# Success Indicator Interpretation for FY2010

Linked to the District's Work Plan and Strategic Plan, success indicators have been established for each of the South Florida Water Management District (SFWMD, District) resource areas. Indicator values are summarized annually in Chapter 2 of Volume II of the South Florida Environmental Report (SFER), which includes several years of data for each indicator, as well as comparisons to planned targets. Further details on success indicators, including definitions, targets, and other related information, is available on the District's website at <a href="http://www.sfwmd.gov">www.sfwmd.gov</a>

## **Everglades Restoration & Capital Projects**

The Everglades Restoration & Capital Projects (ERCP) Resource Area is setting the benchmark for its planning and delivery of capital projects and scientific performance needed to restore Florida's Northern and Southern Everglades. ERCP continued to achieve targeted outcomes in FY2010, as evidenced by its suite of success indicators.

The District takes a system-wide approach to protecting and restoring the Northern and Southern Everglades. These inter-dependent ecosystems stretch across most of South Florida and include the Upper Chain of Lakes, Kissimmee River, Lake Okeechobee, St. Lucie and Caloosahatchee rivers and estuaries, Big Cypress National Preserve, Everglades National Park with adjacent water conservation areas and South Florida's coastal bays. A comprehensive effort is under way to protect and restore these ecosystems. Planned and on-going restoration projects are improving regional water quality, hydrology and ecology – all of which were fundamentally altered by a series of public and private development projects that began more than a century ago. These improvements are called for in Florida's Everglades Forever Act and the state-federal Comprehensive Everglades Restoration Plan (CERP).

#### System-wide Evaluation

Computer modeling and environmental monitoring and assessment provide the technical foundation for science-based, informed decision making. Through implementation of its Strategic Modeling Plan the District implemented modeling industry standards and best practices in FY2010. As indicated by a 98% client satisfaction rating, which exceeded the 95% target, the agency continued to successfully apply state-of-the-art modeling tools.

In FY2010, the District complied with all legally-mandated and permit-required water quality monitoring and reporting obligations. The agency is required to demonstrate that there is no harm to the resource as a result of ecosystem restoration projects, and in FY2010 water quality monitoring networks and operations efficiently and effectively supported the District's mission, strategic efforts and legal obligations. Monitoring is limited to District mission-critical functions, to address key management questions, and to meet legal and permit requirements. The FY2010 target was achieved, which was to complete 4 of 24 re-engineering products. These products were one each for the southern coastal region and the Everglades Agricultural Area, and two for Water Conservation Area 3.

Data generated by the District's water quality monitoring efforts met or exceeded the quality standards set by the state and National Environmental Laboratory Accreditation Program in FY2010. The FY2010 target was for a minimum of 95% of data to meet state and national standards. In fact, 100% of data met requirements. This was confirmed by field and laboratory quality assurance audits, which showed adherence to quality control requirements and standard operating procedures. The annual client survey showed a very high satisfaction level with water quality technical analyses. The FY2010 target was to achieve a 4.5 out of a possible 5.0 score, and a score of 4.8 was actually achieved.

Data management targets also were achieved in FY2010. Consistent implementation of data management policy and procedures increases scientific data credibility, efficiency and resource utilization, data accessibility, ease of use and increased potential for secondary usage. For FY2010, the goal was to acknowledge the complete suite of 112 data management accountabilities as being fulfilled, and this was accomplished.

#### **Restoring the Headwaters**

Wading bird density is an indicator that Kissimmee River floodplain wetland function is being restored, as these birds require appropriate water depths for foraging and concentration of prey. Reintroducing fluctuating water levels and seasonal hydroperiods, and reconstructing the physical form of the Kissimmee River, is expected to re-establish floodplain wetlands. These wetlands will support increased wading bird densities through increased prey concentrations. The FY2010 target was at least 30.6 birds per square kilometer. The actual value was 48.5 birds per square mile, which is encouraging for restoration efforts.

Re-establishing dissolved oxygen regimes in the Kissimmee River channel is vital to meet the goal of ecological integrity, as adequate dissolved oxygen concentrations are essential for most aquatic organisms. Target levels for dissolved oxygen at 0.5 to 1.0 meter depth for the wet season are 3 to 6 milligrams per liter (mg/L) and between 5 and 7 mg/L in the dry season. In 2010, the actually observed levels were 2.5 mg/L for the wet season and 6.2 mg/L in the dry season. Target levels at the channel bottom are 2 mg/L for 90% of the time, (an 84% frequency was observed in 2010) and greater than 1 mg/L for 50% of the time (97% achieved in 2010). Dissolved oxygen levels have increased to a range normally observed in minimally impacted Florida streams, and this is critical for the long-term survival of fish and other aquatic organisms.

Reestablishing hydrologic characteristics that mimic historic conditions is a primary driver for restoring ecological integrity to the Kissimmee River floodplain ecosystem. Lack of flow directly affects certain physical, physio-chemical and biological attributes in the river channel, which impede the ability of associated ecosystem components to respond to restoration. Achieving a water flow every day of the year from the restored channels of the Kissimmee River is the annual objective, and this was achieved during Water Year 2010 (WY2010, which is May 1, 2009 to April 30, 2010).

An important aspect of the pre-channelization hydrology was an annual flood event that resulted in a recession event of long duration (at least 173 days) and slow recession rate (less than 1 foot per 30 days). The target duration for recession events of 173 days is the mean value for historic recession events. The District's objective is for it to take 173 days or longer for the floodplain to dry down from a peak stage at the end of the wet season, and continuing through the dry season, until it starts to re-flood in the following wet season; and the rate at which water depth decreases during the extended recession event (≥ 173 days) should not exceed 1 foot per 30 days. Slow recession rates provide connectivity between the river channel and floodplain. This contributes to increased

habitat diversity and functionality and allows for the transfer of food resources. During WY2010, variation in flow resulted in four recession events instead of a single event. Event duration and recession rates were measured at five floodplain locations, and only one event had a duration longer than 173 days and recession rate less than 1 foot per 30 days.

#### **Protection of the Lake and Estuaries**

Achieving targets at the source in the Lake Okeechobee Watershed is critical to optimizing downstream water quality and to the overall success of achieving the lake's Total Maximum Daily Load (TMDL). The District is working to meet a target TMDL of 140 metric tons phosphorus load for Lake Okeechobee by 2015. During WY2009, a TMDL of 578 metric tons of phosphorous was reported. No interim targets were set for 2010. A TMDL of 483 metric tons of phosphorous was reported for WY2010, which is moving closer toward reduced Total Phosphorus loads and implementing long-term solutions based on the lake's TMDL.

Additional water storage will provide for a healthier and well-balanced Lake Okeechobee ecosystem by moderating lake level fluctuations and reducing damaging discharges to the Caloosahatchee River and St. Lucie River estuaries. Cumulatively 40,000 acre-feet of storage was planned for FY2010, and 55,458 acre-feet was achieved.

Keeping Lake Okeechobee water-level elevations within the prescribed range is desirable. High lake levels tend to benefit water supply, but may increase the risk to public health and safety, can harm the lake's ecological health and may adversely affect estuarine systems receiving lake discharges. Lower lake schedules may reduce water supply potential. The timing and magnitude of water releases is important for preserving regional flood protection, and for protecting natural habitats of downstream estuaries. In FY2010, Lake Okeechobee was continuously maintained within its desired range.

Submerged aquatic vegetation in Lake Okeechobee provides habitat and spawning grounds for fish, and creates areas of low turbidity, good water quality and habitat for waterfowl. Boat crews annually sample and map the vegetation in the lake. The FY2010 target was maintenance of a minimum of 40,000 acres of mixed submerged aquatic vegetation with at least 20,000 acres being vascular plants. The actual achieved was a total of 33,482 acres of mixed submerged aquatic vegetation, of which 25,690 acres were vascular plants. In years with large submerged aquatic vegetation coverage, algal blooms are less frequent and fish recruitment is higher.

Annual treatment of exotic and invasive plant species is needed in Lake Okeechobee to protect native habitat and allow desirable vegetation to establish in previously impacted areas. The loss of desirable native habitat negatively affects wading birds, fish and other wildlife. A steady reduction in invasive, exotic species is being seen in the Lake Okeechobee marsh as a result of control and maintenance efforts. The target coverage level for exotic plants has been established as 10% or less, and in FY2010 the District was successful by achieving an 8.4% coverage level.

Salinity levels in surface water reflect the overall health of the St. Lucie Estuary. A range of salinity concentrations is required for Valued Ecosystem Components – oysters and seagrasses for example – to flourish. During FY2010, the salinity range of 8 to 28 salinity units was met 233 days out of the target 365 days, or 64% of the year. This means that salinity was outside the ideal range 46% of the year, during which time animal and plant species that need brackish water for survival were stressed.

Research has established a relationship between flow rates and salinity concentrations, and prolonged low flows may harm the Caloosahatchee River Estuary. In 2010, mean monthly flows in the Caloosahatchee River Estuary fell between 450 and 2,800 cfs for 6 months. The target was to maintain these mean monthly flows for all 12 months. This means the target was only met for half the year, and during the other half less than ideal salinities for estuary conditions were observed.

#### **Cleaner Water and Improved Habitats**

In the Everglades and southern estuaries, additional effective treatment area for water quality treatment will improve water quality discharges to the Everglades Protection Area. The Success Indicator targets are: Construct 6,817 acres of Compartment B and 4,656 acres of Compartment C Stormwater Treatment Area (STA) by December 2010; and construct pump stations by December 2011. For FY2010, the target and actual area of STA under construction was 11,473 acres. Percentages complete are as follows:

- <u>Compartment B</u>: Earthwork 74%; water control structures 46%; pump stations 44%; Okeelanta Bridge 100%.
- <u>Compartment C</u>: Earthwork 91%; water control structures 72%; and pump stations 38%.

This means that construction to complete the stormwater treatment areas of the two projects was on schedule to complete as planned in December 2010. Construction involves nearly 22 miles of levee and canals and another 22 water control structures for Compartment B; and of 31 miles of canals and 28 miles of levees and 19 water control structures for Compartment C. This paves the way for completion of the next targeted milestone, completion in December 2011 of the pump stations that will help to achieve long-term Everglades water quality goals.

Water quality standards were achieved in FY2010 in the Everglades Protection Area in compliance with the Federal Everglades Settlement Agreement. Stormwater Treatment Area (STA) performance is being optimized according to approved operation plans, federal and state permits, and in accordance with the Long-Term Plan, which is the state's blueprint for achieving water quality standards in the Everglades Protection Area.

The establishment of sustainable restoration targets developed and achieved for wading bird populations in the Everglades is also important. This three-year running average composite indicator reflects reproductive success for the five dominant wading birds of the Everglades. A keystone indicator of Everglades health and resilience, wading bird success is dependent upon establishing hydrologic and water management criteria to meet habitat and prey requirements. The FY2010 three-year running average number of nesting pairs targets and actuals are as follows:

- Great Egret: target 4,000; actual 6,774.
- <u>Snowy Egret & Tricolored Herons</u>: target 20,000; actual 2,442.
- White Ibis: target 25,000; actual 20,081.
- Wood Stork: target 2,500; actual 1,736.

The number of aquatic wading birds has increased significantly, in some years more than double the restoration target; however, in FY2010, only Great Egret numbers exceeded the target, with White Ibis and Wood Stork numbers achieving 80% and 69% respectively of their respective targets, and Snowy Egrets and Tricolored Herons numbers achieving only 12% of target.

Scientists and stakeholders have emphasized the need to investigate whether elevated sulfur levels in the Environmental Protection Area are causing enhanced phosphorous liberation, mercury methylation and plant toxicity impacts. The District is committed to identifying and filling all data gaps identified in the Sulfur Action Plan and addressing all Sulfur White Paper management questions. In all, 15 data gaps and management questions were identified in the Sulfur Action Plan. Of these, three questions have been addressed. For FY2010, another was queued up and addressed on schedule.

For the Loxahatchee River, a minimum flow violation occurs within the Northwest Fork when an exceedence occurs more than once every six years. To prevent significant harm, 35 cubic feet per second (cfs) of flow at the Lainhart Dam provides a flow regime that maintains a healthy floodplain swamp. The exceedence occurs any time that water flows over the Lainhart Dam are below 35 cfs for more than 20 consecutive days within a calendar year. The 2010 target was to have no less than 35 cfs mean daily flow at the Lainhart Dam for no more than 20 consecutive days. The flow criterion was exceeded for 10 consecutive days, however, the Minimum Flow and Level was met since the low flow did not last 20 days.

In South Central Biscayne Bay, which is between Shoal Point and Turkey Point, the salinity within one kilometer of the western shoreline should not to exceed 35 practical salinity units (psu) more than 5% of the year. The near-shore of South Central Biscayne Bay is an estuarine nursery area where many plants and animals require salinity throughout the year in a range between about 15 and 25 psu. Frequent salinity above 35 psu is detrimental to the estuarine community, and will shift it toward a marine community. The target of less than 5% salinity exceedence of the detrimental 35 psu level was achieved in FY2010, and less than 2% salinity exceedence was actually observed, which is good for this estuarine system.

Salinity within Manatee Bay, which is in the Biscayne Bay Area, should not exceed 35 psu more than 5% of the year. Manatee Bay is within the Florida Keys National Marine Sanctuary at the extreme southern reach of Biscayne Bay. The near-shore of Manatee Bay is an estuarine nursery area where many plants and animals require salinity throughout the year in a range between about 15 and 25 psu. Frequent salinity above 35 psu is detrimental to the estuarine community, and will shift it toward a marine community. The target is less than 5% salinity exceedence of the detrimental level each year. In FY2010 the actual observation was less than 1% salinity exceedence, which was good for the bay.

The long-term target (after CERP project construction) is for salinity within Highway Creek, Long Sound and Joe Bay remain between 5 and 15 psu; and within Little Madeira Bay within 15 and 25 psu 100% of the time. These water bodies are in the Everglades National Park/Florida Bay Area. Salinity within the ranges given maintain estuarine habitat for a variety of plants and animals. Interim target have not been set, but in FY2010 salinity levels remained within the long-term target ranges as follows:

- Highway Creek: 155/365 days = 42%
- Long Sound: 37/365 days = 10%
- Joe Bay: 186/365 days = 51%
- Little Madeira Bay: 220/365 days = 60%

Rulemaking, including that for Minimum Flow and Levels, Water Reservations and Restricted Allocation Rules, is a regulatory tool to ensure that management actions are meeting established ecological objectives of water resources. FY2010 targets included adopting rules for two Water Reservations: Kissimmee River and selected lakes in the

upper Kissimmee basin; and the North Fork of the St. Lucie River, while initiating rule development for the Caloosahatchee Estuary. The District successfully achieved a portion of its FY2010 target by adopting its second Water Reservation rule to set aside water for the North Fork of the St. Lucie River. This was in support of the CERP Indian River Lagoon - South Project, and enabled construction to start. Water Reservation rule development was initiated for the Caloosahatchee Estuary - in support of the CERP Caloosahatchee River (C-43) West Basin Storage Reservoir Project - and rule development for the Kissimmee River and Kissimmee Chain of Lakes continued throughout 2010 - with final adoption deferred to a later date. The District also successfully demonstrated that the 2007 Restricted Allocation Area rule protects the natural system water in the Everglades provided by the CERP Site 1 Impoundment (Fran Reich Preserve) Project - which enabled construction to start.

#### Implementing the Federal-State Partnership

The Comprehensive Everglades Restoration Plan (CERP) is the framework and guide for the restoration, protection, and preservation of the Greater Everglades ecosystem. CERP also provides for other water-related needs of the South Florida region, such as water supply and flood protection. CERP projects are subject to the highly structured federal planning process. By 2020, 14 final CERP Project Implementation Reports (PIRs) and Feasibility Studies are scheduled to be completed. The final PIRs are presented to Congress for authorization and subsequent appropriation of funds. During FY2010, the District scheduled ten major planning documents to reach Draft or Final completion status. Eight of these documents actually were completed.

Development of a CERP project through sound engineering practices is essential to ensure the project meets planning goals, is constructible, and can be safely and economically operated and maintained. The District planned to complete 11 project designs during FY2010, but in fact exceeded this projection by completing 13 major design efforts.

Acquisition of lands is a key component in the District's efforts to restore South Florida's ecosystem. Lands are needed for the construction, monitoring and operation of CERP projects: 148,258 acres are targeted for acquisition by 2018; and 371,649 acres are expected to be acquired by end of program. The FY2010 CERP land acquisition target was 225,436 acres. The actual amount acquired was 224,881 acres, a difference of only 555 fewer acres than planned.

CERP construction projects will enable restoration of natural areas by providing additional water storage. Ultimately these projects will define the quantity, quality, timing and distribution of water flows to a restored Everglades. The long-term target includes Indian River Lagoon – South (approximately 90,000 acres), Picayune Strand (55,000 acres), C-111 Spreader Canal (10,000 acres) and Biscayne Bay Coastal Wetlands (3,800 acres). Note: acreages are approximated and rounded. The FY2010 target was to complete 13,150 acres, and the agency surpassed that level and achieved 13,670 acres.

Ecological monitoring supports the assessment, system-level planning, evaluation and adaptive management services that support restoration activities. By 2020, 100% of baseline monitoring will be accomplished for the Lake Okeechobee and Greater Everglades modules. The interim target for FY2010 of 49% of baselines being completed was achieved. 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 re-evaluating monitoring and data collection

strategies. Every year of successful reporting completes 10% of the goal to reach 100% in the year 2020. As of FY2010, 40% has been was planned and achieved. Continued adherence to schedule for CERP monitoring and assessment is anticipated.

### **Operations & Maintenance**

The SFWMD's surface water management system is central to the agency's mission of balancing and improving flood control, water supply, water quality, and natural systems. In FY2010, Operations and Maintenance continued to successfully manage the Central and Southern Florida (C&SF) Project according to operating criteria defined by the U.S. Army Corps of Engineers (USACE) and by federal Consent Decree. This surface water management system includes more than 1,600 miles of canals and 1,000 miles of levees/berms, more than 500 structures and 700 culverts, and 60 pump stations. The system is monitored continuously to ensure that water levels are maintained within set criteria designed to prevent damage to property and the natural environment.

Much of the District's surface water management infrastructure is nearing the end of its design lifespan. District maintenance of the C&SF Project has effectively extended the lifespan of many structures. However, some structures have experienced deterioration beyond the scope of maintenance activities, and a 50-Year Plan has been developed to renovate the system. In FY2010, the District was 85% in compliance with the funded level of the 50-Year Plan for the year, which was right in line with the 85% annual target.

Water managers need real-time water level data available for decision making, water budgeting, and planning. Installing, upgrading, and maintaining the monitoring network that provides data is essential to success. In FY2010, the District achieved 99.8% compliance with its electronic communication installation and maintenance schedule, far exceeding the 90% target level.

Even with a sophisticated computerized control and data acquisition system, there is always potential for human error. Constant evaluation and continued development of tools to assist water managers and operators can minimize the potential for human errors that compromise either flood control or water supply. In FY2010 the District achieved a 99% flood protection performance level, which is the annual target.

Maintenance of water control structures and pump stations is critical to system readiness to move water for flood control and water supply deliveries. In FY2010 the District performed 90% of planned structure maintenance on schedule, which fell short of the 99% annual target. The USACE inspects canals and levees, and in FY2010, 98% passed the USACE inspection, which surpassed the 90% annual target. Based on USACE inspection reports, C&SF Project structures achieved 90% design conveyance capability in FY2010 – which achieved the 90% annual target.

General maintenance is carried out on the District's Field Stations. Buildings and grounds are maintained, including roofing, plumbing, painting, electrical lighting, and mowing activities. Preventive maintenance activities are completed on time to prevent equipment and infrastructure failures that may adversely impact the ability to meet operational demands and intended utilization. In FY2010, 81% of these maintenance activities occurred on schedule, which fell short of the 95% annual target.

Vehicle and equipment maintenance is essential, and ensuring preventive maintenance is completed on-time prevents vehicle or equipment failures that may impact the ability to meet operational demands. In FY2010, 98% of planned vehicle maintenance was performed on schedule, which slightly missed the 99% annual target.

The operation and maintenance of facilities and structures is critical to moving water to achieve the goals and objectives of the Long-Term Plan, which is the state's blueprint for achieving water quality in the Everglades. Each of the Stormwater Treatment Areas (STAs) must be operated and maintained in a manner consistent with the permit conditions in order to ensure the facilities are in compliance with applicable state and federal water quality regulations. Moving water through critical water control structures is needed to meet demands. In FY2010 the District achieved 95.5% of critical STA facilities and structures maintained in accordance with standard operating procedures to meet the goals of the Long-Term Plan. This fell short of the 100% target; however the District maintained compliance with all state and federal STA permit requirements.

In FY2010, the District continued its tradition of environmental excellence by complying with applicable federal, state, and local regulatory requirements relating to our surface water management system. A 95% compliance level for FY2010 was observed, which equaled the 95% annual target.

District natural lands are under threat by highly invasive, nonnative plants. Control efforts are designed to prevent these exotic species from displacing native species and threatening South Florida's biodiversity. Some species also disrupt the District's ability to effectively manage water resources by draining broad areas of wetlands and choking waterways and control structures. The SFWMD has defined acceptable levels of exotic infestation, and in FY2010, 90% of the area within the Water Conservation Areas, Lake Okeechobee, and the STAs were at an acceptable level of infestation, which meets the 90% annual target for those regions. For all other District lands, a 77%-acreage-acceptable level of exotic species was observed, which surpassed the 73% annual target.

Aquatic plants disrupt the ability of channels to meet design flow. Studies have shown that a cover of floating plants can reduce flow in medium-to-large channels by nearly half, and submerged weeds cut the flow by as much as 97%. Maintaining low levels of floating aquatic plants significantly reduces the need for annual herbicide usage. For FY2010, 90% of the District's canals were at an acceptable level of aquatic plant infestation, right in line with the 90% target level.

District natural lands contain large swaths of fire-dependent natural communities, including scrub, pinelands, wet and dry prairies, and marshes. Fire-dependent communities are typically much more biologically diverse than non-fire-dependent communities. Not burning these communities at the appropriate interval triggers ecological succession to a less diverse community type and creates a wildfire hazard through the accumulation of flammable fuels. In FY2010, 100% of lands were burned according to the recommended frequency. This exceeded the 95% target.

Fences, gates, roads, and culverts are necessary for maintaining site security, and providing management and public access to District lands. The District also owns and is responsible for major structure maintenance of several law enforcement officer residences. In FY2010, 100% of these infrastructure projects were completed on schedule and within budget, which outperformed the 80% annual target.

Ensuring that District lands are open to the public is consistent with our Public Recreational Access and Use Policy and during FY2010 the District achieved its 100%

public lands availability target. In FY2010, the District also achieved a 100% completion level of its land management plans and 100% of the submitted mitigation bank credit releases were approved by permitting agencies – which are the annual targets. All planned photopoints, which demonstrate the benefits of restoration projects and provide permanent records of habitat condition, were also achieved in FY2010.

The District documents two formal semi-annual inspections and any incident reports as needed when inspecting properties that it has leased to private entities. When an incident-related report is prepared, land managers are obligated to develop a plan of action within 30 days after identifying the problem, 100% of the time, to facilitate tracking and resolution of issues. In FY2010 the District completed 100% of the required inspections on leased lands, and all incidents were resolved.

Recreational capital improvement projects are constructed on District lands to provide the necessary amenities and facilities that enhance the public's ability to access and recreate on District lands. Ideally, projects are planned, designed, and constructed within the budgeted fiscal year. In FY2010, 71% of these projects were completed on time and within budget. This fell short of the 80% annual target.

The District also controls encroachment and trespassing on its rights-of-way via permit and compliance checks to ensure that District operations are not potentially hindered during times of emergency, routine maintenance, and refurbishment. In FY2010 the agency achieved a 92% Right-Of-Way compliance or resolution level, achieving the 92% target.

## **Regulatory & Public Affairs**

From permitting and water supply planning to outreach and intergovernmental relations, the Regulatory & Public Affairs Resource Area consolidates and centralizes the District's regulatory and public focused functions. This one-stop approach promotes agency transparency and public involvement in regulatory and water resource decision making and – working through our local service centers – extends the agency's reach in providing services within South Florida's communities.

The District strives to have positive, responsive and timely communications with members of the public, stakeholders, government agencies and officials, and measures how quickly we respond to those constituents' needs. Each year we strive to respond and close 90% of correspondence and 75% of public records requests within 14 days, and in FY2010 the District more than achieved both targets - by responding to 94% of correspondence and 93% of public records requests within 14 days.

The SFWMD issues Environmental Resource Permits (ERPs) and Water Use Permits. ERPs ensure that land development projects and dredge-and-fill activities do not cause adverse environmental, water quality, or water quantity impacts. Water Use Permits ensure safe, efficient, equitable and reliable development of water resources. In these processes the District is under time deadlines, under the law, to either request additional information or issue permits, and if these deadlines are missed, the applications get deemed complete or are issued by default. Therefore, the agency aims to meet these deadlines all the time, and in FY2010 we issued 100% ERPs on time (1,176 total); 99.94% Water Use Permits on time (1 permit out of 1,636 was issued by default); and 99.89% Requests for Additional Information were issued on time (3 requests missed the 30-day deadline and were deemed complete by default).

The District is encouraging the use of electronic application submission, or e-Permitting, as electronic submission increases both the efficiency and accuracy of application submittal. Data are also made available for online research. Each year, our target is to increase initial e-Permitting applications by 2 percentage points, and in FY2010, the agency achieved more than double that level, as the actual initial e-Permitting applications went up by 4.7 percentage points.

Construction Completion Certifications (CCC's) confirm that projects are built in accordance with the permitted plans - to ensure water quality treatment, flood protection, and preservation, creation, restoration and enhancement of natural systems. Construction and environmental inspections by District staff during the construction phase of a project afford the District the opportunity to address potential violations prior to irreversible harm. Each year the District inspects thousands of high priority ERPs. The District seeks to achieve a combined 75% compliance rate of those permit applications inspected – on both the environmental and construction sides of permits. For those permits out of compliance, the District staff found an initial 74% compliance rate of environmental applications and a 78% initial compliance rate of construction applications, exceeding the targeted 75% compliance rate. The District issued 1,878 letters on time associated with this compliance effort.

The District previously identified a substantial number of permits (8,159) issued between 1992 and 2000 that had never been certified. As a result, the agency initiated an effort to reduce and ultimately eliminate the backlog of uncertified projects by 2015 while keeping current with the permits issued beginning in 2001. In FY2010, the District processed 814 (target 716) backlog certifications and 1,681 current certifications, surpassing the target goals.

In accordance with regulatory requirements, all wetland impacts and mitigation were properly reported and met legal requirements. In FY2010 the District review included 66,903 acres of wetlands. Of these wetland acres, 62,984 were enhanced, 3,527 were preserved, 81 were created or restored, and 543 were permitted to be impacted. A total of 181 mitigation bank credits were also purchased.

The Long-Term Plan (LTP) is the state's blueprint for achieving water quality standards in the Everglades Protection Area and is recognized in the Everglades Forever Act and the Everglades Total Phosphorus Rule as the best available phosphorus reduction technology for the Everglades. The Long-Term Plan is also being implemented to allow the District to maintain compliance with the federal Everglades Settlement Agreement/Consent Decree. For the Source Control component of the LTP's strategy for improving water quality, in FY2010, both the C-139 and Everglades Agricultural basins were in compliance with water quality standards.

Regional water supply plans ensure an adequate supply of water to protect natural systems and to meet existing and projected reasonable-beneficial uses. These plans are updated every five years to ensure that demand projections and water resource analyses are current. Regional water supply plan updates were completed in 2006 for the four planning regions that cumulatively encompass the District. Water needs in the District were projected to significantly increase over the next 20 years based on the projections at that time. These plans generally concluded that development of historically used fresh water sources has been maximized in many areas of the District such that most increases in future needs will be met by alternative water supplies and water

conservation. Updates to these plans are underway and will be completed in 2011 and 2012. Data collection, model runs, document production and public involvement processes for these updates are on schedule.

Population growth has slowed significantly since the last water supply plan updates were completed and water demands have stabilized or decreased for many utilities. As a result several projects making additional water available have been postponed. However, the agency's Alternative Water Supply (AWS) and conservation work continues. In FY2010, 2.5 mgd capacity was created from AWS sources, which exceeded the 2.0 mgd target. Brackish water/seawater capacity District-wide reached 230 mgd, which was slightly shy of the 236 mgd target, and due to project postponement resulting from reduced demand projections. In FY2010, 29% of wastewater in the District was reused, which was just short of the 30% target and conservation implementation of 4.7 MGD levels exceeded the target of 1.9 MGD.

State law requires local governments to amend their Comprehensive Plans to update their Water Supply Facilities Work Plan, where appropriate, within 18 months of a water management district approving or amending a regional Water Supply Plan. Water Supply Facilities Work Plans address at least a 10-year planning horizon and consider the project lists in the District's water supply plans or identify specific alternatives to satisfy the projected demands. This requirement further promotes consistency between water supply plans, consumptive use permits, and local government comprehensive plans. In FY2010 all Comprehensive Plan reviews were completed by District staff within the mandated timeframes.

### Agency Management & Corporate Resources

In spite of significant revenue reductions, the SFWMD successfully accomplished its mission while remained in good financial standing in FY2010. Safety is of the utmost importance, and in order to protect facilities critical to life, property, and the environment within South Florida the agency maintained 100% compliance with its Security Plan for Critical Infrastructures

Our Current Ratio of 7.72 reflects a very high ability to meet short-term debt obligations, and while the results of the FY2010 audit are still pending, we anticipate the positive unqualified opinion that the agency has continuously received. This will ensure good bond ratings if financing is appropriate, and will reassure taxpayers and partnering agencies of the District's solvency.

The SFWMD continues to make the most of its funding. At 6.65% of the total budget, the overall administrative budget was again kept below the 10% benchmark. Similarly, legal services, while achieving a client survey 92% positive rating, cost 0.54% of the total budget, which is about half the 1% target level. It is important to keep the administrative budget below the target in order to provide the maximum amount of budget to mission delivery services.

An 82% expenditure level of budgeted funds (also known as "burn rate") for the whole agency came in slightly below the 85% target level, and steps have been taken to improve in the future. Funds are limited, so tying up funds that are not expended limits the District's ability to maximize use of each year's revenue. In contracting - the District remains committed to providing equitable opportunities for small businesses, and in

FY2010 spent 13.0% of its contract dollars with small firms. This is considerably higher than the 5.0% annual target.

In FY2010 progress was made in standardizing project management. The agency introduced standard methodology project management compliance as a success indicator and achieved a 75% consistency level. This is 10% shy of the overall target of 85% to be achieved by 2014, so it is anticipated that the target level will be achieved far in advance of the target date.

As evidenced by the 96% retention rate of new hires, the District's success in hiring technically qualified employees that were also the right fit for the District's organizational culture exceeded the 90% target level.

Our Information Technology delivered a very high level of Critical Systems availability (99.93%) which is essential to the delivery and reception of the District's services. The Information Technology Help Desk received a 99% satisfaction rating from employees served, reflecting superior services rendered, even higher than the 96% target.