ERCP - Comprehensive Everglades Restoration Plan

Success Indicator:	1) 14 restoration plans complete by 2020
Definition:	The number of projects completed for each Planning Phase, as indicated by the corresponding number of final Comprehensive Everglades Restoration Plan (CERP) Project Implementation Reports (PIRs) and Feasibility Studies completed each fiscal year
Data Sources:	C&SF Project Comprehensive Review Study
Reporting Period:	Fiscal Year (October 1–September 30)
Reporting Frequency:	Annually
Aligned Strategy:	All Strategies
Why Success Indicator Is Important:	CERP projects are subject to the U.S. Army Corps of Engineers' (USACE) highly structured planning process. This indicator reflects the interagency and multidisciplinary activities for each project, with the South Florida Water Management District (SFWMD) or the USACE leading some or all planning efforts. The PIR, which is the final planning document, is usually accompanied by a National Environmental Policy Act document. The PIR for each project provides (1) problem identification, (2) development of goals and objectives, (3) a refined set of alternative components that were considered, (4) evaluations of alternative plans, and (5) the final recommended plan. The final report is presented to the U.S. Congress for authorization and subsequent appropriation of funds under the Water Resources Development Act (WRDA).
Example:	The Picayune Strand (Southern Golden Gate Estates) Hydrologic Restoration, Indian River Lagoon – South and Fran Reich Preserve (Site 1) Impoundment PIRs are completed and were authorized by Congress in 2007. In 2009 and 2010 Congress appropriated funding to initiate construction for portions of these three projects. Draft Final PIRs for the Broward County Water Preserve Areas, C-43 (Caloosahatchee River) Reservoir, C-111 Spreader Canal and Biscayne Bay Coastal Wetlands are awaiting final approvals and congressional authorization. Copies of these PIRs can be viewed at www.evergladesplan.org
Targets:	14 restoration plans completed by 2020
Target Definition Source:	CERP Draft Integrated Delivery Schedule dated February 2010
Subject Matter Expert:	Matt Morrison

Success Indicator:	2) 18 project designs complete by 2014
Definition:	The number of CERP projects for which the Project Engineering and Design Phase was completed during the fiscal year, as evidenced by completion of Final Plans and Specifications
Data Sources:	Year-End Annual Project Status Reports
Reporting Period:	Fiscal Year
Reporting Frequency:	Annually
Aligned Strategy:	All Strategies
Why Success Indicator Is Important:	Development of a CERP project through sound engineering practices is essential in assuring that the project meets planning goals, is constructible, and can be safely and economically operated and maintained. This success indicator encompasses the technical and managerial performance and oversight of design and related issues including: ▪ Design schedules and budgets ▪ Design plan and work products including coordination with PIRs, Pilot Project Design reports, and Design Documentation reports ▪ Construction plans and specifications ▪ Updates of the Master Program Management Plan ▪ Real property and relocation requirements coordination and verification ▪ Contract scopes of work development, negotiations, modifications, and costs ▪ Program and project cost projections ▪ Anticipated requirements for performance of project operation, maintenance, repair, replacement, and rehabilitation ▪ Restoration Coordination and Verification (RECOVER) efforts ▪ Design cost estimates and review and analysis of actual expenditures to ensure that design work is proceeding cost-effectively and within budget Formal Design Review is conducted at specific milestones in the design of each CERP project: Preliminary, Intermediate, Pre-Final, and a combined Final/Corrected Final Design Review. The Final/Corrected Final Design Review is the focus of this success indicator. Each review typically takes two weeks, during which electrical, mechanical, and civil engineers and environmental scientists verify and validate each design's soundness to ensure that it complies with professional engineering standards, USACE Engineering Circulars, and CERP Guidance Memoranda.
Example:	During FY2007, Intermediate and Final Design milestones were achieved for the following projects: Acme Basin B Discharge, Picayune Strand Hydrologic Restoration, C-43 (Caloosahatchee River) West Reservoir, C-44 (St. Lucie Canal) Reservoir, and Everglades Agricultural Area (EAA) Reservoir
Targets:	18 project designs complete by 2014
Target Definition Source:	CERP Draft Integrated Delivery Schedule dated February 2010
Subject Matter Experts:	Jeff Kivett

Success Indicator:	3) 148,258 acres of needed land acquired by 2018; 371,649 acres acquired by end of program
Definition:	The number of acres acquired through direct purchase, exchange, or other means for CERP storage, treatment, and restoration projects
Data Sources:	Central and Southern Florida (C&SF) Project Comprehensive Review Study PIR for each respective project; Florida Forever Annual Work Plan
Reporting Period:	Fiscal Year
Reporting Frequency:	Annually
Aligned Strategy:	All Strategies
Why Success Indicator Is Important:	In order to implement CERP, the District or other state, local, or federal governments must acquire lands and retain ownership or access on behalf of the public. Therefore, land acquisition is a key component in CERP's efforts to restore South Florida's ecosystem. The District, as the non-federal sponsor of CERP, is responsible for acquiring the lands needed for the construction, monitoring, and operation of CERP projects.
Example:	In FY2007, 4,195 acres of land were acquired for CERP projects at a total cost of $67.7 million. Nearly 57% of the land for CERP was acquired by the end of FY2007
Targets:	148,258 acres acquired by 2018; 371,649 acres acquired by the end of the program
Target Definition Source:	Project managers identified these numbers, which were included in the C&SF Project Comprehensive Review Study (USACE, 1999) estimates
Subject Matter Experts:	Ruth Clements

Success Indicator:	4) Construction completed: 6,300 acres of effective water quality treatment features completed by 2018
Definition:	Acres of effective Stormwater Treatment Areas (STAs) completed
Data Sources:	C&SF Project Comprehensive Review Study
Reporting Period:	Fiscal Year
Reporting Frequency:	Annually
Aligned Strategy:	All Strategies
Why Success Indicator Is Important:	Water quality treatment features remove nutrients and other pollutants improving water quality prior to delivery to downstream natural areas.
Example:	Environmental restoration flows require water quality treatment before delivery to the natural system. The following water quality treatment features are proposed for completion over the next 10 years: • C-44 STA: 6,300 acres • Lakeside Ranch STA: 1,000 acres
Targets:	6,300 acres of effective water quality treatment features completed by 2018
Target Definition Source:	CERP Draft Integrated Delivery Schedule dated February 2010.
Subject Matter Expert:	Matt Morrison

Success Indicator:	5) Construction completed: 156,000 acres of natural area projects completed by 2018
Definition:	Number of acres of natural areas rehydrated and restored
Data Sources:	C&SF Project Comprehensive Review Study
Reporting Period:	Fiscal Year
Reporting Frequency:	Annually
Aligned Strategy:	All Strategies
Why Success Indicator Is Important:	Several natural areas within the south Florida ecosystem have been altered for development and agricultural purposes. These activities include ditching and draining the natural landscape. As a result of these activities natural drainage patterns have been altered causing wetland degradation and estuary impacts. Restoring natural areas by plugging ditches, filling canals, redirecting flows and raising the water table improve hydrology, wetland function and estuarine conditions.
Example:	Restoration of natural areas provides additional freshwater storage, on-site retention, groundwater recharge, water quality improvement and increased spatial extent of natural wetland and upland habitat for wildlife. • Indian River Lagoon – South: 90,000 acres • Picayune Strand: 55,000 acres • C-111 Spreader Canal; 10,000 acres • Biscayne Bay Coastal Wetlands 3,800 acres
Targets:	156,000 acres of natural area projects completed by 2018
Target Definition Source:	CERP Draft Integrated Delivery Schedule dated February 2010
Subject Matter Expert:	Matt Morrison

Success Indicator:	7) 100% of ecological baseline completed by 2020
Definition:	The System-wide Ecological Baseline encompasses the critical monitoring components managed by RECOVER as well as monitoring data from other District and non-District sources. These provide the measure of ecosystem health against which restoration success is measured, as well as key information to meet mandatory CERP reporting requirements and to guide adaptive management of restoration projects. Baseline monitoring will gradually merge into restoration effects monitoring as restoration activities are implemented.
Data Sources:	C&SF Project Comprehensive Review Study (April 1999); Recommendations for Interim Goals and Interim Targets (March 2005); RECOVER Monitoring and Assessment Plan (December 2006); 2007 Assessment Team System Status Report (November 2007)
Reporting Period:	Fiscal Year
Reporting Frequency:	Biennially in the System Status Report; as needed to guide restoration planning, design, and operation activities
Aligned Strategy:	All Strategies
Why Success Indicator Is Important:	Ecological monitoring is the key pillar that supports the assessment, system-level planning, evaluation, and adaptive management services that RECOVER provides to support restoration activities.
Example:	In the past year, ecological baseline data from RECOVER has been used to optimize project-level monitoring plans and compliance monitoring requirements for the Biscayne Bay Coastal Wetlands Project and C-43 Reservoir Project as well as others.
Targets:	By 2020, 100% of baseline monitoring will be accomplished for the Lake Okeechobee and Greater Everglades modules. Monitoring will be 95% complete for the Northern Estuaries and 87% complete for the Southern Estuaries modules.
Target Definition Source:	RECOVER has developed a series of Conceptual Ecological Models that link anthropogenic stressors to environmental impacts. Critical monitoring components were identified based on these models. The length of monitoring required to develop a baseline for each component was determined using statistical methods (or in some cases, best professional judgment). Percent completion of the baseline is measured as the overall average of progress toward completing the required monitoring period for each individual monitoring component.
Subject Matter Expert:	Susan Gray

Success Indicator:	8) 100% of system-wide restoration assessments completed by 2020
Definition:	The System Status Report, CERP Report Card, and Monitoring and Assessment Plan (MAP) updates are essential components in meeting CERP's mandated reporting requirements. These components also play a critical role in assessing ecosystem health and restoration success, and in guiding adaptive management activities for restoration project planning, design, and operation.
Data Sources:	C&SF Project Comprehensive Review Study [April 1999]; Recommendations for Interim Goals and Interim Targets [March 2005]; RECOVER Monitoring and Assessment Plan [December 2006]; 2007 Assessment Team System Status Report [November 2007]
Reporting Period:	Fiscal Year
Reporting Frequency:	Biennial, odd-numbered years for System Status Report, Biennial even-numbered years for CERP Report Card, and Monitoring and Assessment Plan updates.
Aligned Strategy:	All Strategies
Why Success Indicator Is Important:	This success indicator sums up all the work accomplished by RECOVER in the preceding two-year period, guides the future direction of monitoring and assessment efforts, and provides key information for measuring restoration success and guiding adaptive management activities.
Example:	The 2007 System Status Report clearly identified the benefits of crocodile reproductive success as a result of canal plugging in the Southern Everglades. Data analysis conducted as part of the 2007 System Status Report revealed new information about oysters in the east and west coast estuaries, and about groundwater flows in Biscayne Bay, which will influence future restoration and operational decisions.
Targets:	Maintain reporting and monitoring and assessment update schedule through 2020. Duration is dependent on the progress of overall ecosystem restoration progress. Every year of successful reporting completes 10% of the goal of 100% in 2020.
Target Definition Source:	Restoration assessments are part of a cyclical process that includes collecting, analyzing, and integrating environmental data to examine the core hypotheses upon which restoration is based, reporting and applying results to adaptive management activities, and regularly reevaluating monitoring and data collection strategies. Currently, activities include collecting, analyzing, and assessing baseline data to confirm hypotheses upon which restoration activities are based and establishing a pre-restoration dataset. This process will merge into restoration effects assessment as restoration activities proceed.
Subject Matter Expert:	Susan Gray