



Audit of Private Mitigation Banks

Project # 21-08

Prepared by
Office of the Inspector General

J. Timothy Beirnes, CPA, Inspector General
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SOUTH FLORIDA WATER MANAGEMENT DISTRICT

March 10, 2022

Governing Board Members

Re: Audit of Private Mitigation
Banks - *Project No. 21-08*

This audit was performed pursuant to the Inspector General's authority set forth in Chapter 20.055, F.S. Our audit objectives primarily focused on ensuring private mitigation bank permit compliance and determining whether mitigation bank perpetual maintenance funds are sufficient to pay for maintenance in perpetuity. Dan Sooker and I prepared this report.

Sincerely,

A handwritten signature in blue ink, reading "J. Timothy Beirnes".

J. Timothy Beirnes, CPA
Inspector General

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BACKGROUND

Chapter 373.4135, F.S. *Mitigation Banks and Offsite Regional Mitigation* and Chapter 373.4136, F.S. *Establishment and Operation of Mitigation Banks* authorizes public and private entities to construct, operate, and manage mitigation banks that offset adverse impacts and restore and preserve uplands and wetlands through restoration of ecological communities. The mitigation bank program provides a mechanism for the restoration of targeted lands and satisfies mitigation requirements for public and private sponsored impacts to wetlands.

Criteria established in Section 62.342.400, Florida Administrative Code (F.A.C.) requires any entity proposing to create a mitigation bank to apply for a permit and meet the following conditions:

- Provide reasonable assurance that the bank will:
 - Improve ecological conditions of the regional watershed;
 - Provide viable and sustainable ecological and hydrological functions for the proposed mitigation service area;
 - Be effectively managed in perpetuity;
 - Not destroy areas with high ecological value;
 - Achieve mitigation success; and,
 - Be adjacent to lands which will not adversely affect the perpetual viability of the mitigation bank due to unsuitable land uses or conditions.
- Provide reasonable assurance that any surface water management system to be constructed, altered, operated, maintained, abandoned, or removed within the mitigation bank area will meet conditions of issuance of Part IV of Chapter 373, F.S., and the rules adopted thereunder.
- Meet certain financial responsibility requirements.

The Florida Department of Environmental Protection (FDEP) and the water management districts are responsible for overseeing the mitigation bank program. FDEP issues permits to public mitigation banks and water management districts issue permits to private mitigation banks. General and special permit conditions include construction and operation plans, success criteria and bank credits available, service area¹, and establishment of a perpetual maintenance trust fund to provide for perpetual maintenance after all bank credits have been sold and the site has achieved full success as defined in the permit conditions.

Further, FDEP and the water management districts are responsible for assessing the value of proposed ecological enhancements and restoration to mitigation bank wetlands or uplands and awarding mitigation credits based on the value of these improvements. The awarded mitigation credits are available for developers, cities, municipalities and other entities to purchase to offset adverse project impacts. However, before mitigation credits can be sold, the entities are required to achieve success criteria, convey a permanent conservation easement to the Board of Trustees or the South Florida Water Management District (the District) and FDEP and establish a perpetual maintenance fund.

Permits are regularly monitored to ensure compliance. Credits sales can be suspended if success criteria and/or other permit conditions are not met. Each mitigation bank maintains a sales credit ledger that includes credit sales and the remaining credits available for sale. This ensures that only available credits are sold. Credit prices are market driven and negotiated between the buyer and seller.

¹ The mitigation bank service area is established in each mitigation bank permit. The boundaries of the mitigation service area depends upon the geographic area where the mitigation bank could reasonably be expected to offset adverse impacts.

Within District boundaries there are 17 public and private mitigation banks, of which, 15 are private and 2 are public mitigation banks shown in the following table:

Private and Public Mitigation Banks	
Private Mitigation Banks	County
Bullfrog Bay	Polk
Collany	
Hatchineha	
Reedy Creek	
Lucky L	Osceola
Lake X	
Quickdraw	
Shingle Creek	
South Port Ranch	
Twin Oaks	
Panther Island and Expansion	Collier
Big Cypress	Hendry
Bluefield Ranch	St. Lucie
Treasure Coast	
Florida Wetlands Bank	Broward
Public Mitigation Banks	
Corkscrew Regional	Lee
Loxahatchee	Palm Beach

Private entities establish and administer the 15 private mitigation banks and the District permits and monitors them. The two public mitigation banks (Corkscrew Regional Mitigation Bank and the Loxahatchee Mitigation Bank) are District owned and permitted by the FDEP. Through contractual agreements, the District assigned management of the public mitigation banks to independent third-party operators, who are responsible for all aspects of the mitigation bank operations including construction, maintenance, and mitigation bank credit sales. These operators pay a portion of the net mitigation bank credit sales after operations costs to the District on a quarterly basis. These mitigation bank credit sales generate a revenue stream to the District to recover costs associated with land acquisition, management, and staff costs.

The Loxahatchee Mitigation Bank third-party operator has initiated termination of the management agreement with the District. At District management's request, we are conducting a separate audit of the Loxahatchee Mitigation Bank prior to finalizing termination, which will include an examination of financial records to ensure that the District received its contractual agreed upon revenue sharing portion, the remaining credits are unencumbered, all potential outstanding obligations have been identified and the perpetual maintenance fund is adequately

funded. Further, it should be noted that we conducted a similar examination of the Corkscrew Regional Mitigation Bank in 2014. See *Review of Corkscrew Regional Mitigation Bank Credit Sales and Projected Revenue Forecasts Report– Project # 14-13*.

OBJECTIVE, SCOPE, AND METHODOLOGY

Our primary audit objective was to examine the process for monitoring private mitigation banks to ensure compliance with permit conditions and determine whether perpetual maintenance funds are sufficient to pay for mitigation bank maintenance in perpetuity. To accomplish our objectives, we performed the following procedures:

- Reviewed mitigation bank permits.
- Reviewed District regulatory compliance monitoring.
- Examined mitigation bank credit sales.
- Assessed the sufficiency of long-term maintenance trust account balances to fund site maintenance in perpetuity.

We conducted this 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

We found that all private mitigation bankers have not updated perpetual maintenance costs and principal balance reserves that will produce a sufficient revenue stream to fund perpetual maintenance costs. Based on our calculations, perpetual maintenance funding appears deficient, and under current conditions there is a significant risk that trust fund annual earnings projected by mitigation bankers will be insufficient to maintain mitigation banks in perpetuity, which is contrary to the intent of Chapter 373.4136, F.S. and 62-342.700(12) F.A.C. The Regulation Division (Regulation) is addressing this issue.

Chapter 62-342.700(12) F.A.C., authorized an annual 6% rate of return on the principal balance when projecting annual earning requirements to fund perpetual maintenance. These earnings are expected to generate annual revenue equal to the annual cost of perpetual management. However, in the current and foreseeable future interest rate environment, a 6% rate of return appears unreasonable and distorts estimated principal funding needs. Market conditions indicate that annual earnings using the 10-year treasury interest rate of 2%, is a more realistic long term projection; however, Chapter 62-342.700(12) F.A.C. would need to be amended in order for the District to require private mitigation bankers to use a lower rate. We recommend coordinating with relevant staff and the District legislative liaison to change the authorized 6% interest earning rate on perpetual maintenance funds to a more reasonable rate that reflects long-term market conditions (i.e. the 10-year US Treasury interest rate). We also recommend that Regulation management consider coordinating with Finance Bureau staff to review mitigation banker's perpetual maintenance fund financial assurance calculations for reasonableness. In addition, we found that financial information (i.e., bank statements, financial instruments, etc.) documenting the assets in place to fund perpetual maintenance was not always current. Bank statements or financial instruments should be provided to the District at least annually.

We also found recurring non-compliance with the requirement to update perpetual maintenance cost estimates at least every two years in accordance with statute by licensed persons in the State of Florida to provide such estimates. Most cost estimates were unsupported and not updated in accordance with statute. We recommend that Regulation develop a detailed cost template that includes all maintenance components and the estimated costs to maintain the mitigation bank in perpetuity.

We further recommend that mitigation bank perpetual maintenance estimated costs are updated at least every two years by certified licensed professionals authorized to conduct the work and be reviewed for reasonableness by District staff knowledgeable in land management costs.

Inadequacy of Perpetual Maintenance Funding and Estimated Annual Maintenance Costs

Chapter 373.4135, F.S. and Subsection 62-342.700(12) F.A.C., requires mitigation bankers to provide financial assurance for the construction, operation and perpetual maintenance of the mitigation bank. Financial assurance mechanisms include surety bonds, performance bonds, irrevocable letters of credit, insurance policies, escrow accounts, or trust funds. These requirements are included in the special conditions section of the mitigation bank permit.

Mitigation banking is complex and best monitored by multidisciplined and experienced Regulation staff. Knowledge in construction, financial and biology backgrounds would prove beneficial. Oversight responsibilities include monitoring mitigation bank construction and operations, determining success criteria, which leads to the release of mitigation credits for sale and establishment of the perpetual maintenance fund. Regulation staff primarily located at service centers in Orlando, Fort Myers, Okeechobee and West Palm Beach monitors compliance with private mitigation bank permit conditions through site inspections, desk reviews, cost estimate reviews and other monitoring procedures.

We found that the 15 private mitigation banks failed to update and remit to the District perpetual maintenance cost estimates and funding requirements in accordance with state statutes, except for one private mitigation bank. However, the one compliant mitigation bank's perpetual maintenance cost estimate was underfunded. Mitigation banks are required to establish a perpetual management fund that will fund mitigation bank maintenance in perpetuity after construction is complete and all credits have been sold. Prior to the sale of mitigation bank credits, the bankers are also required to submit to the District a detailed cost estimate accompanied by supporting documentation prepared by a certified professional, licensed in the State of Florida to provide such estimates.

Florida Administrative Code [F.A.C. Subsection 62-342.700(13) and (14)], requires that every two years, the mitigation bankers update its perpetual management cost estimates. The bankers are required to submit the estimate to the District in writing, certified by a person licensed in the State of Florida to provide such estimates, accompanied by supporting documentation. Construction, implementation activity costs, and perpetual management costs shall be listed separately. The Agency shall review the cost adjustment statement and supporting documentation to determine if they reflect all construction, implementation costs and perpetual management costs. If the cost adjustment statement and supporting documentation accurately reflect a good faith

estimate of all construction, implementation costs and perpetual management costs, the Agency shall approve the cost adjustment statement. At each cost adjustment, the banker shall revise the construction, implementation, and perpetual management cost estimate for inflation and changes in the costs to complete or undertake the current phase of the Mitigation Bank or appropriate phase thereof in accordance with subsection 62-342.700(14), F.A.C.

A perpetual maintenance funding plan must be in place prior to the withdrawal of credits from a mitigation bank or applicable phase. Revisions to the cost estimates should require corresponding additions or reductions to the funding plan. We found that mitigation banks did not adjust perpetual maintenance estimates or funding in accordance with F.A.C. requirements. We also found reductions were made to the perpetual maintenance funding balances without corresponding support prepared by a certified professional for the revisions. Further, financial information documenting that assets are in place to fund perpetual maintenance was not always current. Annual bank statements or financial instruments should be provided to the District annually.

Subsection 62-342.700(12), F.A.C. authorizes an average rate of return of 6% per annum when calculating funding requirements for the perpetual maintenance fund, which is reasonably expected to generate annual revenue equal to the annual cost of perpetual management. However, in the current and foreseeable future interest rate environment, a 6% rate of return appears unreasonable. Market conditions indicate that annual earnings using the 10-year treasury interest rate of 2% is a more realistic long term forecast. Thus, we recommend coordinating with relevant staff and the District legislative liaison to change the authorized 6% interest earning rate on perpetual maintenance funds to a more reasonable rate that reflects long-term market conditions (i.e., the 10-year US Treasury interest rate).

We recommend that Regulation evaluate all mitigation bank funding to establish adequate principal balance reserves that produce sufficient income to fund perpetual maintenance. Consider coordinating with Finance Bureau staff to review mitigation banker's perpetual maintenance fund financial assurance calculations for reasonableness. To improve consistency of the mitigation banker's cost estimates, we recommend that staff develop a detailed cost estimating template that includes all components. We recommend that financial assurances are updated at least every two years by certified licensed professionals in the state of Florida authorized to conduct the work.

In addition to non-compliance with mitigation bank perpetual maintenance requirements, Regulation found, through compliance monitoring, six mitigation banks that were out of compliance with other permit conditions including unauthorized dredging and clearing, and/or other maintenance deficiencies. Regulation staff was working to bring the banks into compliance, first with letters of non-compliance and if not corrected or an accepted corrective action plan developed, the case was turned over to the Regulation's Enforcement Section. On occasion, the District has suspended mitigation bank credit sales until the non-compliance issues are corrected.

If no future adjustments to the fund balances are made prior to the banks entering the perpetual maintenance phase, the potential funding deficit that could ensue once all mitigation banks are in the perpetual maintenance phase including both underestimated annual maintenance costs and a 2% interest earning assumptions on trust funds is illustrated in the following table.

Potential Perpetual Maintenance Trust Fund Deficit Under Current Conditions					
Mitigation Bank	Number of Acres	Principal Balance Needed Per Permit	Annual Earning @ 2%	Annual Maintenance Cost Estimate†	Deficit
Bullfrog Bay	452	\$ 307,333	\$ 6,147	\$ 90,400	\$ (84,253)
Collany*	153	110,958	2,219	30,600	(28,381)
Hatchineha	2,057	427,834	8,557	411,400	(402,843)
Lucky L	1,192	465,150	9,303	238,400	(229,097)
Lake X	5,499	707,033	14,141	1,099,800	(1,085,659)
Quickdraw*	454	56,630	1,133	90,800	(89,667)
Reedy Creek*	3,516	792,250	15,845	703,200	(687,355)
Shingle Creek*	524	447,153	8,943	104,800	(95,857)
South Port Ranch*	3,281	803,499	16,070	656,200	(640,130)
Twin Oaks	748	432,433	8,649	149,600	(140,951)
Panther Island*	4,470	2,391,450	47,829	894,006	(846,177)
Big Cypress*	2,196	1,158,810	23,176	439,200	(416,024)
Bluefield Ranch	2,675	1,511,375	30,228	535,000	(504,773)
Florida Wetlands Bank*	450	450,000	9,000	90,004	(81,004)
Treasure Coast *	80	57,760	1,155	16,000	(14,845)
Totals	27,747	\$ 10,119,668	\$202,393	\$ 5,549,410	\$ (5,347,016)

* Mitigation banker did not provide an estimate of the annual cost to maintain property.

† Mitigation banks either did not provide or did not reasonably update perpetual maintenance estimates. When estimates were provided, costs appear understated. District staff estimated the annual cost of perpetual maintenance for a mitigation bank owned by the District to be \$200 per acre. Although maintenance costs can be site specific and may vary depending on mitigation bank conditions, the estimate cost of \$200 includes core costs for vegetation management, prescribed burns, inspections, monitoring and project management plus 2% for inflation rate. Since mitigation banks did not provide updated reasonable perpetual maintenance cost estimate, we used \$200 per acre to determine whether perpetual maintenance funding was adequate.

The table above indicates the potential for substantial underfunding of long-term perpetual maintenance fund requirements under current conditions. As such, there is a significant risk that if the maintenance funds are not increased prior to the banks entering the perpetual maintenance phase, the funds will be insufficient to maintain mitigation banks in perpetuity, which is contrary to the intent of Chapter 373.4136, F.S. and 62-342.700(12) F.A.C. It should be noted; however,

that perpetual maintenance is the responsibility of the permittees, and in accordance with the mitigation bank permits, the perpetual maintenance phase is not authorized by the District until a bank has achieved full compliance with all permit requirements.

RECOMMENDATIONS

1. **Evaluate the mitigation banks perpetual maintenance funding needs based on the most current cost and other financial information. If inadequate, develop a funding plan with the mitigation banker while the mitigation bank has credits available to sell.**

Management Response: The Environmental Resource Bureau (ERB) has notified all bankers to provide certified, updated cost estimates for the remaining construction and implementation costs and perpetual management costs, and current financial statements for their financial mechanisms from the financial institutions. Moving forward, the cost estimates are to be provided on a biennial basis and the financial statements are to be provided at the interval used by the financial institution. Chapter 62-342.700(14)(c), FAC states, "...If the value of any financial responsibility mechanism is less than the total amount of the current construction and implementation and perpetual management cost estimates, the banker shall, upon Agency approval of the cost adjustment statement, increase the value of the financial mechanism to reflect the new estimate within 60 days." If a necessary adjustment is not made within 60 days, the banker will be deemed in noncompliance and subject to enforcement action

Responsible Division: ERB with initial assistance from the Finance Bureau; Land Resources Bureau and Engineering and Construction Bureau

Estimated Completion: September 30, 2022

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2. **Ensure that mitigation bank perpetual maintenance estimated costs are updated at least every two years by certified licensed professionals in accordance with statute.**

Management Response: As stated in the response to Recommendation 1., the ERB has notified all bankers to provide certified, updated cost estimates for the remaining construction and implementation costs and the perpetual management costs on a biennial basis. In the past, these letters have not been part of the 30-year-old database that ERB has been using and therefore were not integrated into mitigation bank compliance. With the implementation of the new Regulatory Permitting Portal, the required recurring post permit compliance action has been added to the compliance module for each mitigation bank permit. Compliance staff receive a reminder on their compliance workload list to issue the letter at the appropriate time and a subsequent assignment is made on the response due date to maintain tracking of compliance. Once a response is received, it will be evaluated to determine if it is complete and submitted by the appropriate professionals.

Responsible Division: ERB

Estimated Completion: Initial notification to bankers regarding biennial requirements is completed. Compliance portal programming to ensure timely staff notifications is also completed.

3. **Develop a detailed cost template that includes all maintenance components and the estimated costs to maintain the mitigation bank in perpetuity.**

Management Response: ERB developed two forms for reporting estimated costs for construction and implementation, and perpetual management.

Responsible Division: ERB

Estimated Completion: Completed

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4. **Consider Finance Bureau staff review of the mitigation banker's perpetual maintenance fund financial assurance calculations for reasonableness.**

Management Response: ERB staff will coordinate with the Finance Bureau for initial assistance and training in analyzing the financial statements submitted by the bankers' financial institutions. ERB staff will also coordinate with the Land Resources and Engineering and Construction Bureaus for current unit costs for land management and construction to aid in evaluation of the biennial cost estimates. The results of the analyses will determine the need for adjustments to the principal balances of the financial mechanisms.

Responsible Division: ERB with initial assistance from: Finance Bureau; Land Resources Bureau; Engineering and Construction Bureau

Estimated Completion: September 30, 2022

5. **Coordinate through relevant staff and District legislative liaison to change the mandated 6% interest earning rate on perpetual maintenance funds to a more reasonable rate that reflects long term market conditions. (i.e. the 10-year US Treasury interest rate).**

Management Response: Changing the rate of return will require legislative ratification and rulemaking at the State level initiated by FDEP. Coordination with FDEP and the District's legislative lobbyist will need to occur at the appropriate time that a bill addressing this topic is proposed or being reviewed in a committee.

Responsible Division: ERB and Legislative Liaison.

Estimated Completion: Unknown; dependent on Florida Department of Environmental Protection.

6. Verify perpetual maintenance fund bank statements or financial instrument balances annually.

Management Response: As stated in the response to Recommendation 1., the ERB has notified all bankers to provide current financial statements for the financial mechanisms, from their financial institutions. Moving forward, the financial statements are to be provided at the interval used by the financial institution. When financial statements are received by the District, the assigned staff will review the statements and compare them to permit requirements. The statements will be scanned and posted into the Regulation Division SharePoint Mitigation Banking Directory.

Responsible Division: ERB with initial assistance from the Finance Bureau

Estimated Completion: September 30, 2022