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July 19, 2017

The Honorable John A. Alario, Jr.,
President of the Senate
The Honorable Taylor F. Barras,
Speaker of the House of Representatives

Dear Senator Alario and Representative Barras:

This report provides the results of our performance audit on the Atchafalaya Basin Program within the Department of Natural Resources. The report contains our findings, conclusions, and recommendations. Appendix A contains the Department of Natural Resources’ response to this report. I hope this report will benefit you in your legislative decision-making process.

We would like to express our appreciation to the management and staff of the Atchafalaya Basin Program for their assistance during this audit.

Sincerely,

Daryl G. Purpera, CPA, CFE
Legislative Auditor

DGP/aa

ABP2017
Introduction

This report provides the results of our performance audit of the Atchafalaya Basin Program (ABP) within the Department of Natural Resources (DNR). The Atchafalaya Basin is an important natural resource that provides economic, recreational, and cultural benefits to the State; however, the Basin also faces threats to its ecosystem, primarily in increased sedimentation and water quality concerns brought about from natural changes and man-made modifications.

We received an allegation regarding ABP’s administration of one of its first water management projects, Bayou Postillion. The allegation stated that the project was conducted under the pretense of improving water quality and navigation, but was really conducted to provide an access canal for oil and gas exploration in order to benefit adjacent landowners. Because of this concern, we conducted a performance audit to evaluate all of ABP’s water management projects to determine if ABP administered them in compliance with relevant requirements. While we were not able to substantiate or disprove the allegation, we did identify areas within the program that need to be strengthened.

Louisiana Revised Statute (R.S.) 30:2000 et seq. created ABP in 1998 within DNR to coordinate, oversee, and provide a funding vehicle for the activities established in the Atchafalaya Basin State Master Plan. The State Master Plan was created in 1998 to fulfill the State’s responsibility of matching federal funds for construction of water management projects in the Basin. The Army Corps of Engineers (ACOE), per the federal Water Resources Development Act of 1986, was to construct water management projects within the Atchafalaya Basin to address the effects of sedimentation brought about by converting the Atchafalaya Basin into a flood control measure for the Mississippi River. While ACOE was to take the lead in constructing projects, including paying 100% of the construction costs, the state was required to pay 25% of the operation and maintenance costs once projects were completed.

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1 The Atchafalaya Basin serves as a flood control measure for the Mississippi River because of the historic 1927 flood. The Flood Control Act of 1928 designated the Atchafalaya Basin Floodway as the major outlet for flood flows on the lower Mississippi River. Currently, ACOE diverts around 30% of water flow from the Mississippi River into the Atchafalaya Basin.
While the ACOE worked on its first water management unit,² ABP and other stakeholders identified other water management projects that the state, through ABP, could construct and fully fund using capital outlay funding. APB began constructing its first project in 2004. To date, ABP has completed five water management projects at a cost of approximately $3.5 million and is currently working with a nonprofit organization on a sixth project. ACOE is nearing completion of its first water management unit, Buffalo Cove. Exhibit 1 summarizes ABP’s completed water management projects and their total costs.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Location</th>
<th>Construction Dates</th>
<th>Project Description</th>
<th>Project Costs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schwing Chute</td>
<td>St. Martin Parish</td>
<td>2004</td>
<td>A dredge for navigation enhancement and increased water circulation due to sedimentation from ACOE’s “Interior Circulation Channel” project</td>
<td>$731,424</td>
</tr>
<tr>
<td>Bayou Postillion</td>
<td>Iberia Parish</td>
<td>2004–2005</td>
<td>A dredge of a section of the bayou for enhancement of navigation and increased water circulation due to sedimentation</td>
<td>1,171,740</td>
</tr>
<tr>
<td>Dog Leg Sediment Trap Maintenance Dredging</td>
<td>St. Mary Parish</td>
<td>2012</td>
<td>Restore the functionality of the sediment trap to prolong the transport of freshwater into the surrounding swamp</td>
<td>269,352</td>
</tr>
<tr>
<td>Henderson Lake Access Channels**</td>
<td>St. Martin Parish</td>
<td>2012–2013</td>
<td>A dredge of canals from existing boat launches into Lake Henderson to facilitate boat traffic and create deep water fish habitat during low water periods</td>
<td>660,360</td>
</tr>
<tr>
<td>Bayou Fourche</td>
<td>Iberia Parish</td>
<td>2015</td>
<td>A dredge to promote water flow into the surrounding areas and enhance water quality due to accumulated sediment causing inadequate inflow of water</td>
<td>613,161</td>
</tr>
<tr>
<td>**Total</td>
<td></td>
<td></td>
<td></td>
<td><strong>$3,446,037</strong></td>
</tr>
</tbody>
</table>

*Project costs are according to ABP and are based on unaudited information.
**This project was conducted through a cooperative endeavor agreement with the St. Martin Parish Government.
Source: Prepared by legislative auditor’s staff using information provided by DNR.

The objective of this performance audit was:

**To evaluate ABP’s administration of water management projects in Louisiana.**

The issues we identified are summarized on the next page and in more detail in the remainder of the report. Appendix A contains DNR’s response to this report and Appendix B details our scope and methodology. Appendix C details ABP’s current process for administering water management projects in the Atchafalaya Basin. Appendix D provides a map of the Basin and the location of ABP’s five completed water management projects.

² Water management units (WMU) are the 13 distinct environmental and hydrological subdivisions of the Atchafalaya Basin established by ACOE for the purpose of formulating individual water management plans to retain or restore unique environmental values of each area. Multiple water management projects are included in each WMU. Two water management units, Buffalo Cove and Henderson, were chosen as pilot units.
Objective: To evaluate ABP’s administration of water management projects in Louisiana.

Overall, ABP needs to strengthen its administration of water management projects in the following areas:

- ABP did not properly administer certain aspects of its first two water management projects, which resulted in issues regarding transparency, landowner concessions regarding project design, potential conflicts of interest, and insufficient monitoring.

- Since 2008, ABP has improved its administration of water management projects. However, it should strengthen its process by having each project formally approved before construction begins and by consistently conducting project monitoring.

- The State Master Plan for the Atchafalaya Basin Floodway System expired in 2013 and no longer adequately guides ABP’s operations.

These issues are discussed in detail below, along with recommendations to continue strengthening the program going forward.

ABP did not properly administer certain aspects of its first two water management projects, which resulted in issues regarding transparency, landowner concessions regarding project design, potential conflicts of interest, and insufficient monitoring.

We reviewed available documentation related to ABP’s administration of its first two water management projects, Bayou Postillion and Schwing Chute. We found that the lack of a formalized process during this time resulted in ABP not always properly administering certain aspects of their earlier projects. Specifically, we identified the following issues:

- **Lack of Transparency in the Administration Process.** ABP did not have a formal process to administer these first two projects and were instead making decisions as the need arose. ABP did not clearly document how or why these projects were chosen over others and why ABP staff made certain decisions on the design of the projects. Not having a formal process with criteria on how to choose, review, and approve projects and their design features created a lack of transparency for stakeholders and the public.

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3 Current ABP personnel were not employed by ABP during the timeframes of these projects so they could not provide us with any first-hand knowledge of the administration of these projects.
• **Landowner Concessions Regarding Project Design.** In order to obtain landowner approval, ABP agreed to changes in the engineering designs for the Bayou Postillion project that were outside the scope of improving water quality. These concessions included a deeper and wider dredge of the canal to accommodate potential future oil and gas exploration, installing pilings across canals connected to the bayou, and installing landownership notification signs. According to ABP files, these concessions were made because of problems in determining whether the state or the adjacent private landowners owned the land that had silted up along the mouth of the bayou. After discussions with the Office of State Lands and the Attorney General’s Office, and in order to keep the project moving forward, obtain landowner approval, and avoid possible legal challenges, APB agreed to project designs requested by the landowners. In return, the landowners allowed the State to place dredged materials along the banks of the bayou rather than having to pay to haul the materials out of the Basin.

• **Conflicts of Interest.** We identified two instances of potential conflicts of interest regarding personnel hired to administer certain aspects of the two projects. First, the chairman of the Channel Maintenance Committee, who helped decide which projects were chosen, was also on contract with DNR as the project engineer and project manager for both the Bayou Postillion and Schwing Chute projects. Having a role in the selection of a project and then an active, financially-compensated role in the project poses a potential conflict of interest and may violate R.S. 42:1112 of the Louisiana Code of Ethics, which prohibits the participation by a public servant in a transaction involving the governmental entity in which the public servant has a substantial economic interest.

In addition, one of the landowners for the Bayou Postillion project, who was the president and attorney representing the landowner group, was subsequently hired by ABP during the negotiation process to provide legal services for ABP. This individual represented both the landowner group and ABP simultaneously during negotiations for the Bayou Postillion project, which may violate Rule 1.7 of the *Louisiana Rules of Professional Conduct*, which provides that lawyers shall not represent a client when that representation creates a significant risk of limiting the lawyer’s responsibilities to another client.

• **Poor Construction Oversight.** ABP encountered multiple construction issues during the Schwing Chute project, such as dredged materials placed in unapproved locations, disagreements between ABP and the contractor over the amount of materials actually dredged, and untimely project completion. The project manager, who was charged with construction oversight, blamed these issues on the lack of funds to conduct sufficient monitoring throughout construction.

• **Insufficient Project Monitoring.** Based on a review of ABP files, there was insufficient monitoring conducted for the Bayou Postillion project and no

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4 Between 2000 and 2004, this individual’s company was compensated at least $400,000 for work for ABP.
monitoring conducted for the Schwing Chute project. Monitoring for Bayou Postillion started approximately three years before the project was constructed, but post-project monitoring continued for only three months after completion. ABP conducted additional post-project monitoring for Bayou Postillion in 2009, four years after project completion; however, this was only conducted because of its dispute with ACOE over mitigation for the project. Conducting pre-project monitoring is necessary to establish the pre-existing conditions of the area, while post-project monitoring is needed to show the conditions of the area after the project is completed to determine if the project was successful in meeting its purpose and to identify any potential adverse consequences of the project.

Since 2008, ABP has improved its administration of water management projects. However, it should strengthen its process by having each project formally approved before construction begins and by consistently conducting project monitoring.

Act 606 of the 2008 Regular Session created and formalized a new process for administering water management projects. ABP’s current process includes having a Technical Advisory Group (TAG) evaluate projects that are nominated by the public, an annual plan of projects proposed for funding which must be approved by the Legislature, and ABP staff working with the Office of Facilities Planning (OFP) to create a project’s engineering specifications and to oversee construction of projects. See Appendix C for a detailed overview of this process. While this new process addressed many of the issues identified in ABP’s administration of its first two projects, ABP should further strengthen the process as described below.

ABP should have TAG formally review and approve each project after engineering specifications are developed to ensure projects will achieve their intended goals and increase transparency. R.S. 30:2000.11 requires that any project recommended for inclusion in the annual plan be certified by TAG as a project that will result in significant water management and water quality improvements. However, because this statute requires TAG to certify projects before they are included in an annual plan, ABP has not yet had a chance to work with OFP to create the engineering specifications (specific width, length and depth of a dredge, location to deposit the dredge spoil, sediment trap specifications, etc.). As a result, TAG certifies proposed projects without a complete understanding of what will occur during construction.

5 Since fiscal year 2009, 77 water management projects have been nominated by both the public and various stakeholders. However, only 20 of these met the requirements to move forward into the annual plan, and only three were fully funded and completed by ABP. Based on our review of these projects, it appears that ABP is following its current process for administering water management projects.

6 TAG is required by R.S. 30:2000.11 to review, evaluate, and approve all water management projects proposed for inclusion in the annual plan. TAG is made up of members from the Louisiana Department of Wildlife and Fisheries, the Department of Environmental Quality, the Department of Agriculture and Forestry, DNR, the U.S. Geological Survey, U.S. Fish and Wildlife Service, ACOE, and the LSU School of Renewable Natural Resources.
Previous TAG members expressed concern over certifying projects without having engineering specifications and recommended another review after they were developed; however, this review was never implemented. Therefore, ABP should consider having TAG formally review projects once engineering specifications are developed to provide further assurance that the project’s design is capable of achieving its intended goals. Doing so would provide TAG with the information it needs to ensure that a project will result in significant water management and water quality improvements, as required by law. In addition, stakeholders we spoke with expressed concern over not knowing enough details about projects before they are implemented. Having an opportunity for the public to review the project’s design during TAG meetings, which are subject to the state’s open meetings law, would help increase the transparency of ABP’s projects.

**ABP should consistently conduct project monitoring so that it can determine the impact and success of its water management projects and include these results in its annual plans.** ABP did not conduct any monitoring for the Henderson Lake Access Channels project, conducted limited monitoring for the Dog Leg Sediment Trap project, and conducted its own monitoring using ABP staff for the Bayou Fourche project. According to ABP personnel, monitoring is not always necessary given the scope of the project, such as in the Henderson Lakes project. In addition, monitoring may not always be financially feasible given its limited budget, such as in the Bayou Fourche project. For Bayou Fourche, ABP conducted its own monitoring as an alternative to hiring outside contractors. While ABP is not required by law to monitor its projects, without sufficient monitoring ABP cannot determine whether a water management project resulted in the overall goal of improving water quality, as required by state law.

In addition, monitoring prior to a project’s construction would help ABP identify the pre-existing conditions of the area, justify the need for the project, and establish specific, measurable goals. In turn, monitoring for a sufficient amount of time after a project is completed would allow ABP to determine if the project was successful in achieving its goals and to determine the project’s long-term benefits and/or adverse consequences. ABP should report monitoring results to TAG, the Research and Promotion Board and in its annual plans.

**Recommendation 1:** ABP should have TAG review and approve water management projects after engineering specifications are developed to further ensure that the project’s final design will achieve its intended goal(s) and so that stakeholders will know the details of projects before they are constructed.

**Recommendation 2:** ABP should consult with TAG on each water management project to determine if monitoring is necessary and, if so, work with TAG to develop the specific monitoring requirements. ABP should report monitoring results to TAG, the Research and Promotion Board and in its annual plans.

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7 The Atchafalaya Basin Research and Promotion Board was created within ABP by R.S. 30:2000.5. The statute requires the Board to advise the DNR secretary and ABP director relating to the program, develop the annual Basin plan, develop criteria for projects to be included in the annual plan, and hold public meetings prior to adoption.
Summary of Management’s Response: ABP agrees with these recommendations and will develop a formal protocol to conduct these activities. See Appendix A for ABP’s full response.

The State Master Plan for the Atchafalaya Basin Floodway System expired in 2013 and no longer adequately guides ABP’s operations.

The State Master Plan for the Atchafalaya Basin was created in 1998 and was intended to be a 15-year plan; however, the Plan is now 19 years old. The primary reason the Master Plan was created was to meet the State’s responsibility as the “non-federal cost share partner” to ACOE. As mentioned earlier, the federal Water Resources Development Act of 1986 required that ACOE be the lead agency in constructing and funding water management projects in the Atchafalaya Basin. The State, through DNR, would provide 25% of the operational and maintenance costs of a water management unit once it was completed. However, to date, ACOE has not fully completed any of its water management units, and subsequently the State has not had to provide operation and maintenance support. With the passage of Act 606 in 2008, ABP was required to spend 75% of its funding on water management and access projects, focusing its efforts on these projects. Because of ABP’s new role in constructing water management projects, the current State Master Plan is no longer adequate to guide the operations of the program.

Furthermore, the conditions of the Basin have changed since the Master Plan was originally developed. Many of the projects originally included in the Master Plan may no longer be viable or financially feasible given the increased amount of sedimentation that has accumulated in the Basin. According to ABP personnel, the Basin is currently 75% full due to increased sedimentation. This sedimentation not only causes irreversible ecological damage to the Basin’s ecosystem, but it also puts the Basin’s use as a flood control at risk because as the Basin fills in it will no longer be able to carry the same volume of water.

The Master Plan also does not guide ABP on how it should address challenges it encounters when administering water management projects in the Basin, such as lack of landowner cooperation and competing interests of user groups. Many of ABP’s projects are viewed to be in contradiction with either public access or landowner rights and often face opposition from the public as a result. Without adequate guidance, ABP is forced to make decisions on the direction of its water management projects, and subsequently on the direction of the Basin as a whole. While the Program does receive oversight from various entities, having an

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8 These projects were in an effort to address many of the negative environmental impacts that arose as a result of ACOE’s use of the Basin as a flood control for the Mississippi River, namely issues with increased sedimentation.

9 By 2005, ACOE had completed seven of the 11 elements of its first pilot water management unit, Buffalo Cove. However, several of these elements were damaged in the 2011 flood and had to be rebuilt. Currently, ACOE is conducting post-construction project monitoring to evaluate the success of the project.

10 The remaining 25% of funds may be used to complete ongoing projects or for projects that are in accordance with the State Master Plan, such as recreation projects.
updated Master Plan that incorporates the views of all of the various stakeholders and provides an agreed upon strategy and direction for the Basin as a whole, would better guide the operations of ABP in terms of its water management projects.

**Recommendation 3:** DNR should, upon consultation with the legislature, determine whether there is a need to extend and revise the Master Plan for the Atchafalaya Basin to better address the current needs and environment of the Atchafalaya Basin and better guide the Program in its administering of water management projects.

**Summary of Management’s Response:** ABP agrees with this recommendation and believes this is an item for legislative consideration. See Appendix A for ABP’s full response.
Mr. Daryl Purpera, CPA
Louisiana Legislative Auditor
Post Office Box 94397
Baton Rouge, Louisiana 70804-9397

Dear Mr. Purpera:

Let me first begin by thanking the audit team and other staff members of the Office of the Legislative Auditor for their efforts in working to review the Atchafalaya Basin Program’s (“ABP”) water management projects undertaken over the last 17 years. We were gratified to note that the report showed that DNR has administered the program in compliance with all relevant laws and regulations, and that it recognizes the improvement the ABP has made in transparency and administration of water projects over its history.

Below is a summary of the three (3) recommendations included in the draft report followed by ABP’s response.

Recommendation 1: ABP should have TAG review and approve water management projects after engineering specifications are developed to further ensure that the project’s final design will achieve their intended goal(s) and so that stakeholders will know the details of projects before they are constructed.

ABP Response: The ABP agrees with this recommendation and will develop a formal protocol for this.

Recommendation 2: ABP should consult with TAG on each water management project to determine if monitoring is necessary and, if so, work with TAG to develop the specific monitoring requirements. ABP should report monitoring results to TAG, the Research and Promotion Board and in its annual plans.

ABP Response: The ABP agrees with this recommendation and will develop a formal protocol for this.
Recommendation 3: DNR should, upon consultation with the legislature, determine whether there is a need to extend and revise the Master Plan for the Atchafalaya Basin to better address the current needs and environment of the Atchafalaya Basin and better guide the Program in its administering of water management projects.

ABP Response: ABP agrees with this recommendation and believes this is an item for legislative consideration.

Sincerely,

[Signature]

Thomas F. Harris
Secretary
APPENDIX B: SCOPE AND METHODOLOGY

We conducted this performance audit under the provisions of Title 24 of the Louisiana Revised Statutes of 1950, as amended. We conducted this audit in response to allegations made against the Atchafalaya Basin Program (ABP) and its past water management projects. Our audit focused on ABP’s administration of its water management projects and covered the time period July 1, 1998, through December 31, 2016. The audit objective was:

To evaluate ABP’s administration of water management projects in Louisiana.

We conducted this performance audit in accordance with generally accepted Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. To answer our objectives, we reviewed internal controls relevant to the audit objectives and performed the following audit steps:

- Researched Louisiana Revised Statutes, Administrative Code, the Department of Natural Resources’ (DNR) website, the State Master Plan for the Atchafalaya Basin, and conducted interviews with DNR staff to understand ABP’s legal authority and requirements for administering water management projects.

- Interviewed ABP staff to obtain an understanding of the current process used for administering water management projects, their administration of past water management projects, and the challenges affecting ABP.

- Interviewed various stakeholders and interested parties, including crawfishermen, environmental advocacy groups, the United States Army Corps of Engineers, scientists, and landowner groups, to gain their perspective on ABP’s administration of water management projects, issues affecting the Atchafalaya Basin, and their relationship with ABP.

- Observed meetings of the Research and Promotion Board, as well as ABP public meetings regarding the Annual Plan.

- Obtained and reviewed documentation regarding ABP’s administration of water management projects, including, but not limited to: agency files, meeting minutes and transcripts of the Research and Promotion Board meetings, Channel Maintenance Committee meetings, and Technical Advisory Group meetings, agency emails and other correspondences, ABP Annual Plans, studies performed on water management projects, project design specifications, project permits,
legal documents, contracts, project nominations, bid information, and mitigation proposals.

- Evaluated whether ABP followed legal requirements and other criteria when administering water management projects.

- Obtained and reviewed the State’s Master Plan for the Atchafalaya Basin in order to determine the guidance it provides and the requirements for ABP’s activities. Evaluated its sufficiency to guide ABP in administering water management projects.
APPENDIX C: ABP’S PROCESS FOR ADMINISTERING WATER MANAGEMENT PROJECTS, 2008 – PRESENT

Project Nomination

Step 1 Projects are nominated by the public to be included in the Annual Plan.

Step 2 The technical advisory group reviews and evaluates all nominated water management projects, approves those to be included in the Annual Plan, and certifies a project will result in significant water management and water quality improvements.

Annual Plan Process

Step 3 The Atchafalaya Basin Research and Promotion Board (Board) evaluates, approves, and lists the projects in a priority ranking for inclusion in the Annual Plan.

Step 4 The Annual Plan is presented to the public for comment.

Step 5 Public comments on the Annual Plan are presented to the Board and any changes proposed to the Plan are voted on for approval.

Step 6 The Annual Plan is reviewed and approved by the Coastal Protection Restoration Authority (CPRA) Board for its consistency with the Master Plan for Coastal Protection and Restoration.

Step 7 The Board adopts the final version of the Annual Plan, including any changes made from the CPRA Board's review.

Step 8 The Annual Plan is submitted to the House and Senate Committees on Natural Resources for their review and approval and then the Plan is presented to the full legislature for approval.

Step 9 The Annual Plan is included for funding through the capital outlay process.

Step 10 The Bond Commission extends ABP a Priority 1 line of credit for any funding allocated.

Step 11 Once funding levels for the Plan are determined, the Board decides how to allocate the appropriated money, with 75% required to be put toward water management projects.

Project Implementation

Step 12 ABP works with the Office of Facilities Planning (OFP) for the design and engineering specifications of the funded water management project.

Step 13 OFP and ABP obtain the necessary permits and approvals for the project.

Step 14 OFP and ABP bid out the project for construction following Public Bid Law.

Step 15 The awarded contractor constructs the water management project with oversight from OFP and ABP and provides a report detailing the work completed.

Step 16 ABP may conduct post-project monitoring on the conditions of the site.
APPENDIX D: ABP WATER MANAGEMENT PROJECTS

Legend
- Atchafalaya Basin
- ABP Water Management Project

Henderson Lake Access Channels
Dog Leg Sediment Trap Maintenance
Schwing Chute
Bayou Postillion
Bayou Fourche