

Executive Summary

Performance measures are tools based on a set of indicators used in project planning to evaluate the degree to which proposed alternative plans are likely to meet restoration objectives and to assess the success of implemented plans in meeting restoration objectives. Performance measures and their associated targets are integral components of the Comprehensive Everglades Restoration Plan (CERP) Adaptive Management Strategy.

Most performance measures were developed through conceptual ecological models that identified key stressors and attributes of the natural system. Attributes are biological and ecological indicators in the natural system, which respond to effects of stressors. Performance measures for other water-related needs of the system, such as water supply and flood control to meet urban and agricultural needs, are derived from state and federal laws. CERP performance measures must fulfill the following:

- The performance measure must address indicators that represent attributes or stressors of natural or human systems that CERP is expected to affect.
- Targets must reflect the desired restoration condition, which is the maximum level of restoration possible given human inhabitation of South Florida. (The concept of desired restoration condition is currently being reexamined.)
- The performance measure must provide an understanding of system-wide responses relative to how CERP implementation is meeting its complex, system-wide goals, while not being so unwieldy and costly that system-wide modeling and monitoring programs cannot be sustained over many years.

This report documents the development and application of system-wide performance measures developed by Restoration Coordination and Verification (RECOVER) technical teams to date. Performance measures were developed with the best available science and tools. Development and application of performance measures is a dynamic process that incorporates new scientific understandings and technological improvements. As our understanding of the ecosystem grows, performance measures and this document will be refined. Refinement of performance measures is part of CERP's Adaptive Management Strategy. Therefore, this is a 'living document', as are the performance measure documentation sheets, and they will be updated to reflect best available science and tools.

This document provides background on how RECOVER performance measures are developed, revised, reviewed and applied. To fully understand the performance measures and how they are to be properly used, this document needs to be read. It discusses the following:

- Scope and purpose of performance measures
- History of performance measure development
- Criteria for choosing performance measures
- Detailed review process for new and revised performance measures

- Performance measures place in the CERP Adaptive Management Strategy
- Connection between performance measures and other aspects of the CERP Adaptive Management Strategy (i.e., monitoring and assessment, interim goals and targets)
- Relationship of performance measures to conceptual ecological models
- Application of performance measures in evaluating alternative plans and assessing system response to CERP implementation
- Uncertainty associated with using performance measures
- Next steps in performance measure development

Performance measures themselves are documented separately. A documentation sheet is maintained for each measure.