SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Audit of the Everglades Agricultural Area Tax Assessment Process

Project #14-05

Prepared by
Office of the Inspector General

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SOUTH FLORIDA WATER MANAGEMENT DISTRICT

May 14, 2015

Governing Board Members:

Re: Audit of the Everglades Agricultural Area Tax Assessment Process
Project No. 14-05

This audit was performed pursuant to the Inspector General's authority set forth in Chapter 20.055, F.S. Our objective was to determine whether tax incentives were properly determined in accordance with state statutes. This entailed ensuring that adequate internal controls were in place to provide reasonable assurance that the District's processes and procedures used to collect and analyze water samples, and measure the phosphorus load discharging from the Everglades Agricultural Area (EAA) comply with applicable standards, and that such results were properly communicated to the Budget Bureau to ensure that the tax roll information was processed properly. Dan Sooker and I prepared this report.

Sincerely,

J. Timothy Beirnes, CPA
Inspector General

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BACKGROUND

In accordance with our FY 2014 Audit Plan, the Office of Inspector General conducted an Audit of the Everglades Agricultural Area (EAA) Privilege Tax. In 1994, the State of Florida enacted the Everglades Forever Act (the Act), which imposes an annual tax for conducting an agricultural trade in the EAA and C-139 Basins. The tax, known as the Everglades Agricultural Privilege Tax and the C-139 Agricultural Privilege Tax, is levied on all real property within the EAA and C-139 Basins that is classified as agricultural. In 2013, the agricultural acreage subject to the privilege tax had approximately 456,000 acres in the EAA and 127,000 acres in the C-139 Basin. Over the last ten years, the tax generated an average of $11.7 million annually for Everglades Restoration. Tax revenue collected is recorded in the District's Everglades Restoration Trust Special Revenue Fund.

The Act requires landowners to obtain a permit in accordance with Florida Administrative Code, Chapter 40E-63, to farm in the EAA and C-139 Basins. Conditions of the Rule also require the landowners to develop a Best Management Practices Plan (BMP), which includes fertilizer, and water management plans for each crop and a monitoring program. The goal of the plan is to achieve a 25 percent reduction in phosphorus load discharging from the EAA and C-139 Basins. Points are assigned to BMP categories; landowners are required to implement BMP's valued at a minimum of 25 points.

The Act offered EAA landowners an opportunity to decrease their annual tax liability by providing area-wide and individual incentive credits for reductions of phosphorus load discharging from the EAA. Since the Act's inception, EAA landowners have met or exceeded phosphorous reduction goals and have never paid more than the minimum tax of $24.89 per acre and never had to use the individual farm incentive credits to offset the tax escalations. It should be noted that as of November 2013, all individual incentive credits earned by the landowners expired.

The Act was amended in May 2013, which among other changes modified the EAA landowner's tax rate to $25 per acre in 2014 and systematically reduces the rate to $10 per acre after 2036. Further, the amended Act reduces the C-139 Basin tax rate from $4.30 per acre to $1.80 per acre for tax notices mailed out November 2014 and thereafter.

The amended Act does not provide for individual incentive tax credits. By September 15 of each year, the Governing Board certifies by resolution the Everglades agricultural privilege tax roll for each county in which the EAA is located and credits earned.

Implementation of the Act is a coordinated effort among the District's Budget, Infrastructure Management, Everglades Regulation, and Water Quality Bureaus. Budget Bureau staff is responsible for processing the tax rolls. The Water Quality Bureau's Water Quality Monitoring and Analytical Services Sections are responsible for collecting and analyzing water samples for phosphorus and other nutrients. Infrastructure Management measures water flow at EAA outflow structures. The Everglades Regulation Bureau monitors EAA landowner BMP compliance and measures the phosphorus load content in the EAA water samples and enters these results in the District's DBHYDRO database that is available to the general public.

OBJECTIVE, SCOPE AND METHODOLOGY

Our objective was to determine whether tax incentives were properly determined in accordance with state statutes. This entailed ensuring that adequate internal controls are in place, which provides reasonable assurance that the District's processes and procedures used to collect and analyze water samples, and measure the phosphorus load discharging from the EAA, complies with applicable standards, and that such results were properly communicated to the Budget Bureau to ensure that the tax roll information was processed properly.

To accomplish our objectives, we performed the following:

- Reviewed the Everglades Forever Act, Florida Administrative Code, (Chapter 40E-63), and other relevant quality assurance manuals.
- Interviewed District staff responsible for administering the EAA.
- Documented the District's internal control processes over the Everglades Privilege Tax.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT RESULTS

Executive Summary

The District's measurement of phosphorus load and other nutrients in the EAA is used by various entities, including the federal government and State of Florida, to determine compliance with provisions of the Act and the effectiveness of current phosphorus load reduction projects, which may impact future restoration efforts. We found that internal controls over the District's processes and procedures used to collect and analyze water samples, and measure the phosphorus load discharging from the EAA appear sufficient to ensure compliance with established standards and accurate data.

District methods used to collect water samples and to measure phosphorus and nutrient data in the EAA undergo extensive Quality Assurance/Quality Control (QA/QC) to ensure that the data is complete and accurate. The QA/QC process includes District staff dedicated to the process, external audit teams and peer reviews. The District's internal quality control staff review and audit the processes to ensure that the data is reliable and defensible. The QA/QC program also includes staff training, policy and procedure updates, and internal and external audits to ensure that quality standards are followed and any noted deficiencies are corrected. Our review of the audit reports prepared by internal staff and external agencies indicated no major deficiencies and minor issues were addressed in a timely manner.

The District's Budget Bureau is responsible for processing the Agricultural Privilege Tax. We found that the processes implemented by the Budget Bureau appear adequate to ensure that that tax roll information is processed accurately. Such processes include comparison of prior and current year tax rolls to identify and review changes.

Internal Quality Control Procedures over the Collection and Analysis of Water Samples from the EAA

Phosphorus load in the EAA is determined primarily through three processes;

1. the collection of water samples and flow data at EAA monitoring locations,
2. the analysis of the samples and flow data, and
3. the update of sample and flow data results into the District's DBHYDO database, which is the District's corporate environmental database.

The Water Quality Bureau's, Water Quality Monitoring and Analytical Services Sections, are responsible for collecting and analyzing water samples for phosphorus concentrate and other nutrients taken from the sixteen structures and eighteen water quality monitoring points in the Everglades Agricultural Area. Flow data from these monitoring locations are measured by the Hydro Data Management Section primarily through its SCADA system. The Everglades Regulation Bureau combines phosphorus and flow information from the EAA outflow structures to calculate the phosphorus loads from the EAA. Phosphorus load is defined as the amount of phosphorus carried past a monitoring point by the movement of water.

The District's quality control framework was developed from internal and external standard setting sources. This framework addresses the controls over the collection and analysis of water samples and flow data, calculating phosphorus load and updating DBHYDRO. Internal sources include District standard operating procedures and Internal Quality Control Manuals while external sources include the Act, the Everglades Program, Florida Statutes and Florida Administrative Rules, and National Environmental Laboratory Accreditation Conference[1] (NELAC) standards. The District's quality program also involves annual staff and management training, revising and updating quality manuals and SOPs, and internal and external audits.

[1] The National Environmental Laboratory Accreditation Conference (NELAC) is an association of States and Federal agencies, formed to establish and promote mutually acceptable performance standards for the operation of environmental laboratories. The standards cover both analytical testing of environmental samples and the laboratory accreditation process.

Water Quality Monitoring

Water samples are collected in accordance with procedures established in the internally developed 256 page Field Sampling Quality Manual, the Comprehensive Everglades Restoration Plan Quality Assurance System and the Florida Department of Environmental Protection Quality Assurance Rule. These procedures incorporate federal and state requirements and define the sample collection methods, sample preservation and holding times, and field collector's documentation requirements. The Water Quality Monitoring Section follows strict collection procedures that are described in its quality manual and other authoritative standards to ensure that the data are scientifically and legally defensible.

To assess compliance with established processes and procedures, the sample collection process is audited regularly. These audits evaluate the entire sample acquisition system, which includes the sample collection process, equipment cleaning, and submission of the samples to the Laboratory. Each step of the process is evaluated for conformance to appropriate methodology, approved procedures and the appropriate QA plans/manual, or SOPs. These audits and other QA/QC processes certify and ensure that the Water Quality Monitoring Section produces defensible data that meets or exceeds all regulatory QA requirements.

Analytical Services Section

In 2013, the District's Chemistry Laboratory (Chemistry Lab) analyzed over 87% of the water samples collected in the EAA. The Florida Department of Environmental Protection and Miami-Dade Department of Environmental Resource Management and contracted laboratories analyzed the remaining water samples. District Chemistry Lab operations are highly scrutinized by internal review staff and external quality control auditors to ensure adherence to high performance standards and the production of accurate and verifiable analytical data.

The Chemistry Laboratory Quality Manual governs the Chemistry Lab's sample analysis process. The manual, which is updated annually, describes the extensive processes and procedures that staff follows to ensure compliance with applicable standards and requirements. Chemistry Lab QA/QC procedures include quality control

audits, staff training, blind sample testing, testing equipment calibration, and external quality systems audits.

The Analytical Services Section has a data validation unit whose key responsibilities are data validation, data stewardship, and customer service. The unit performs data validation on all water quality analyses conducted at the District's Chemistry Lab and for samples analyzed by contracted laboratories. Unit staff loads data to databases and provides a stewardship role in maintaining water quality data in DBHYDRO.

In accordance with QA/QC procedures, internal and external audit groups conducted annual audits of the Chemistry Lab operation to verify compliance with the Laboratory operation standards and requirements. Over the last two years, the Chemistry Lab operation has been audited by four internal and external audit groups as noted in the table below.

Audit	Organization	Year
Florida Department of Health	Bureau of Public Health Laboratories	2013
Internal Laboratory System Audit	Zdzislaw Kolasinski District Senior Scientist	2012
External System Audits	USACE - Quality Assurance Oversight Team	2013
Management Review of Quality Systems	Chemistry Lab Quality Assurance staff	2013

Our review of the audit reports indicated that the Chemistry Lab operation complied with quality standards established internally and by Lab certifying organizations. The State of Florida's Bureau of Public Health Laboratories audit of the Chemistry Lab operations in 2013 indicated that the Lab complied with NELAC standards and Florida Administrative Code 64E-1 provisions. During the same year, the United States Army Corps of Engineers also conducted an assessment of the Chemical Lab's quality systems as part of the Comprehensive Everglades Restoration Plan's Quality Assurance Program and found that the Chemistry Lab was in compliance with quality standards. The quality laboratory system audit conducted by internal QA/QC

staff in 2012 and the audit conducted by management of the Lab's quality system conducted in 2013 found no problems of a serious nature.

Hydro Data Management Section

Flow data is measured and analyzed by the Hydro Data Management Section in accordance with policies and procedures established in its QA/QC manual. Included in this manual is the Section's QA/QC program whose objective is to assure that the data generated are accurate and representative of actual conditions and that the degree of certainty can be established. The Hydro Data Management Section has staff solely dedicated to ensuring accurate data. QA/QC staff's responsibility includes performing scientific validation of hydrometeorological data through QA/QC procedures to verify and/or improve data quality. The District is obligated to meet a variety of legally mandated data requirements, such as Everglades Agricultural Area Rulemaking. A large percentage of QA/QC functions are committed to fulfilling these data needs.

Everglades Regulation Bureau

The Everglades Regulation Bureau is responsible for monitoring BMP compliance in the EAA and C-139 Basins, which includes approximately 200 structures. The Bureau is also responsible for determining the phosphorus load in the EAA water samples and updating the information into District's DBHYDRO database.

Using data on water quality phosphorus concentration and water flow, the Everglades Regulation Bureau calculates the phosphorus load discharged from monitoring points at water control structures in the EAA. Data loading verification is required to ensure data loading accuracy and completeness into DBHYDRO. Any issues or anomalies are communicated to the Water Quality Data Steward and the appropriate action is taken.

Agricultural Privilege Tax Levy

The District's Budget Bureau is responsible for processing the Agricultural Privilege Tax, which primary involves calculating the Everglades Agricultural Privilege tax for all parcels in the EAA and C-139 Basins and loading the data onto the tax roll database provided by Palm Beach and Hendry Counties. Incentive credit information resulting from EAA phosphorus reductions is compiled by Regulation staff for inclusion in the tax rate calculation. Further, the Bureau has drafted due diligence procedures to ensure tax data (i.e., EAA acres) is correct. Such procedures include comparing the prior and current year tax rolls for changes and reviewing for unusual variations. These draft procedures appear adequate to ensure that tax roll information is processed accurately but they should be finalized.

Recommendation

1. **Finalize EAA tax roll procedures.**

Management Response: Management agrees with the recommendation to update the procedures. The Agricultural Privilege Tax (APT) Procedure Document has been revised and updated; the procedure is being presented to management for review and approval.

Responsible Bureau: Budget Bureau
Estimated Completion: July 31, 2015