiliency of the ecosystems and support a natural mosaic of wetland and upland habitat and associated fauna
- Improve sheetflow patterns and surface water depths and durations in order to reduce soil subsidence, the intensity and duration of fires, decline of flora, and salt water intrusion
- Reduce high volume regulatory discharges from Lake Okeechobee to the northern estuaries and improve regional water management operational flexibility in context of the overall Everglades ecosystem restoration
- Reduce water loss out of the natural system to prevent over-drainage, improve ground and surface water depths and promote appropriate dry season recession rates for wildlife utilization
- Restore more natural water level responses to rainfall to promote plant and animal diversity and foster conditions for native species while reducing invasive and nuisance species
- Improve nutrient levels to foster conditions for native species while reducing invasive and nuisance species
- Provide recreational opportunities

## Recent version of WERP objectives...

- Restore **ecological connectivity, water flow, seasonal hydroperiods** and **freshwater distribution** including **historic flow paths** to **increase resiliency** of the ecosystems and support a natural mosaic of **wetland** and **upland habitat** and **associated fauna**.
- Improve **sheetflow patterns** and surface water **depths** and **durations** in order to **reduce soil subsidence**, the **intensity** and **duration of fires**, **decline of flora**, and **salt water intrusion**
- **Reduce high volume regulatory discharges** from Lake Okeechobee to the northern estuaries and improve **regional water management operational flexibility** in context of the overall Everglades ecosystem restoration
- **Reduce water loss** out of the natural system to **prevent over-drainage**, improve **ground** and **surface water depths** and promote appropriate **dry season recession rates** for **wildlife utilization**
- Restore more natural **water level responses** to rainfall to **promote plant** and **animal diversity** and foster **conditions for native species** while **reducing invasive and nuisance species**
- Improve **nutrient levels** to foster **conditions for native species** while **reducing invasive and nuisance species**
- Provide **recreational opportunities**



## **Our potential metrics (33 metrics)...**

- Ecological connectivity
- water flow
- seasonal hydroperiods
- freshwater distribution
- historic flow paths
- increase resiliency
- wetland and upland habitat
- associated fauna
- sheetflow patterns
- surface water depths and durations
- reduce soil subsidence
- intensity and duration of fires
- decline of flora
- salt water intrusion
- Reduce high volume regulatory discharges
- regional water management operational flexibility
- Reduce water loss
- prevent over-drainage
- ground and surface water depths
- dry season recession rates for wildlife utilization
- water level responses to rainfall
- promote plant and animal diversity and foster conditions for native species
- reducing invasive and nuisance species
- nutrient levels to foster conditions for native species while reducing invasive and nuisance species
- recreational opportunities

## **USACE budgeting decision criteria:**

- Scarcity
  - Connectivity
  - Special species
  - Hydrologic character
  - Geomorphic condition
  - Self-sustaining
  - Plan recognition (CERP)
- Outputs, Outputs per cost
- Acres
- Years to complete
- Resilience in face of future unknowns (climate change)

## Our potential metrics, grouped...

- **Ecological connectivity**
- water flow,
- seasonal hydroperiods
- freshwater distribution
- historic flow paths
- sheetflow patterns
- surface water depths and durations
- Reduce water loss
- prevent over-drainage
- ground and surface water depths
- dry season recession rates/response to rainfall
- decline of flora
- associated fauna
- wildlife utilization
- reduce soil subsidence
- intensity and duration of fires
- promote plant and animal diversity and foster conditions for native species
- reducing invasive and nuisance species
- nutrient levels to foster conditions for native species while reducing invasive and nuisance species
- wetland and upland habitat
- Increase resiliency
- salt water intrusion
- Reduce high volume regulatory discharges
- regional water management operational flexibility
- recreational opportunities

## USACE budgeting decision criteria:

- Scarcity
  - **Connectivity**
  - **Special species**
  - **Hydrologic character**
  - **Geomorphic condition**
  - **Self-sustaining**
- Plan recognition (CERP)
- Outputs, Outputs per cost
- Acres
- Years to complete
- Resilience



## Collapsing the metrics (16 metrics)...

- **Ecological connectivity**
- **Seasonal flow volumes, hydroperiods** (can include a depth threshold above or below ground), **distribution of sheetflow, flow paths, recession rates**
- **Prevent over-drainage** (may be measured as hydroperiod in specific locations)
- **flora, fauna** (dropped “wildlife utilization” – how would we model that?)
- **Reduce wildfire risk** (removed “intensity, duration”, removed soil subsidence)
- **Restore oligotrophic conditions for native species** (dropped “diversity”, reducing invasives, incorporates nutrients concerns into restoration context)
- **wetland and upland habitat**
- **Increase resilience in S Florida with regional water management operational flexibility to reduce discharges...** (note - may want stand alone objective on estuaries)
- **salt water intrusion**
- ~~recreational opportunities~~ (move to “opportunities” list)

## USACE budgeting decision criteria:

- **Scarcity**
  - **Connectivity**
  - **Special species**
  - **Hydrologic character**
  - **Geomorphic condition**
  - **Self-sustaining**
- **Plan recognition (CERP)**
- **Outputs, Outputs per cost**
- **Acres**
- **Years to complete**
- **Resilience**

## Refined into updated WERP objectives:

- Reestablish **ecological connectivity** of **wetland and upland habitats** in the western Everglades with restored freshwater **flow paths, flow volumes and timing, seasonal hydroperiods**, and **historic distributions of sheetflow**.
- **Reduce wildfires** that damage the underlying geomorphic condition of the western Everglades.
- **Restore oligotrophic conditions** to restore and sustain **native flora and fauna**.
- Promote **system-wide resilience** in light of future change, such as sea level rise and climate change.

***Full-text descriptions in the WERP Feasibility Report will include many important details:***

***Example – “Seasonal hydroperiods” includes preventing over-drainage and includes depth thresholds set above or below ground, depending on location. The specific locations include inflows the Tribal lands, the Seminole Tribe’s natural area south of west feeder, the Miccosukee Tribe’s triangle area, restoring natural water levels and flows in WCA-3A, northern Big Cypress National Preserve (BCNP).***

***Full-text descriptions will also meet USACE wording guidelines such as including “...over the period of analysis.”***



**We can use a subset of those metrics for high-level screening of management measures!**



**Translation: Let's use that list to choose among the suggestions we received.**

**To make choices among the suggestions, we are scoring each management measure according to whether it...**

- Increases connectivity
- Promotes natural seasonal hydrology (including most-discussed areas)
- Alleviates over-drainage
- Reduces wildfire risk via hydrologic restoration
- Reduces salt water intrusion via Lostmans Slough/Sweetwater Strand
- Increases operational flexibility/system resilience
- Restores oligotrophic (low nutrient) conditions
- Rough cost

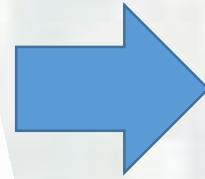
# PROGRESS ON PLANNING STEPS: SCREENING “MANAGEMENT MEASURES” (MMs)

## Refined into updated WERP objectives:

- Reestablish **ecological connectivity** of **wetland and upland habitats** in the western Everglades with restored freshwater **flow paths, flow volumes and timing, seasonal hydroperiods**, and **historic distributions of sheetflow**.
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**Full-text descriptions in the WERP Feasibility Report will include many important details:**  
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**Full-text descriptions will also meet USACE wording guidelines such as including “...over the period of analysis.”**



The metrics in the objectives became our initial metrics for qualitative screening....

In coming months, we will refine or develop performance measure targets and tools for the metrics to evaluate the final alternatives, to help choose a TSP.





# PROGRESS ON PLANNING STEPS: SCREENING MANAGEMENT MEASURES

Suggested Measures		Metrics														Scores 1, 0, -1, +		Combined Score		Advantages		Notes	
Management Measure	Purpose	INCREASE CONNECTIVITY (1 = yes, 0 = neutral, -1 = no)	SEASONAL HYDROLOGY: Rehydrate BCNP (1 = yes, 0 = neutral, -1 = no)	SEASONAL HYDROLOGY: WCA 3A (1 = yes, 0 = neutral, -1 = no)	SEASONAL HYDROLOGY: Rehydrate semiole natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41	SEASONAL HYDROLOGY: Rehydrate natural area south of US41
L-28s Restoration - Construct breaks in L-28 levee - Construct more plugs in L-28 canal - construct culverts under US41	Rather than completely degrading the L-28 levee, create breaks in the levee. Create more plugs in the L-28 canal reducing the fetch between the current L-28 tieback and the L-28 levee.	1	-1	1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
L-28t Restoration - Degrade L-28 tie-back	Degrade the L-28 Tieback Levee directing runoff to the south.	1	-1	Y	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
L-28s Levee and Canal - Completely degrade south L-28 Levee	Create/Construct breaks in the L-28 levee north of S-344 and completely	1	-1	Y	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
L-28s Restoration - Construct breaks in L-28 levee north of S-344	Create Construct breaks in the L-28 levee north of S-344 and construct canal	1	Marginal	Marginal	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
US 41 spreader - Construct pump station near fifty-mile bend to	Create a pump station that collects water from canal along north side US41 and	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
US 41 Culverts - construct culverts to connect cypress strands	Construct culverts under US41, primarily between fifty-mile bend and forty-mile	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Loop Road Culverts - construct additional culverts to connect cypress	Construct additional culverts under Loop road to provide an improved	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
11 mile road & airport road - Add flow conveyance culverts under road	Create flow conveyance culverts under 11-mile road and establish rules for	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
L-29 Levee and Canal - construct canal blocks to limit flow south	Construct canal block between L-28s and L-29 canals. This is done in	? Unclear what this is	-1	-1	-1	1	-1	M. Would n	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L-29 Levee and Canal - Raise weir operation - direct flow to the west. - raise the US41 bridges	Raise the bridges and S-12 structures along L-29 canal to reduce flow into the Sparrow area. This should raise water levels in	? Unclear																					
Modify L-28 Interceptor Canal - South of I-75 - Construct levee breaks	One option to the L-28 canal south of I-75 is to create levee breaks on the	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Modify L-28 Interceptor Canal - South of I-75 - Degrade Levee to allow contiguous flow - Fill L-28 canal	Completely degrade the L-28 levee and fill in the canal. This will require subsequent creation of a more substantial spreader	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
L-28 Interceptor Canal - South of I-75 - Construct Levee breaks to	Construct levee breaks and install plugs/weirs to direct flow into the marsh. This is	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
L-28 Interceptor Canal - north of I-75 - construct weir to maintain tailwater head on S-190 structure	Tailwater of S190 controls H2O levels in part of Tribal land. Intent of this is to raise tailwater level. Seek 'poof' between S190 and	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Modify L-28 Canal - South of I-75 - Remove L-28 extension	Removal of the levee and filling in the L-28 extension. EXTENSION =	M	0	M	1	1	1	0?	N/A	-1	1	1	1	1	1	1	1	1	1	1	1	1	1

# PROGRESS ON PLANNING STEPS: SCREENING MANAGEMENT MEASURES

GROUPED BY REGION, SCORED PER METRIC. FINAL DRAFT WILL BE PROVIDED.  
NOT SHOWING MMs HERE BECAUSE STILL IN PROGRESS. THIS SLIDE ILLUSTRATES THE SCORING.  
**THE SCORES ARE GUIDES. NOT ASSUMING "TWO DECIMAL ACCURACY".**

F	G	H	I	J	K	L	O	P	Q	R	S	T	U	V	
SEA SONAL HYDROLOGY: Rehydrate Natural Area south of Alle Maitis overdrainage (1 = yes; 0 = no) (Improvement or not?)	SEA SONAL HYDROLOGY: Rehydrate Seminole Natural Area south of Alle Maitis overdrainage (1 = yes; 0 = no) (Improvement or not?)	SEA SONAL HYDROLOGY: Rehydrate Seminole Natural Area south of Alle Maitis overdrainage (1 = yes; 0 = no) (Improvement or not?)	SEA SONAL HYDROLOGY: Rehydrate Seminole Natural Area south of Alle Maitis overdrainage (1 = yes; 0 = no) (Improvement or not?)	ER/hydrologic restoration in study area/ REDUCE WILDFIRE RISK (1 = yes; 0 = no)	SALT WATER INTRUSION/ Rehydrate Lostmans Slough and/or Sweetwater	INCREASES OPERATIONAL FLEXIBILITY/ RESILIENCE (worse = -1, neutral = 0, better = 1)	COST: Relatively affordable? (-1, 0, 1) (\$\$\$, \$\$, \$)	WQ Benefit? (1 = yes; 0 = neutral; -1 = no)	Adverse WQ Impact? (no = 1, yes = -1)	Treatment Required? (1 = no; -1 = yes)	SEA SONAL HYDROLOGY: Improve WQ inflow to Tribe land Tribal (yes = 1, no = -1)	RESTORE OLIGOTROPHIC CONDITIONS/ Improve water quality (SCORE)	TOTAL (including avg WQ rating instead of total WQ rating)	"Advantage points" (M = +) M means maybe or marginal.	
-1	1	-1	1	1	1	0.25	0	0	NPS to study	1	-1	0			Need to m potential changing using local .25 flexibility. NOTE: Yes Less cost
-1	Y	-1	1	1	1	0.25	1	0	1	1	-1	0.3	0.39	+	
-1	Y	-1	1	1	1	0.5	-1	unknown	ENP to study		-1	-1	0.06	++	May affect supply - an other mea
Marginal. T	Marginal	-1	1	1	1	0.5	1	0	NPS to study	1	-1	0	0.56		Could sup restore gr overdrain
-1	-1	-1	-1	-1	-1	0.25	0	0	1		-1	0.0	-0.48		This meas on captur sending it
1	-1	-1	-1	N/A	N/A	0	1	0	1	1	-1	0.3	0.03		Will be ne solution b already en
1	-1	-1	-1	N/A	N/A	0	1	0	1	1	-1	0.3	0.03		Will be ne solution b already en
1	-1	-1	-1	N/A	N/A	0	1	0	1	1	-1	0.3	0.03		Will be ne solution b already en
-1	-1	-1	1	-1	M. Would n	0	0	0	NPS to study	1	-1	0.0	-0.38	+	Could mak other mea somewhere



# PROGRESS ON PLANNING STEPS: MANAGEMENT MEASURE MAPS

A series of maps are being generated to help summarize and visualize the contents of the Management Measure table.

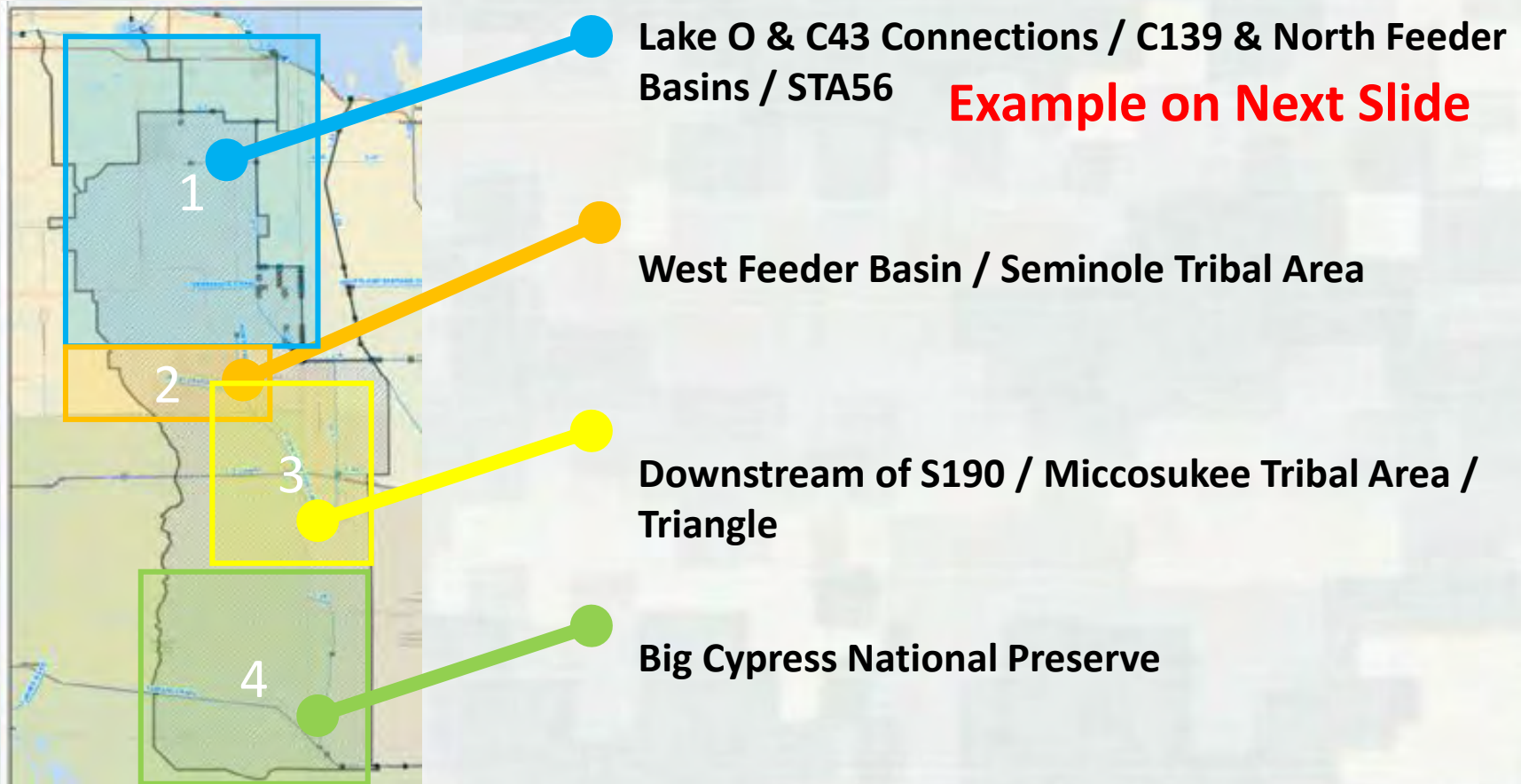
These maps are designed to:

- Assist with the review of the management measure table content with the goal of helping to finalize that product
- Provide a spatial context to the management measures in order to help identify which features may be complementary, mutually exclusive or redundant
- Help the team to begin thinking of combinations of features that may ultimately comprise project alternatives



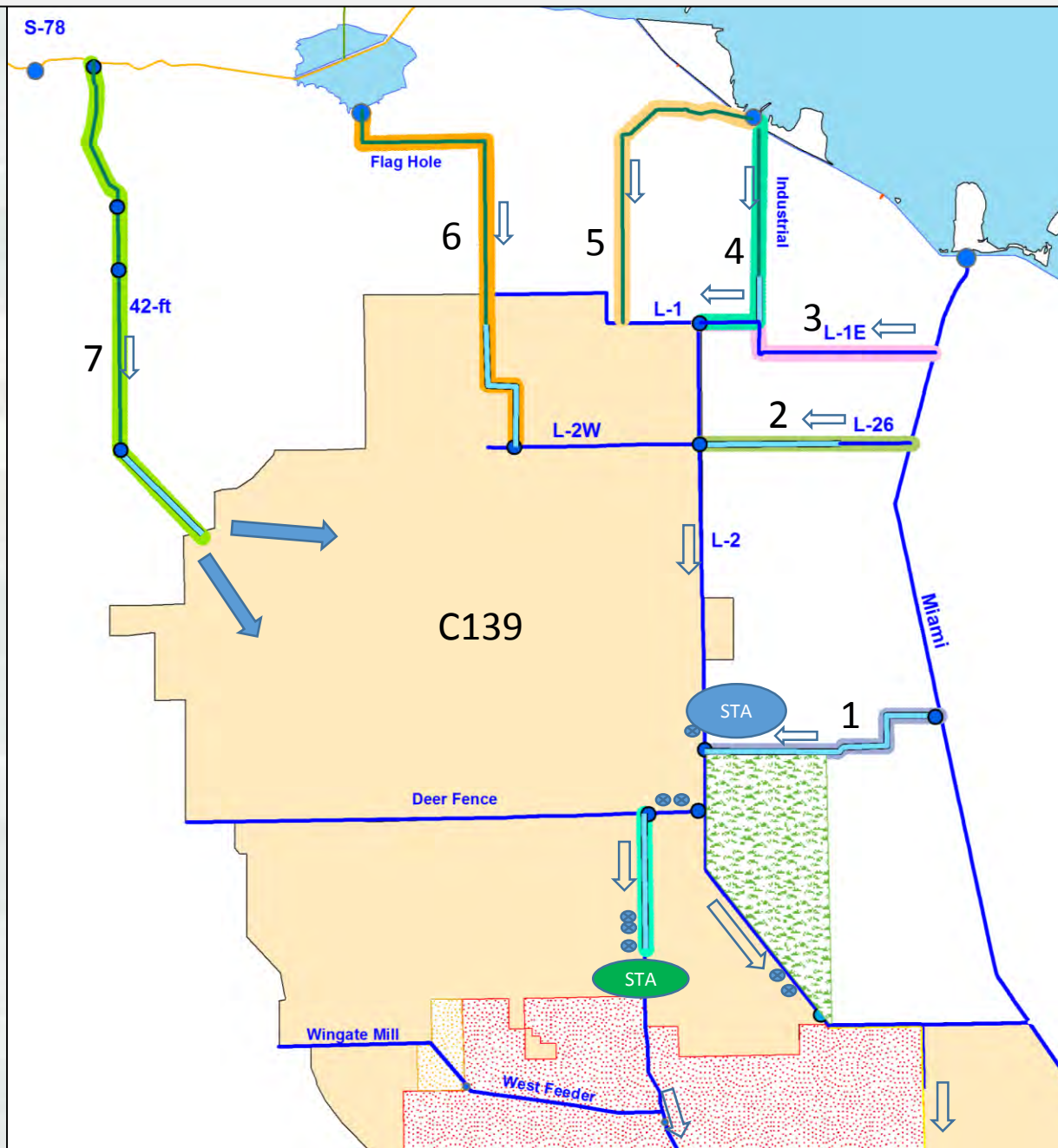
# Management Measure Summary Maps

Maps will be generated for each of the regions defined in the WERP Plan Formulation Strategy and shown below. Individual maps will provide context on options in each region and also provide insight on the connections between regions.





# Example Summary Map for Region 1



## Lake Okeechobee & C43 Connections

- Opt 1 – new canal
- Opt 2 – L-26 extension
- Opt 3 – L-1E
- Opt 4 – Industrial Canal
- Opt 5 - 20-mile canal
- Opt 6 – Flaghole canal
- Opt 7 – 42-ft Canal
- North Feeder Ext

## Water Treatment Options

- Opt 1 STA 5/6 Expansion
- Opt 2 North Feeder

## ASR Options

- Deer Fence
- L-2
- L-3

# WHAT'S NEXT?

## ■ BIG PICTURE: ALTERNATIVES MILESTONE MEETING (16 NOV)

<u>Sub-Teams Working On...</u>	<u>Deliverables...</u>	<p>SUB-TEAMS MEETING <b>WEEKLY...</b></p> <ul style="list-style-type: none"> <li>ENGINEERING                             <ul style="list-style-type: none"> <li>M 1PM-2:30PM</li> </ul> </li> <li>WATER QUALITY                             <ul style="list-style-type: none"> <li>M 2:30PM-4PM</li> </ul> </li> <li>PLAN FORM.                             <ul style="list-style-type: none"> <li>T 1PM-4:30PM</li> </ul> </li> <li>ENVIRONMENTAL                             <ul style="list-style-type: none"> <li>TH 1PM-3:00PM</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>- Determine Existing Conditions Baseline &amp; Future Without Project Conditions</li> <li>- Refine Management Measures &amp; screening methodology</li> <li>- Choose plan formulation strategy</li> <li>- Develop &amp; Screen Final Array of Alternatives</li> </ul>	<ul style="list-style-type: none"> <li>- Project Management Plan</li> <li>- Report Synopsis</li> <li>- Decision Management Plan</li> <li>- Risk Register</li> <li>- Decision Log</li> <li>- Study Issue Check List</li> <li>- Peer Review Plan</li> <li>- Modeling Work Plan</li> </ul>	
<p><b><u>Upcoming Public Forums...</u></b></p> <p>SFWMD WRAC – 6 OCT</p> <p>WG/SCG – 29 SEP</p> <p>WERP PDT – 14 OCT</p>		



# PUBLIC COMMENT

- Provide thoughts and ideas about anything related to the Western Everglades Restoration Project

(Time limits may be used to ensure everyone is heard, based on the level of public participation.)

- State and spell your name for the record before commenting
- FACA Regulations prohibit dialogue or Q&A with team members

