

Everglades Restoration Transition Plan Phase 1

Project Overview



Everglades Restoration Transition Plan Phase 1

Objectives

- To improve conditions for the Everglade Snail Kite, Wood Stork and other wading birds and their habitats in WCA-3A
- To maintain nesting season requirements for the Cape Sable Seaside Sparrow
- To maintain other C&SF project purposes



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Paradigm Shift

- USFWS developed a Multi-Species Transition Strategy for WCA-3A
- ERTTP Includes Consideration of New Information
 - ▶ Current climate conditions
 - ▶ Project specific performance measures
 - ▶ Observed species data (1998-2009)
 - ▶ Mock Periodic Scientist Calls
 - ▶ WCA-3A Spreadsheet Analysis (based on MPSC recommendations and current climate conditions)



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Chapter 1 – Alternatives A, B, and C

August 2009 – June 2010

- Coordinated with multi-agency team
 - ▶ Agreements
 - No closure criteria for S-12C with Tram Road stoppers
 - Consider marsh ops
 - Periodic Scientist calls are integral to implementation
 - E RTP Performance Measures and Targets developed as guidance
- Alternative A – IOP, baseline
- Alternative B – Incorporates Flexibility
 - ▶ Expansion of Zones E-1 and D
 - ▶ Flexibility on S-12 A and B closure dates based on current nesting conditions, NP-205 levels, and WCA-3A levels
- Alternative C – Intended to Represent DOI Concerns
 - ▶ No flexibility on S-12 A and B closure dates



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Chapter 2 – Human Health and Safety Constraint

July 2010

- Human Health and Safety Constraint needs to be considered in ERTTP
- Top of the WCA-3A Regulation Schedule needs to be lowered
- Resulted in 2 X 2 modeling which lowered entire Regulation Schedule
 - ▶ Runs 5b1 and Run 7
- Results:
 - ▶ Positive: High water reduction in WCA-3A
 - ▶ Negative: Increase in frequency and duration of dry events resulting in potentially undesirable ecological effects



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Chapter 3 - Final Array of Alternatives

August 2010

- Based on lessons learned from Chapters 1 and 2...
- Final Array of Alternatives *will* Include:
 - ▶ **S-12 C & D no closure dates** with Tram Road stoppers (installed, maintained and monitored by DOI/ENP)
 - ▶ **No marsh ops** (for Phase 1)
 - ▶ **S343/S344 IOP closures**
 - ▶ **Increased S-333 flow targets** into NESRS during the dry season
 - ▶ **S-346 Operations**
 - ▶ **Manage for MSTs Recession and Ascension Rates**
 - ▶ **Periodic Scientist Calls**



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Chapter 3 - Final Array of Alternatives

- IOP – Existing Conditions, no longer an option
- Lower WCA-3A Regulation Schedule
 - ▶ Revert to the originally established Zone A (9.5 to 10.5) as defined per the 1960 regulation schedule.
 - ▶ Bottom of schedule will remain at same level as current Regulation Schedule.
- Variations on New Lower Regulation Schedule which analyze:
 - ▶ S-12 A & B operations
 - ▶ Expansion of Zone E-1 and D



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Path Forward

Schedule

- ▶ TSP – Early October 2010
- ▶ BA to USFWS – October 2010
- ▶ BO Received – November 2010
- ▶ DEIS/Public Meeting – December 2010
- ▶ FEIS – March 2011
- ▶ ROD Signed – May 2011



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Water Quality Discussion



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Water Quality Questions

- Will ERTTP increase water into NESRS?
- If so, does this raise Consent Decree compliance issues?
- How will the project analyze this issue?
- What is the water quality path forward?



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- ***Will ERTTP increase water into NESRS?***
 - ▶ Response: Probably by a small amount. Until we have a final recommended plan, it is not possible to determine by how much water will increase. However, most of the current plans being considered show only a slight increase (~5%) in S-333 flows as well as an increase in S-12C flows.



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- ***Does this raise Consent Decree Compliance Issues?***
 - ▶ Response: This is very difficult to determine. Dr. Walker's paper (May 2010) examined the impacts of implementing the New Rainfall Formula. Although that formula is no longer being considered, this does give us some insight into potential impacts that might result from changes to the system.



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From Dr. Walker's May 2010 Report:

“Modeling results indicate that operations driven by this formula could potentially provide a 10% increase to the long-term average flow delivered to ENP’s Shark River Slough (SRS), relative to operation using the existing rainfall formula.”



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From Dr. Walker's May 2010 Report:

“The analysis indicates that operating under the NRFF could decrease the long-term average FWM concentration in the combined inflows to Shark River Slough by ~0.4 ppb or increase it by ~0.2 ppb, depending on modeling assumptions. Measuring changes in the long-term FWM of this magnitude would be difficult in the context of random year-to-year variations, although measurable changes could occur in specific years.”



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- ***How will the project analyze this issue?***
 - ▶ Response: The team should be able to identify the approximate increase in flows through S-333 and S-12s, and identify the general timing of flows (wet season vs. dry season increases) which would help bracket the issue. 2 X 2 output will allow us to compare this against baseline to predict changes to water quality.



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- ***What is the water quality path forward?***
 - ▶ Response:
 - First the team will choose a recommended plan.
 - Then, should there be a special TOC to discuss this alternative and its potential settlement agreement implications?



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Bottom Line

- It is very difficult to determine if there will be a Consent Decree issue.
- These changes are being recommended as a result of an ESA consultation, as well as the human health and safety constraint. If there is a conflict with water quality, what is the path for resolution?
- Team's recommendation: Increases in flow are anticipated to be minimal through S-333 (~5%). Implement and monitor.



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Requested TOC Input

If the recommended plan presents a conflict between stage/flow quantity improvements and water quality(Consent Decree compliance), the ERTTP Team requests the TOC provide a recommendation to the principals on the path forward.



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Any Questions?

