SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Audit of Permitting Works of the District

Audit #99-27

Prepared By Office of Inspector General

Allen Vann, Inspector General Dan Sooker, Lead Consulting Auditor

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045 • TDD (561) 697-2574 Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

MGT 08-06F

May 9, 2000

Audit Committee Members:

Mr. Mitchell W. Berger, Chairman

Mr. Michael D. Minton, Member

Ms. Vera M. Carter, Member

Mr. Gerardo B. Fernandez, Member

Mr. Patrick J. Gleason, Member

Mr. Nicolas J. Gutierrez, Jr., Member

Mr. Harkley R. Thornton, Member

Ms. Trudi K. Williams, Member

Mr. John Fumero, Ex officio

Re: Audit of Permitting Works of the District – Audit #99-27

This audit was performed pursuant to the Inspectors General's authority set forth in Chapter 20.055, F.S. The audit focused on District compliance with permits issued to the District by regulatory agencies. This report was prepared by Dan Sooker.

Sincerely,

Allen Vann Inspector General

AV/ds Enclosure

c: Frank Finch James Blount John Merriam Terrie Bates

GOVERNING BOARD EXECUTIVE OFFICE

TABLE OF CONTENTS

| Introduction | 1 |
|---|----|
| Objectives, Scope and Methodology | 3 |
| Findings and Recommendations | |
| Summary | 4 |
| Strengthen Internal Controls Over the Permitting Process | 5 |
| ECP Permits | 8 |
| Other District Permits | 9 |
| Combine Permitting for Significant District Projects | 12 |
| Consolidate Water Quality Monitoring and Reporting to Regulatory Agencies | 15 |
| Appendix | 1 |

Introduction

A permit, in effect, is an enforceable contract between a regulatory agency and a permittee. Permit terms and conditions are sometimes negotiated but for the most part embody federal law, state statutes, local ordinances, and other regulations. Failure to meet the terms and conditions of a permit may subject the permittee to enforcement action and penalties.

The District is rarely exempt from obtaining permits for its works and other projects. The District must adhere to regulatory requirements or face possible enforcement action. Federal and State agencies that regulate District activities and issue permits include the United States Army Corps of Engineers (USCOE), the United States Environmental Protection Agency (EPA), the Florida Department of Environmental Protection (FDEP), and counties and local governments within District boundaries.

Regulatory permitting is continually evolving. The District is subject to a broad array of Federal and State environmental laws and regulations, which include the Clean Water Act, the Clean Air Act and the Everglades Forever Act. The water conveyance system, primarily designed for flood protection, was not permitted when it was turned over to the District during the 1960's and it is operated in accordance with a schedule established by the USCOE. Subsequent enactment of Federal and State environmental laws and legal actions has resulted in more regulatory oversight. Federal and State jurisdiction over District projects is often segmented requiring permits from multiple agencies. Federal and State agencies are concerned with public health, safety and welfare, water quality and wetland impacts, property rights, fish and wildlife and navigation.

Operating permits are required for the Everglades Construction Project (ECP) and for District controlled structures known as Non-ECP that discharge water into, within, and from the Everglades Protection Area. These operating permits contain water quality targets and monitoring and reporting provisions. Meeting the water quality targets in Lake Okeechobee and other water bodies has proven to be challenging. This is due in part to the District being held responsible for upstream activities. Even though the District does not introduce nutrients or other pollutants when conveying water, it is subject to the provisions of the Clean Water Act, whereas, agriculture is exempt. However, legislatively mandated best management practices (BMP's) implemented in the Everglades Agricultural Area (EAA) and cooperation between farmers, ranchers and the District have produced reductions in phosphorus and have otherwise improved water quality.

| Office of Inspector General |
|-----------------------------|
|-----------------------------|

In addition to activities in the Everglades, other District capital projects also require permitting by regulatory agencies, counties and local governments. Staff from various District divisions is responsible for a wide variety of permitting including the ECP, Lake Okeechobee, research projects, canal and structure maintenance, fish stocking, well drilling, fuel tank storage and replacement, hazardous materials licensing, petroleum remediation and other capital projects.

A certain degree of judgment, by both the District and the regulatory agency, is necessary to determine which regulations apply and the agencies having jurisdiction over a particular project. Federal regulatory agencies have delegated certain permitting authority to the FDEP. In turn, FDEP has delegated some permitting to local governments. Local governments can impose stricter regulations than mandated by State Statutes.

District divisions responsible for the project or activity initiate the permit process. With few exceptions, the entire process, from the application to the reporting phase, is administered by the responsible divisions.

Objective, Scope and Methodology

The purpose of our audit was to determine whether a system of controls is in place to provide assurances that the District is obtaining the required permits, complying with all terms and conditions, thereof and renewing permits on a timely basis.

Along with other permits, we reviewed the ECP Chapter 404 Clean Water Act permit (ECP 404 permit) and the Lake Okeechobee permit. Our objective was to examine the permit process for these significant projects. Audit procedures included the following:

- Document the District's methodology for obtaining and renewing permits and complying with permit conditions.
- Determine whether the District has adhered to all conditions of permits.
- Consult with the employees from the Engineering and Project Management Department, Everglades Construction Project, Office of Counsel and other employees as deemed necessary.

Our audit was conducted in accordance with generally accepted government auditing standards.

FINDINGS AND RECOMMENDATIONS

Summary

Our testing uncovered instances of non-compliance that were corrected. The ECP permit compliance and reporting appears to work well and could be used as a best practice example for future multiple permit projects. Our environmental permit testing indicates no permit compliance issues. Currently, permit compliance and administration is decentralized into many District divisions. There is no central point of contact to obtain an entire listing of active permits. As a result, the completeness of the listing provided could not be verified. However, changes to standardize the permit process would strengthen the internal controls over permitting works of the District and other capital projects. In addition, Federal and State environmental laws have placed an increased emphasis on water quality, which in turn increases District monitoring and reporting requirements.

The District has adopted an informal process to manage permit application, renewal and compliance; the District has no formal permit policies or procedures. Office of Counsel, Environmental Monitoring and Assessment Division and other District divisions are involved on an as needed basis, depending on permit complexity. Unlike the District's formal contracting process, documentation of approvals and reviews are not part of the process for all District permitting. We recommend that the District develop formal internal procedures to ensure a consistent permit process. For example, Office of Counsel should be involved at the application phase of all operating permits. In addition, centralization of the permit process would improve controls. A database tracking system could provide a central point that enables interested parties to quickly ascertain permit status. Most importantly, the District would have to commit to dedicate resources for system maintenance and updating.

To facilitate the development and construction of projects that result in improvements to water quality, simplifying and expediting the permitting process would be beneficial. We recommend that for major projects where possible, the District consolidate permits into master permits, similar to the EFA.

The District could benefit from changes to its current permit reporting and monitoring practices. Developing a comprehensive map that consolidates all water quality-monitoring sites, the parameters tested at each site segregated by basins on an annual basis could serve as a single

| Office of Inspector General | Page 4 | Audit of Permitting |
|-----------------------------|--------|-----------------------|
| | | Works of the District |

monitoring report that would satisfy all water quality reporting provisions. This approach would eliminate current piecemeal reporting practices. Furthermore, the map could be used to negotiate water quality monitoring sites for new permits and other mandates rather than continually adding new sites.

Strengthen Internal Controls over the Permitting Process

On an overall basis, internal controls over the permitting of the District works and other activities could be improved. Recently issued permits indicate that they are becoming more complex. Federal and State environmental laws have placed an increased emphasis on water quality, which requires monitoring and reporting by the permittee. A standardized-centralized approach to permitting could prove beneficial. The Comprehensive Everglades Restoration Plan (CERP), the Lake Okeechobee permit and other legislatively directed restoration initiatives have the potential to require an increased workload to comply with permit terms and conditions. As a result of these changes, the control environment over permitting should be strengthened.

Our review of the District's permitting system disclosed that it is a decentralized process. There is no central point of contact to obtain an entire listing of current permits issued to the District and ascertain the status of permit compliance. Reporting to the respective regulatory agencies is also decentralized. The disadvantage of decentralization is that all permit information is not easily accessed as compared to a centralized database system in which data is easily retrievable by multiple users. In the past the District had a division that administered all District permitting.

We surveyed a governmental entity and a public corporation to gain an understanding of how they administer their permitting programs and whether the processes used by these organizations would be applicable to the District. Many of their activities required permits. Whether public or private, the organizations considered the consequences of permit non-compliance to be a high risk. The risks associated with non-compliance of permit terms and conditions were significant enough for the organizations to invest in a permit database tracking system and dedicate the resources to maintain it to mitigate the risk of non-compliance. The two approaches to administering their permit programs were considerably different.

| Office of | of Ir | nspector | General |
|-----------|-------|----------|---------|
|-----------|-------|----------|---------|

The public corporation surveyed has delegated its permitting responsibilities to an engineering firm with experience in regulatory permit compliance. To ensure permit compliance, the engineering firm developed a database system to track all permit data. The corporation has a decentralized permit process but its database system enables management to know the status of permit compliance. In addition to developing the database, the engineering firm has assumed primary responsibility for maintaining and updating the system on a monthly basis.

A very different approach to permit compliance was observed at the Florida Department of Transportation (FDOT). We had numerous discussions with staff responsible for permit compliance and reviewed their formal procedures. Unlike the public corporation noted above, all permit compliance is administered internally. FDOT has extensive procedures and dedicated staff to administer and coordinate permit compliance. FDOT permit coordinators must verify that all necessary permits have been obtained before a project is started. However, in-house maintenance projects have the potential to be overlooked for permit compliance, unlike major projects that are examined more closely.

The objective of FDOT's program is to identify permit needs and issues early in the planning process to avoid project delays. Recognizing the complexity of regulatory permitting, FDOT has also developed guidelines to identify in the planning stages environmental impacts that may affect a project and attempt to resolve these potential impacts with the regulatory agencies. At the project letting stage, an FDOT permit coordinator reviews the projects for permit requirements. However, one similarity is that permit information is tracked in an environmental permit database. To ensure an efficient and effective permit program, annual performance audits are conducted.

Because permits are essentially contracts, we compared the District's contracting and permitting processes. While the contracting process is very centralized the permit process is decentralized. The District has a separate department that serves as a central point to process and manage contracts. In addition, the District has extensive policies and procedures to process contracts. Office of Counsel review is required before finalizing the contract unless it is a boilerplate type agreement, containing standard provisions.

Generally, District permitting is an informal process to manage permit applications, renewals and compliance with no written policy, procedures, or guidelines. Also, there are no procedures to ensure that in-house

| Office of Inspector General | Page 6 | Audit of Permitting |
|-----------------------------|--------|-----------------------|
| | | Works of the District |

maintenance projects are reviewed to determine whether permits are necessary. Office of Counsel, the Environmental Monitoring and Assessment and other District divisions are involved on an as needed basis determined by staff responsible for the permit. Operating permits require a commitment of resources usually water quality monitoring and reporting. However, formal supervisory and other approvals are not a part of the process. We have been assured by permitting staff that management is kept informed on permit issues and resource commitments. However, from an internal control standpoint, these are weaknesses in the system.

In order to obtain a complete schedule of current permits, staff with permit oversight responsibility, developed a listing of outstanding permits. Generally, staff from the Everglades Construction Project and the Engineering and Project Management Department administers permitting compliance. Permit files and spreadsheets containing important data such as permit status, type of permit, conditions, expiration and post construction monitoring requirements are maintained in the respective divisions. Three Everglades Construction Project employees administer permits related to the ECP and Non-ECP and three Engineering and Project Management Department employees control the permits for capital projects excluding Everglades. Other District personnel obtain and track permit compliance relating to their research, drilling and various projects.

Our review of sample collection permits for research projects indicated that they are issued to individual District staff. However, there is no procedure that addresses the staff level designated to sign the permit as District representative or requiring supervisory approval.

Whether centralized or decentralized, a good internal control system over permitting of District works and other activities should detect non-compliance with regulatory agency requirements on a timely basis and/or prevent such from occurring. Internal controls are defined in accounting literature as the plans of an organization and all its coordinated systems established by management to ensure that its objectives are met.

External controls compliment the control environment. In the permitting program, a degree of reliance is placed on the permit issuing agencies to assist the District during the process and an expectation that agencies will provide oversight and when necessary notice of non-compliance. External controls are also an integral part of the control environment. However, our review of these controls indicates that they appear inconsistent. Based on discussions with District staff and external regulatory personnel, the

| Office of | Inspector | General | |
|-----------|-----------|---------|--|
| | | | |

monitoring reports and other deliverables submitted to the regulatory agencies are often not reviewed within a reasonable period of time. For operating permits, the issuing agencies rarely perform on-site inspections to ensure permit compliance but primarily rely on activity reports except for the ECP. The strengthening of internal controls would compensate for weak external controls.

ECP Permits

As part of the audit process, we tested on a sample basis, the ECP and Non-ECP permit deliverables to ensure all permit conditions are met. The ECP permits issued by the FDEP and USCOE contain approximately one hundred compliance items that are due during various stages of the project's timeline. The ECP permit staff has developed a process whereby District personnel possessing the necessary expertise are delegated responsibility for timely completion and submittal. Quality assurance and quality control procedures are followed for all reports submitted as a requisite to satisfy permit conditions. We found that the District's submittals were complete and within the mandatory due dates for those permit provisions tested. We confirmed this acceptance with staff from the USCOE. The Everglades Construction project's staff provides an annual status report of permit compliance with Everglades restoration.

Although the District is currently in compliance with all provisions of the ECP permits, the differences between the multiple Federal and State regulations governing the project may eventually cause non-compliance. The ECP 404 permit is a federal mandate while the Everglades Forever Act and FDEP permits are state requirements.

The District was required to obtain an ECP 404 permit for the ECP from USCOE before starting construction. The ECP 404 permit contains approximately one hundred conditions requiring various deliverables due during the permit term. The construction permit is unusual in that it contains numerous monitoring requirements and goal setting water quality targets. The permit was signed by the USCOE on March 13, 1997 but the District chose not to sign it and has reserved its right to challenge the permit. However, the permit is valid and fully enforceable.

In the minutes of the Special Meeting and Workshop of Governing Board meeting on April 9, 1997, it was decided at that time to proceed with the project and for conflicting issues, District and federal officials can enter into dispute resolution.

| Office of Inspector General | Page 8 | Audit of Permitting |
|-----------------------------|--------|-----------------------|
| | | Works of the District |

The Everglades Forever Act establishes a construction timeline for the ECP and authorizes the FDEP to issue permits for the construction, operation and maintenance of the project. The Act also mandates the District to obtain additional permits for operating and maintaining structures that discharge into, within and from the Everglades Protection Area and are not included in the ECP.

Special Condition 18 of the ECP 404 permit allows the District to modify the permit conditions that are repeated in the National Pollution Discharge Elimination System (NPDES) permits issued by FDEP. Staff from the Everglades Construction Project has requested and received modifications to the ECP 404 permit to eliminate duplicative monitoring requirements.

According to a Report on the Differences Between the Everglades Program and the ECP 404 Permit, dated July 1, 1997, the most significant potential conflict involves acceleration of District efforts to achieve the long-term water quality standards for STA 2 discharges to Water Conservation Area 2A (WCA 2A). The EFA requires that all discharges to the Everglades meet long-term phosphorus levels no later than December 31, 2006. However, the ECP 404 permit requires the District to make a best effort to achieve the long-term goal for STA 2 within four years of the first discharge into WCA 2A. Based on current schedules, this best effort would need to occur by October 2004, or approximately two years earlier than the EFA date. The District and USCOE are working to resolve this conflict. Further differences included the ECP 404 permit requiring additional alternative technology and mercury research. The cost for the added research was estimated to be \$4.05 million. The report also identified other less material differences.

Other District Permits

In addition to ECP and Non-ECP permitting, we also tested other District activities such as operating water control structures, well drilling, and construction and research projects to ensure compliance with applicable permitting requirements. Our test verified one instance in which a permit was obtained but staff was unaware that a second permit was necessary. The regulatory agency brought this oversight to the District's attention and the permit was obtained. The District did not incur a penalty for the oversight. We found another non-compliance issue in which storage tanks at District pump stations were out of compliance because the vinyl secondary containment area was cracking. The District has taken action and budgeted funds to correct this problem. Another non-compliance occurrence was uncovered at the S-236 pump station in which the lessee

| Office of Inspector | General |
|---------------------|---------|
|---------------------|---------|

did not maintain adequate records nor perform proper monitoring. When the regulatory agency brought this non-compliance to the attention of the District, corrective action was taken to bring it into compliance.

Our review of the Lake Okeechobee permit issued by FDEP to the District for operation of 14 Lake Okeechobee inflow structures indicated that the District has been out of compliance with the targeted phosphorus loading established in the permit and SWIM legislation. The dairy buy-out program and the dairy rule were implemented to reduce phosphorus entering the Lake. However, the District is unable to reach target nutrient loads.

According to FDEP, a temporary permit was issued for Lake Okeechobee structure operations in 1979 for a five-year period. Subsequently, renewal permits were issued based on FDEP's decision not to deny it within the specified timeframe. The Lake Okeechobee permit's target nutrient loading was 382 tons total phosphorus and 2,949 tons of total nitrogen per year. Assumptions made in the 1970's to reduce the phosphorus in the Lake became outdated because of changes to the Lake. Over time, the Lake was not assimilating phosphorus as expected.

Recommendations

1. Standardize the permit process and develop a centralized database system to facilitate permit compliance monitoring.

Management Response:

We agree with the recommendation. A centralized database will be used to track works of the District permits. The ECP database shall be used as a standardized template for all District permits and modified as necessary to accommodate all permitting requirements. Departments could also use the server used for the ECP and Non-ECP permits, thus centralizing the District's permit compliance monitoring.

Responsible Div/Dept: Engineering and Project Management

Everglades Construction Project Business, Econ. and Info. Sys. Vegetation Management

Watershed Research and Planning

Environmental Monitoring and Assessment

Estimated Completion Date: October 1, 2000

| Office of Inspector General | Page 10 | Audit of Permitting Works of the District |
|-----------------------------|---------|---|
|-----------------------------|---------|---|

- 2. Develop permit internal control procedures, which should include:
 - A sign-off by responsible employee that all the necessary permits have been obtained and supervisory and other approvals have taken place.
 - District Office of Counsel reviews of operating permit applications and final permit document.
 - A process that evaluates permitting implications of in-house maintenance projects.
 - Determine the staff level to delegate authority to sign permits as District representative.

Management Response:

We agree with this recommendation. ECP has developed guidelines as part of the ECP and Non-ECP permitting process that includes the activities recommended in the draft audit report. These guidelines along with procedures developed by the Division of Real Estate, Engineering and Construction could be used as the basis for developing a District-wide standardized set of procedures, expanding them to include appropriate level of signoff by supervisors and other departments with implementation responsibilities.

Responsible Department: Engineering and Project Management

Estimated Completion Date: October 1, 2000

3. Work with the USCOE in an effort to reconcile the differences in the EFA and ECP 404 permit to ensure that the terms and conditions are consistent.

Management Response:

We agree with this recommendation. ECP staff has taken steps to accomplish this goal and will continue. Specifically, upon receipt of the NPDES operating permit for STA 1 West, ECP staff requested and the USCOE granted a modification of the ECP 404 permit to make consistent the monitoring requirements for STA 1 West.

| Office of Inspector General | Page 11 | Audit of Permitting |
|-----------------------------|---------|-----------------------|
| | | Works of the District |

Similar modifications for other STAs will be requested upon issuance of the state NPDES operating permits. Staff are also working to reconcile the additional research requirements of the ECP permit, for example, we have recently notified the USCOE that contractual research has been ended on an advanced treatment technology that has not shown promise. Staff is also reexamining the agency's mercury research program. The remaining significant potential conflict involves acceleration of District efforts to achieve the longterm water quality standards for STA 2 discharges to Water Conservation Area 2A. The EFA requires that all discharges to the Everglades meet long-term phosphorus levels no later than December 31, 2006. However, the ECP 404 permit requires the District to make best efforts to achieve the long-term phosphorus goal for STA 2 within four years of first discharge into WCA 2A. Based on current schedules, this best effort would need to occur by October 2004, or approximately two years earlier than the EFA date. The District and USCOE are presently evaluating alternative discharge configurations that will hopefully eliminate this conflicting condition.

Responsible Office: Environmental Engineering Section of the Everglades

Construction Project

Estimated Completion Date: Upon receipt of the STA NPDES operating

permits scheduled through 2003.

Combine Permitting For Significant District Projects

Operations of the District's water conveyance system were initially designed exclusively for flood control and water supply purposes. However, the District's mission has increasingly taken on water quality objectives. In total, the District works include 25 major pump stations and approximately 200 larger and 2,000 smaller structures, of which, only 54 have operating permits. The permitted structures are all within the Everglades Protection area and Lake Okeechobee. The District does not have operating permits for structures outside these areas. Regulatory agencies have not yet required that the District obtain permits for these structures. However, the direction of regulatory agencies appears to favor holding the District responsible for water quality even though the District

does not introduce nutrients or other pollutants when conveying water through its system.

From a practical standpoint, permitting all structures would not serve to improve water quality. In addition, permitting and monitoring all District structures would require an inordinate amount of administration from both the District and the regulatory agencies and might obligate the District to incur considerable costs. Nevertheless, water quality initiatives represent a trend that will likely continue. Although moving water is important, water quality has become equally as important. The increased District resource allocation to water quality initiatives demonstrates its significance. This trend has also increased permit and regulatory compliance.

Determining which of the myriad of regulations that apply to complex District projects can be difficult. It can also be equally problematic for the permit issuer, as there is a learning curve for new programs. Our review of a District Aquifer Storage and Recovery (ASR) project near Lake Okeechobee revealed that the District was required to obtain two permits from FDEP; an Underground Injection Control permit for water going into the aquifer and a NPDES permit for water coming out of the aquifer.1 In addition, the discharge may be subject to Total Minimum Daily Load (TMDL) regulations.

The project permitting process for an ASR can be very time consuming and lengthy. One permit for an ASR project took approximately nine months to complete. ASR technology is a significant component of the Comprehensive Everglades Restoration Plan (CERP). The recommended plan includes two hundred wells around Lake Okeechobee alone and others in the Water Preserve Areas and the Caloosahatchee River Basin. Should permits be required on a per-well basis for all of the 333 ASR wells proposed in the CERP, a NPDES permitting bottleneck will likely occur without some preplanning.

Simplifying and expediting the permitting process will be necessary to facilitate the timely development and construction of projects that result in improvements to water quality. For major projects, determining permit requirements up-front and crafting a master permit, similar to the EFA could prove beneficial for the CERP and other projects. A master permit for

-

Discharge of recovered water from ASR Systems to surface water bodies as proposed in the CERP is regulated under the NPDES program. The EPA delegated jurisdiction of the NPDES permitting process to FDEP several years ago.

major projects may require legislative changes to current permitting statute. At a minimum, it will require discussions and negotiations with FDEP.

Recommendations

4. Consolidate project permitting into a master permit for significant projects.

Management Response:

We agree with this recommendation, however, permit consolidation and permit jurisdiction is not solely a District decision. Federal, state and local regulatory agencies determine which permits will be required for a project. The District was fortunate with the ECP and Non-ECP, in that specific legislation was passed that allowed for some (but not all) consolidation of the state permitting process for these major programs. Legislation may be required to accomplish this for projects such as the Comprehensive Everglades Restoration Plan and the Lake Okeechobee Restoration Program.

Responsible Group/Office: Water Resource Management and the

Executive Office

Estimated Completion Date: Initiation of the CERP and Lake Okeechobee

Restoration Program

5. Evaluate whether to conduct a review of what types of federal, state and local environmental permits, if any, should be obtained for District structures.

Management Response:

We agree with this recommendation. While we have obtained all permits that the Florida Department of Environmental Protection (FDEP) has required, there is a benefit to evaluating whether to conduct a review of what types of federal, state and local environmental permits, if any, should be obtained for District structures.

Responsible Office: Office of Counsel

Estimated Completion Date: October 2000

| Office of Inspector General | Page 14 | Audit of Permitting |
|-----------------------------|---------|-----------------------|
| | | Works of the District |

Consolidate Water Quality Monitoring And Reporting to Regulatory Agencies

Regulatory agencies issue individual operating permits to the District for a specific activity or project. Provisions of operating permits often establish water quality targets and require permittees to monitor water quality and submit periodic reports to the issuing regulatory agency for each individual permit.

Throughout the District, there are approximately 2,100-water quality monitoring sites of which 60% are mandated by permit or other regulation. Monitoring site locations can be mandated by regulatory agencies or negotiated, depending on the program. The water quality parameters monitored usually include a base set of constituents. This data is disseminated to District staff responsible for overseeing permit compliance and submitted to the regulatory agency on the periodic basis. District staff, rarely receives feedback from the regulatory agencies concerning the submitted reports.

The District could benefit from changes to the current reporting and monitoring practices. Developing a comprehensive map that consolidates all water quality-monitoring sites, the parameters tested at each site, segregated by basins could serve as a single monitoring report that would satisfy all water quality reporting provisions. This approach would eliminate current piecemeal reporting practices. Furthermore, the map could be used to negotiate water quality monitoring sites for new permits and other mandates rather than continually adding new sites.

Consolidating individual permits into logical regions (watersheds or basins) and preparing one report could also prove beneficial. Reporting on a consolidated regional basis would provide more oversight. The ECP has moved to this approach. The ECP prepares one annual report containing the multiple permit compliance items and disseminates it to regulatory agencies and other groups that have an interest. This report along with other schedules maintained by the ECP provides a central point of project permitting compliance and a listing of employees responsible for difference aspects of the ECP. This method has proven very beneficial.

The regulatory agencies would have to agree to consolidating water quality monitoring data into a single report that eliminates District administrative reporting burden and provides the District with a basis for negotiating future permit monitoring sites.

| Office of Inspector General |
|-----------------------------|
|-----------------------------|

Recommendations

6. Map water quality monitoring sites to serve as single consolidated monitoring report for existing operating permits and for use in negotiating future operating permit water quality monitoring sites and frequency.

Management Response:

We agree with this recommendation. The Environmental Monitoring and Assessment Division has several initiatives underway that will eventually make all monitoring site metadata, water quality, hydrometeorologic and (possibly) biologic spatial and temporal data, and associated reports available on the World Wide Web for access by all interested parties, including regulatory agencies.

A long-term project, to be operational by the end of 2001, will allow access to District-wide monitoring information through an intuitive (user-friendly) "point-and-click" map-based graphical user interface (GUI) – integrating the database, GIS and Web technology. Within approximately the next six months, a web-site will be on line to provide metadata on the District's many water quality and hydrometeorologic monitoring sites, and will include linkages to the associated temporal and spatial data stored in the corporate environmental database, along with other relevant information. Starting with this quarter's issue, the Water Quality Conditions Report will be available on the WEB; however, information contained within this document will eventually be merged into the integrated system described above.

The ultimate goal is to phase out the multiple hard copy monitoring reports for legal mandate and permit requirements, as well as for Governing Board, Executive Office and public informational purposes, and have all monitoring data and information available for perusal by all users/customers at one location - the world wide web.

Responsible Division: Environmental Monitoring and Assessment

Estimated Completion Date: December 31, 2001

| Office of Inspector General | Page 16 | Audit of Permitting |
|-----------------------------|---------|-----------------------|
| · | • | Works of the District |

7. Reduce reporting on individual permits, where possible, by consolidating permit reporting on a watershed basis.

Management Response:

We agree with this recommendation and have implemented it to the greatest extent practicable. The Environmental Monitoring and Assessment Division continually works on eliminating redundancy in all of its monitoring and reporting obligations as much as possible, not only for permits, but for various other legal mandates, agreements and memoranda of understanding. Additionally, the division works closely at the front end with District permit administrators and program managers to negotiate for the most relevant, practical and cost-effective monitoring requirements. Monitoring results are also evaluated on an on-going basis to determine where requirements can be eliminated or reduced during the course of the permit period. In addition, the division is also working with Governing Board members to evaluate effectiveness and efficiency of all monitoring networks.

Responsible Division: Environmental Monitoring and Assessment

Estimated Completion Date: Will be established during individual

permit acquisitions.

District Activities Requiring Permits and the Responsible Divisions/Departments

| | | District | | Permitting Regulatory |
|---|---------------------------------------|---|---|--|
| Division/Dept. | Group | Activities | Permit Types | Agencies |
| Business, Economic and Information Systems | Water Resource Management | Construction, Operations, Remediation and Hazardous Materials | Storage Tank, Petroleum clean-up, Title V Air Pollution, Hazardous Materials | FDEP Local Governments |
| Engineering and Project Management | Water Resource Management | Construction, Restoration, Stilling Well Installation | Dredge and Fill, Environmental Resource, Wetland Resource, Surface Water, NPDES | FDEP USCOE Local Government |
| Everglades Construction Project | Everglades Construction Project | Construction, Restoration | NPDES, EFA, Water Use, De-watering, Dredge and Fill | FDEP USCOE EPA Local Governments |
| Vegetation Management | Water Resource Operations | Aquatic Weed Control, Grass Carp stocking | Aquatic Plant Management, Fish Stocking Authorization | Florida Game and Freshwater Fish |
| Technical Services | Water Resource Operations | In-house drilling projects | Well Drilling | FDEP |
| Watershed Research and Planning | Water Resource Management | Construction, Restoration, Collection of fish and eggs and other samples | Dredge and Fill Federal Fish and Wildlife Collection, Florida State Scientific Collection Florida Fishing License | FDEP Florida Game and Fresh Water Fish |
| Water Supply | Water Resource Management | Well drilling, Aquifer Storage and Recovery | Well Drilling, NPDES | FDEP |
| Environmental Monitoring and Assessment | Corporate Resources | Monitoring and Reporting EFA, Lake Okeechobee, Holey land | EFA, Holey Land, Lake Okeechobee | FDEP USCOE EPA |