

# **Atchafalaya River Basin Restoration and Enhancement Task Force**

**Findings and Recommendations to the Louisiana Coastal Protection  
and Restoration Authority Board**



**GOVERNOR'S  
OFFICE OF  
COASTAL  
ACTIVITIES**



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## Atchafalaya River Basin Restoration and Enhancement Task Force Membership List

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- **Adam Eitmann**, Policy Director for the Office of the Governor
- **Jack Montoucet**, Secretary, Department of Wildlife and Fisheries
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- **Leroy J. Blanchard, III**, Assumption Parish Police Juror – District 7, Representative from East Atchafalaya Basin
- **Chris Tausin**, St. Martin Parish Council Chairperson – District 5, Representative from West Atchafalaya Basin
- **Rudy Sparks**, Williams Land Company/Williams Inc., Representatives of landowners in the Atchafalaya River Basin
- **Vic Blanchard**, A. Wilbert's Sons, Representative of landowners in the Atchafalaya River Basin
- **Karen Gautreaux**, The Nature Conservancy, Representative of conservation organizations participating in policy or projects relating to the conservation of the Atchafalaya River Basin
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- **Mike Spinks**, Enterprise Products, Representative of the energy transportation sector
- **Spencer Murphy**, Canal Barge Co., Representative of the inland navigation sector
- **Mac Wade**, Executive Director, Representative from the Port of Morgan City
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- **Matthew Jewell**, Representative from the commercial fishing industry in the East Atchafalaya Basin
- **Jody Meche**, LA Crawfish Producers Association – West, Representative from the commercial fishing industry in the West Atchafalaya Basin
- **Donald Braud**, Representative from the recreational fishing industry in the Atchafalaya River Basin
- **Chris Bonvillain**, Nicholls State University, Representative from an academic institution doing research in the Atchafalaya River Basin

Non-voting members include:

- **Mark Wingate**, U.S. Army Corps of Engineers
- **Glenn Constant**, U.S. Fish and Wildlife Service
- **Britt Paul**, Natural Resources Conservation Service
- **Richard Rebich**, U.S. Geological Survey
- **Charles Maguire**, U.S. Environmental Protection Agency

## Introduction

### Atchafalaya River Basin Background

The Atchafalaya River, the largest tributary of the Mississippi River, originates at the confluence of the Red River and Mississippi River near Simmesport, LA and travels approximately



140 miles south to the Gulf of Mexico. The Atchafalaya River Basin (ARB) lies within eight Louisiana Parishes: Assumption, Avoyelles, Iberia, Iberville, Pointe Coupee, St. Landry, St. Martin, and St. Mary.

The ARB is recognized continentally and globally as an independently important resource for environmental, economic, and social benefits. However, the ARB, which was authorized under the Flood Control Act of 1928 and became operational in the late 1930s, has been primarily managed as a flood control system for the Mississippi River and its tributaries, which drain approximately 41 percent of the continental United States and portions of Canada.<sup>1</sup>

Prior to 1839 the flow of water into the Atchafalaya River was sporadic and limited due to a 30-mile logjam referred to as the “Great Raft” situated in the Red River near Shreveport. In 1839 the logjam was cleared for navigational purposes, resulting in increased water flow (from 10 to 30 percent) from the Red and Mississippi Rivers into the Atchafalaya River.<sup>2</sup> In response to the devastating flood of 1927, Congress passed the Flood Control Act of 1928, which designated the Atchafalaya Basin as a floodway system and provided funding for dredging and levee construction for flood protection. By the 1950s, studies of the Mississippi-Atchafalaya River flows concluded the Atchafalaya River would capture the Mississippi River and cause subsequent flood damage within and adjacent to the ARB as well as economic disruption to the Port of New Orleans. As a preventative measure, Congress appropriated funds for the construction of the Old River Control Complex (ORCC). Since the completion of the ORCC in 1963, the ARB receives a congressionally designated 30 percent combined flow of the Mississippi and Red Rivers annually.<sup>3</sup>

In 1972 Congress directed the United States Army Corps of Engineers (USACE) to conduct the Atchafalaya Basin Floodway System Louisiana Project.<sup>4</sup> The purpose of the study was to 1) review the Atchafalaya Basin Floodway System (ABFS) features of the Mississippi River and Tributaries (MR&T) project to develop a plan for flood control; 2) review the operation of the ORCC and determine if the 30/70 water flow was sustainable; and 3) develop a comprehensive plan for the preservation and use of the water and land resources of the ARB. Additionally, Congress designated responsibilities for carrying out the future restoration efforts within the ARB to the USACE.

In 1998 the State of Louisiana Department of Natural Resources (LDNR) and a committee of Basin stakeholders reviewed the USACE Atchafalaya Basin Floodway System Louisiana Project of

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<sup>1</sup> United States Environmental Protection Agency (USEPA). *The Mississippi/Atchafalaya River Basin (MARB)*. <https://www.epa.gov/ms-htf/mississippiatchafalaya-river-basin-marb>.

<sup>2</sup> Louisiana Department of Wildlife and Fisheries (2018), Waterbody Management Plan Series: Atchafalaya Basin, Lake History & Management Issues.

<sup>3</sup> Flood Control Act of 1954, P.L. 780, 83rd Congress.

<sup>4</sup> United States Army Corps of Engineers (USACE) (1982). Atchafalaya Basin Floodway System, Louisiana Feasibility Study. Vol. 1-3. <https://louisianadigitalibrary.org/islandora/object/lsu-govdocs-p16313coll35:36>.



1982 and incorporated the USACE recommendations into the 1998 ARB State Master Plan.<sup>5</sup> The plan's proposed projects were designed with a 15-year implementation period that would provide for improved water management to enhance water quality, improve and increase public access and recreation, prevent development via land use easements, and protect the natural basin habitat.

The Atchafalaya Basin Program (ABP) was established within LDNR to carry out the development, implementation, and management of the comprehensive State Master Plan and serve as the Non-Federal Sponsor for the federal action. During the 1999 Louisiana Legislative Session, through Act 920, the State Master Plan for the Atchafalaya Basin was signed into law<sup>6</sup> and authorized \$85 million in state funds to match the \$250 million the USACE had been appropriated. While the State Master Plan set the course for types of projects to be implemented, the Louisiana legislature further focused the efforts of the ABP through Act 606, which prioritized water quality, water management, and recreational opportunities. As an additional resource to implement impactful projects Act 606 also established a Technical Advisory Group to further review water quality projects nominated for inclusion into the ABP.<sup>7</sup>

In 2018 the Louisiana Legislature Act 570, transferred the responsibilities of the Atchafalaya Basin Program from LDNR to the Coastal Protection and Restoration Authority (CPRA).<sup>8</sup> With the transfer, CPRA continues to provide an Annual Plan for implementation of the ABP that is incorporated into the overall CPRA Annual Plan and coastal mission.

Through the ABP, the State has successfully implemented projects that improve water quality, habitat, recreational access, campsites, and parks throughout the Basin; however, many challenges remain in the Basin as described below.

## Challenges

### Hydrology, Sedimentation, and Water Quality

Historically, flood waters within the ARB flowed through distributaries and bayous, overtopped natural levees, and traveled as sheet-flow from north to south toward the Gulf of Mexico. Natural inflow and outflow of water across floodplains of the ARB provided water enriched in nutrients, sediments, and high dissolved oxygen levels to its swamps and lowlands, fostering a highly productive ecosystem. This water exchange also buffered the severity of

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<sup>5</sup> Atchafalaya Basin Advisory Committee (1998). Atchafalaya Basin Floodway System Louisiana Project - State Master Plan. [http://www.dnr.louisiana.gov/assets/docs/Atchafalaya\\_Basin/StateMasterPlan.pdf](http://www.dnr.louisiana.gov/assets/docs/Atchafalaya_Basin/StateMasterPlan.pdf)

<sup>6</sup> La. R.S. 30:2000.4, et seq.

<sup>7</sup> H.B. 1135, 2008 Reg. Sess. (La. 2008).

<sup>8</sup> La. R.S. 49:214.8.1, et seq.



flooding caused by rain events for the communities within and surrounding the Basin. However, anthropogenic disruptions to the Basin's natural hydrology have caused a deterioration in water quality in certain areas and a decrease in flood retention capacity resulting from sedimentation.

Since the completion of the ORCC in 1963, the ARB has received an elevated more consistent supply in sediment over historic levels as a result of the regulated increase in annual flow from the Mississippi River. Other anthropogenic changes to hydrology such as pipeline canals and water control structures have exacerbated the effects of sediment by disrupting north to south sheet flow of water and serving as pathways for sediment dispersion through the interior ARB. Further, due to the placement of dredged sediments onto spoil banks for maintenance of navigable channels within the Basin, waters are confined to channels until high flood levels are reached.<sup>9</sup> When water levels do overtop the river and/or spoil banks within the ARB, in many areas an unnatural south to north flow has been observed.<sup>10</sup> The combined effect of these actions has caused ground elevations in certain areas within the interior Basin, to increase, the extent and duration of overbank flooding to decrease, and the quality of backwater - habitat during the low-water season to decline.

Because impacted backswamps can no longer drain efficiently, hypoxia (dissolved oxygen of less than two mg/L) occurs within ponded water. Extended periods of hypoxic conditions throughout the ARB have compromised suitable aquatic habitats and conditions necessary to promote and sustain the coastal wetland forest that once thrived in this region.<sup>11,12,13</sup> Natural sheet-flow within the Basin has historically facilitated denitrification of nutrient rich water within its backswamps, but as a result of altered hydrology, this water and its associated nutrients reach the Gulf of Mexico where algal blooms can become prevalent and cause dead zones.<sup>14</sup> This in turn affects coastal marine life and economic industries such as commercial fishing.

### Invasive species

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<sup>9</sup> Kaller, M. D., Rutherford, A. and Kelso, W. (2011). Effects of spatial scale on assessment of dissolved oxygen dynamics in the Atchafalaya River Basin, Louisiana. *Hydrobiologia*, 658(1): 7-15.

<sup>10</sup> Environmental Monitoring Reports and data (USGS, TNC), 2006-2009; 2017-2021.

<sup>11</sup> Fontenot, Q. C., Rutherford, D. A., and Kelso, W. E. (2001). Effects of environmental hypoxia associated with the annual flood pulse on the distribution of larval sunfish and shad in the Atchafalaya River Basin, Louisiana. *Transactions of the American Fisheries Society*, 130: 107-116.

<sup>12</sup> Bonvillain, C. P., Rutherford, D. A., and Kelso, W. E. (2015). Effects of environmental hypoxia on population characteristics of red swamp crayfish *Procambarus clarkii* in the Atchafalaya River Basin, Louisiana. *Hydrobiologia*. 743: 309-319.

<sup>13</sup> Conner, W. H., and Day, J. W. Jr. (1976). Productivity and composition of a baldcypress-water tupelo site and a bottomland hardwood site in a Louisiana swamp. *American Journal of Botany*. 63(10): 1356-1364.

<sup>14</sup> United States Environmental Protection Agency (USEPA). *The Mississippi/Atchafalaya River Basin (MARB)*. <https://www.epa.gov/ms-htf/mississippiatchafalaya-river-basin-marb>



Invasive species are commonly found throughout the ARB and can further diminish environmental conditions. Invasives have the potential to reduce water quality parameters (*e.g.*, dissolved oxygen and circulation), increase sediment retention by hindering water velocity, and outcompete native species.<sup>15</sup> Sedimentation along the banks of the main channel of the AR and its natural and man-made distributaries has disconnected/disrupted waterflow to backswamp areas, creating optimal conditions for invasive species to establish and thrive. If left unchecked, invasive species have the potential to alter the ecological community of the ARB.

### Stakeholder Conflicts

The Basin is a mixture of state, federal, and privately owned lands and water-bottoms. The Basin is used for commercial and recreational fishing, energy extraction and transport, timber production, recreational hunting, and ecotourism. Competing land use, resource consumption, and management objectives can create conflict that can affect the interpretation of project benefits as well as affect project implementation by denial of consent, delaying permitting actions and construction.

## **The Governor's Advisory Task Force on Atchafalaya River Basin Restoration and Enhancement**

### **Charge of the Task Force**

To address the challenges within the ARB, Governor Jon Bel Edwards created the Governor's Advisory Task Force on Atchafalaya River Basin Restoration and Enhancement (Task Force), which was established through Executive Order JBE 2020-22 on December 14, 2020. The Task Force was charged with:

- A. Elevating critical issues facing the Atchafalaya River Basin today and the importance of its holistic management for navigation, flood control, and restoration;
- B. Identifying and building support for new and recurring sources of funding, including working closely with the U.S. Army Corps of Engineers to reinvigorate the Atchafalaya Floodway System – Louisiana Project;
- C. Identifying shared goals and values for restoration and enhancement of the Basin, as illustrated by project types that would benefit both the Basin and the larger coastal program managed by the Coastal Protection and Restoration Authority; and

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<sup>15</sup> Villamagna, A.M., and Murphy, B.R. (2010). Ecological and socio-economic impacts of invasive water hyacinth (*Eichhornia crassipes*): a review. *Freshwater Biology*. 55: 282-298. <https://doi.org/10.1111/j.1365-2427.2009.02294.x>



D. Serve to proactively build consensus and advise the Atchafalaya Basin Program on matters relating to implementation of the Atchafalaya Basin Floodway System – Louisiana Project.

## Recommendations to the CPRA Board

The Task Force is eager to see the State, USACE, and interested parties undertake projects that address the challenges as previously described as well as future challenges that may arise. To address these challenges, the Task Force puts forth the following recommendations:

### 1. Enhance outreach that highlights the importance of the Atchafalaya Basin locally, regionally, and nationally

The Task Force requests that the Coastal Protection and Restoration Authority's Board (CPRAB) provide further public outreach that highlights both the function and the importance of the Atchafalaya Basin as a crucial floodway and flood outlet for local and regional flood events. The Atchafalaya Basin Floodway System is the largest active river delta in North America, extending approximately 140 miles from the ORCC to the Gulf of Mexico. The Basin serves as a critical relief valve for extreme flood events on the Mississippi River. As such, a primary function of the ARB is to protect life and property by effectively and efficiently delivering a significant portion of the Mississippi River's floodwaters to the Gulf of Mexico.

The ARB also holds national and local importance both ecologically and economically. The ARB serves as a contiguous habitat for migratory waterfowl as well as many aquatic species. The ARB is located within the Mississippi Flyway, a major bird migration route. Annually, greater than 325 bird species migrate through the Mississippi Flyway<sup>16</sup> and greater than 250 bird species<sup>17</sup> have been observed utilizing the ARB for foraging, resting, or overwintering purposes.<sup>18</sup> Additionally, the fishing economy, both recreational and commercial, within the ARB is a multimillion dollar activity and provides jobs and food supply nationally and globally. Further, with approximately one million acres of forested wetlands<sup>19</sup>, the ARB benefits the global effort to mitigate climate change through carbon sequestration that occurs naturally through

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<sup>16</sup> Piazza B. P. 2014. The Atchafalaya River Basin: history and ecology of an American wetland. Texas A&M University Press: College Station, TX.; Rice, C. L., Weber, D. S., Haase, C. S. and Piazza, B. P. (2014) Water quality monitoring station design for remote sites experiencing extreme water level fluctuation. *River Research and Applications*, 31(2), 173-180.

<sup>17</sup> See *Id.*

<sup>18</sup> U.S. Fish and Wildlife Service (1981). Planning-Aid Report on Management and Land Use Controls. In: Atchafalaya Basin Reports, Avoca Island Levee Extension and Water Management and Land Use Controls.

<sup>19</sup> Demas, C. R., Brazelton, S. R., and Powell, N. J. (2001). *The Atchafalaya Basin: River of Trees*. US Department of the Interior, US Geological Survey. Fact Sheet 021-02.



vegetative growth and soil processes. Finally, the ARB is a vital part of water-borne shipping and activities along the Gulf Coast, and it has a direct impact on the regional, state, and national economies. During high water events in the Basin, maritime traffic from the Texas Gulf Coast to Baton Rouge must be rerouted through New Orleans, increasing a four-day transit to twelve days, adding to the cost of transportation, and further expanding the carbon footprint. Conservation of the multiple functions of the Atchafalaya Basin system will provide a future with increased ecological and economic services.

Given the local, regional, and national importance of the Basin, the many challenges it faces and difficulties in implementing solutions, and the need to better acknowledge the scale of the issue, the Task Force urges the CPRAB to request the Governor declare a state of emergency in the Atchafalaya Basin. An emergency declaration may provide new funding avenues and facilitate expedited project implementation aimed at restoring the overall hydrologic function of the Basin. An emergency declaration would increase local, regional, and national awareness of the importance of the Basin, the current degradation of the system, and the consequences to life, property, and the economy.

## **2. Urge and request that Congress fully fund construction of finalized USACE studies relevant to the management of the Atchafalaya Basin as well as fund authorized studies**

The Task Force requests that CPRAB urge Congress to fully fund the implementation or construction associated with completed USACE studies relevant to the management of the ARB as well as provide funding to conduct currently authorized studies. The need for restoration in the ARB has been officially acknowledged since 1982 when the USACE published the Lower Atchafalaya Basin Floodway System – Louisiana Project Environmental Impact Statement/Feasibility Study that assessed the hydrologic conditions of 13 water management units (WMUs). The purpose of the study was to determine if restorative action could successfully improve/recreate historic hydrologic flood conditions and benefit degraded aquatic and terrestrial ecosystems within the Atchafalaya River Basin Floodway System. Of the 13 water management units, five were determined to have the “greatest potential” of providing large-scale ecological improvements; these were: Buffalo Cove, Henderson, Beau Bayou, Flat Lake, and Cocodrie Swamp.<sup>20</sup> Only one of the WMUs, Buffalo Cove, has been congressionally authorized for construction as a “Pilot” WMU.<sup>21</sup>

Since congressional authorization, only two sets of projects, Henderson Lake Access Channels and Buffalo Cove Water Management, have been implemented within the WMUs. The Henderson Lake Access Channel project was funded by the ABP and implemented as a

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<sup>20</sup> United States Army Corps of Engineers (USACE) (1982). Atchafalaya Basin Floodway System, Louisiana Feasibility Study. Vol. 1-3. <https://louisianadigitalibrary.org/islandora/object/lsu-govdocs-p16313coll35:36>.

<sup>21</sup> Supplemental Appropriations Act of 1985, P.L. 99-88; Water Resources Development Act (WRDA) of 1986 ; P.L. 99-662.



cooperative venture between the LDNR and St. Martin Parish. The Buffalo Cove Water Management Project was implemented by USACE to improve water circulation and manage sediment deposition. Elements of the project were constructed between 2004 and 2016. An additional element had been proposed within the area, but due to unsuccessful results from the initial project (compromised water circulation and inability to control sedimentation), construction of the additional element was voided. The ecological outcome of the Buffalo Cove WMU Project is a prime example of diminished ecosystem function as a result of prolonged funding constraints. Partial implementation and stalled completion of project elements resulted in failure to provide the benefits that the Buffalo Cove Project was designed to produce.

It is imperative that the Atchafalaya Floodway System – Louisiana Project be reinvigorated and fully funded. The Task Force urges that projects determined to be beneficial be implemented in a timely manner rather than piecemealed over years. Full authorization and appropriate funding is required for large scale project implementation to ensure the Basin receives the benefits the projects were designed to provide.

The Task Force further requests that additional projects and studies currently awaiting authorization or appropriation be prioritized. These include the Mississippi River and Tributaries Project, South Central Coastal Study, and the East Atchafalaya Basin and Amite River Basin Projects. The Task Force has additionally requested that the impacts from upstream uses be assessed. An assessment of nutrient inputs into the Mississippi River and the impact of nutrients that enter the ARB has been requested. High nutrient loads entering the ARB, can reduce overall water quality, increase hypoxic water conditions, which can lead to fish kills and lack of suitable habitat for recreational and commercial fishing, and coastal wetland forests. For these reasons, the level of nutrient load entering the ARB needs to be scientifically quantified.

Additionally, the Task Force requests that the CPRAB urge the USACE to streamline the permitting process for integrated restoration and protection projects in the ARB. Current permitting hurdles and mitigation requirements cause delays to projects designed to benefit the Basin. A streamlined process would allow for easier and more efficient implementation of projects designed to provide ecological, economic, social, and other benefits to the Basin.

During project selection, projects designed to restore the historic hydrology of the natural bayous in the Basin should be prioritized. The Task Force suggests that the Henderson Management Unit, and projects previously authorized therein, be used as a model for future projects. The projects implemented within the Henderson Management Unit have shown beneficial restoration of natural hydrology and navigation. The Task Force recommends similar actions be taken to restore the historic flow in Butte Larose. The Task Force requests Butte Larose be considered as a top priority project candidate.



### **3. Urge the USACE to approach management of the Atchafalaya Basin holistically, designating ecological restoration as a primary component along with flood control and navigation**

The Task Force requests the CPRAB urge USACE to manage the ARB holistically, recognizing the importance of ecological restoration along with flood control and navigation interests. The ARB is a critical part of the lower Mississippi River. It is the largest contiguous riverine swamp in the United States and includes ten distinct aquatic and terrestrial habitats. These habitats provide refuge and sustainable resources to a variety of species including the endangered pallid sturgeon. The Basin is home to more than 300 species of wildlife, 100 aquatic species, a rich diversity of native flora, and it supports cultural, economic, and natural treasures. It is a prime location for both recreational and commercial activities such as hunting, fishing, boating, hiking, birding, and holds the potential to make a significant contribution to global carbon sequestration efforts. The Basin also serves as a navigation route for commercial vessel transport and acts as a major flood relief valve for the Mississippi River. Management of the ARB must take into consideration the diverse ecology of the Basin as well as the diversity of its uses and stakeholders while balancing considerations for navigation, flood control, economics, and restoration.

The Task Force urges inclusion of the Atchafalaya River and Basin into the upcoming Lower Mississippi River Comprehensive Management Study implemented by USACE. This study should recognize the ecological, flood, and navigation benefits of enhanced management of water flow and sediment deposition within the River and Basin.

### **4. Request the CPRA Board evaluate inclusion of the remainder of the Atchafalaya Basin within the Louisiana Coastal Zone**

The Task Force recognizes that although the ARB is currently wholly included within Louisiana's Coastal Area, and within the operating jurisdiction of CPRA, full inclusion into the state's Coastal Zone may result in additional funding opportunities for the ARB. However, the Task Force also recognizes that a thorough evaluation of potential beneficial and adverse impacts should be conducted in relation to the diverse management needs within the ARB. The Task Force requests that the CPRAB conduct that evaluation seeking input from the Task Force and its diverse membership.

### **5. Management actions should where possible restore north/south sheet flow within the Basin**

The Task Force urges the CPRAB to restore the natural, north to south sheet flow of water within the Basin. Currently east/west oriented spoil banks exist throughout the Basin. These spoil banks often obstruct water flow, which causes stagnation and diminishes water quality



parameters such as dissolved oxygen. Spoil banks along canals can funnel sediment-laden water into interior swamps and cause excessive sedimentation.

The Task Force suggests the development of a spoil bank inventory to aid in identification and prioritization of spoil banks that should be gapped or removed. The development of the inventory and resulting implementation strategies to gap spoil banks should be done in consultation with public and private landowners. Spoil bank gapping techniques should be optimized to promote longevity of the feature (*i.e.*, gap size, orientation, etc.). A Programmatic permit with the USACE should also be developed to allow for expedited removal, gapping or re-orientation of problematic spoil banks.

Additionally, the Task Force urges the USACE to enforce the provisions of their permits, which require permit holders to maintain gaps in any spoil banks created during the installation of a pipeline. The Task Force also suggests that CPRAB work with industry stakeholders such as pipeline companies and request that artificial spoil banks created during pipeline installation be removed.

## **6. Management actions should, where possible, restore and conserve deep water habitats within the Basin**

The Task Force suggests that, where possible, CPRAB identify and implement management actions that restore and conserve critical deep water habitats within the Basin. The Task Force requests that ingress of sediment into these deep water habitats be limited through hydrologic modification, sediment trapping, or other means. Alternative uses for dredged sediment, such as commercial or residential use, should also be explored.

Further, when restoration actions such as spoil bank gapping or other dredging occur, sediment should be placed within adjacent upland or elevated areas. As an alternative, sediment should be utilized to nourish subsiding areas separated from sediment inputs. Sediment should be placed in a north to south orientation in order to allow for the natural north to south flow of water to occur. LIDAR should be used to identify preferred sediment disposal areas that will build upon existing terrestrial habitat. This management practice will prevent further, unnecessary sedimentation within the ARB as well as enhance current areas that are essential for wildlife such as whitetail deer, turkeys, and other terrestrial species.

## **7. Examine ways to better manage sediment within the ARB**

The Task Force requests CPRAB urge the USACE to explore alternative dredging techniques, channel alignments, and channel maintenance in order to better contain and mobilize sediment within the main Atchafalaya River channel to reduce basin infilling and address the state's coastal crisis. New and/or improved methods of sediment management are crucial for the continued functioning of the ARB as a floodwater system. The USACE must examine ways to more effectively



manage deposition of the sediment leaving the main channel of the Atchafalaya River and infilling of the ARB interior. The Task Force additionally suggests that the USACE fast track a hydrologic study to determine the effectiveness of dredging the outlets of the ARB, specifically the lower reaches of the main river channel, Wax Lake Outlet, and the Jaws, on the transport of water and sediment out of the ARB.

#### **8. Examine the current hydrology of the ARB, including management of the ORCC and the ARB channel outlets**

The Task Force requests that CPRAB examine the current management of the ORCC, in particular the impacts of altering the flow between the Mississippi, Red, and Atchafalaya Rivers. The current flow regime mandates 30 percent of the total latitude flow (combined flow in the Red River and Mississippi above the control structures) pass down the Atchafalaya River on an annual basis. The “70/30” flow regime was based solely on the natural flow distribution prior to construction of the ORCC. It has not been altered since the ORCC was completed in 1963.

Given the natural and man-made changes that have altered flow conditions within the ARB, the Task Force requests a reevaluation of the current flow regime to provide critical information for future management decisions within the ARB. The evaluation should include an examination of how management of both the Red River and the Mississippi River, as separate but interrelated entities, influences the Atchafalaya River.

#### **9. Update the State’s Atchafalaya Basin Master Plan to include current conditions and challenges as informed by the ARBRE Task Force**

The Task Force urges CPRAB through CPRA to update the State’s Atchafalaya Basin Master Plan (State Master Plan). The State Master Plan should include current conditions and challenges as informed by the Task Force. The Plan should also consider all studies and restoration efforts within and immediately adjacent to the ARB guide levees. To facilitate this, the Task Force suggests a clearinghouse be established, which would act as a repository for all studies and projects occurring within and adjacent to the ARB. For example, several parishes on the east side of the Basin are currently conducting a flow model study of Atchafalaya River water. This study will be beneficial in determining the effects of river outlets that enter the main stem of the Atchafalaya River near the coast.

The State Master Plan must also address issues related to recreational access and navigation. The Atchafalaya Basin is one of the most productive river basins in North America and is a highly sought after location for both recreational and commercial fishing. However, due to sedimentation and hydrologic changes, access to many parts of the ARB has become increasingly difficult and, in some cases, prohibitive. Additionally, the Atchafalaya is a crucial thoroughfare for commercial vessel traffic, being home to the Port of Morgan City, a critical connection point for inland and coastal shipping routes. Maintaining adequate navigation channels along the main



stem of the Atchafalaya River is a vital component of Louisiana's working coast. The updated Master Plan must consider restoration of navigational channels for both recreation and commercial fisheries as well as for the marine industry.

#### **10. CPRA Board and CPRA to enhance public engagement concerning the management of the Atchafalaya Basin**

The Task Force recognizes and appreciates the current outreach activities conducted by the State but given the scope and scale of the issues requests that the CPRAB through CPRA further engage the public concerning the management of the ARB. A goal of CPRA's Atchafalaya Basin Program is to provide benefits to both the resource *and* the resource users of the Atchafalaya Basin. The Task Force requests enhanced public engagement through activities such as meetings for project collaboration and ideas, media updates for public access, and public comment collection via in-person or online meetings.

Further, the ARB is a major recreational destination for activities such as boating, fishing, and water sports. However, due to the dynamic nature of the system and rate of sedimentation in some channels, access to portions of the ARB can be difficult or in some cases completely prohibited. Therefore, the Task Force has requested that new navigational aids be produced. These include updated navigational maps for online download, posted identification of safe, publically authorized channels for navigation, posted warning signs of navigational hazards on these channels, and addition of more water level gauges. Providing the suggested navigational aids would not only benefit experienced ARB users but may also encourage new users to visit the ARB.

#### **11. Recommend the ARBRE Task Force be used to discuss and inform potential management actions within the Atchafalaya Basin**

The Task Force recognizes the diverse challenges faced by the Basin and recommends that a diverse stakeholder group such as this Task Force continue to be used as the platform to discuss and inform future management actions within the Atchafalaya Basin. The Task Force could be used as a means of addressing issues holistically and spurring collaboration among stakeholders.

#### **12. Explore opportunities for significant recurring funding for the Atchafalaya Basin Program**

The Task Force recognizes that although a recurrent funding mechanism exists for the ABP through state mineral revenues, the triggers to appropriate monies to that account have never been reached. To provide adequate management in the future, the Task Force requests that CPRAB explore opportunities to expand recurrent funding. A potential option is to address the thresholds for funding in current state statute. Additionally, federal funding options should be explored such as The Inland Waterway User Fee as a potential model. The Inland Waterway User Fee (also known as the Inland Waterways Trust Fund) is a tax on commercial barge fuel on



federally designated waterways.<sup>22</sup> The funds are used to match federal appropriations from the General Fund of the U.S. Treasury and are used to finance construction and major rehabilitation projects in inland waterways.<sup>23</sup> The Task Force believes that a similar fee structure could be implemented to provide sustained and recurring funding for projects within the ARB.

## Work Plan and Meeting Schedule

The ARBRE Task Force met monthly, beginning in March 2021. Below is a brief overview of the Task Force's work plan and schedule:<sup>24</sup>

- March 16, 2021; Cecilia Civic Center, Breaux Bridge, LA – Initial Meeting
- April 15, 2021; Assumption Parish Community Center, Napoleonville, LA – Problems and Potential Solutions Identified
- May 4, 2021; Port of Morgan City Governmental Operations & Emergency Center, Morgan City, LA - Potential Solutions Identified
- June 10, 2021; Cecilia Civic Center, Breaux Bridge, LA - Potential Solutions Identified
- July 15, 2021; Iberville Parish Courthouse, Plaquemine, LA – Report Drafting
- August 12, 2021; Virtual – Report Consideration
- August 26, 2021; Virtual – Report Adoption

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<sup>22</sup> Congressional Research Service, Inland Waterways Trust Fund, Version 9 (Feb. 26, 2018).

<sup>23</sup> *See Id.*

<sup>24</sup> See Attachment 1 for Meeting Minutes.