

RECOVER Presentation ELM Peer Review Workshop 1

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What is RECOVER?

- Restoration Coordination and Verification
- An interagency, interdisciplinary team of scientists, planners, and resource specialists
- Organizes and applies scientific and technical information on a system-wide scale to support the objectives of CERP



Three RECOVER Missions

- Evaluation To work with project teams to evaluate (through modeling) and maximize the contribution made by each project to the system-wide performance of CERP
- <u>Assessment</u> To measure (through monitoring) and interpret actual responses in the natural and human systems as CERP projects are brought on line
- Planning and Integration To identify potential improvements in the Plan, consistent with the goals and purposes of the Plan, and to ensure that the components of the Plan are integrated



RECOVER Organization





Evaluation Team Primary Tasks

- Develop and revise system-wide evaluation performance measures
- Review project performance measures for consistency with system-wide performance measures
- Conduct evaluations of the Comprehensive Plan and its projects as they are refined
- Request the development and refinement of models



Regional Sub-teams

- Regional sub-teams perform most of ET tasks.
- Four sub-teams: Northern Estuaries, Lake Okeechobee, Greater Everglades, and Southern Estuaries.
- Currently, only the Greater Everglades Sub-team plans on using ELM



Greater Everglades Sub-team







Simplified Ridge and Slough Conceptual Ecological Model





What are Performance Measures?

Performance measures are the quantitative indicators of condition in natural and human systems. Collectively, a well-selected set of performance measures and targets provides a characterization of restoration.



Greater Everglades Performance Measures

- Hydrologic
- Ecological
- Water Quality
 - GE-4: Surface water TP concentration
 - GE-5: TP loading and flow weighted mean at inflows
 - GE-6: Surface water TN concentration
 - GE-7: TN loading and flow weighted mean at structures
 - GE-8: Soil Phosphorus*
 - GE-9: STA bypass



Relationship to CEMs and Adaptive Assessment Hypotheses





Assessment and Adaptive Management

- Monitoring and assessment will be used to refine understanding of key uncertainties.
- With greater understanding, model parameter estimates with large variability can be refined to provide more accurate predictions of water quality.



Moving from Water Quality Proxies to a Predictive Model

RECOVER ET applies Water Quality proxies

- STA bypass flow
- Backpumping
- Dry-down
- Structural flows (loading)

 RECOVER could potentially apply ELM to Greater Everglades Performance Measures to help predict the relative performance of project alternative scenarios.



Questions ?