

## **EXPLANATORY NOTICE**

The attached Final Permit Re-evaluation and Revised Decision Document pertaining to Individual Permit No. MVN-2010-1080-WLL and Nationwide Permit No. 7 MVN-2010-1032-WLL was signed on February 13, 2013.

These permits have been challenged in United States District Court, Western District of Louisiana. This document is posted to facilitate access by interested parties.

CEMVN is not seeking comments on this document.

CEMVN-OD-SW

**Department of the Army Permit Re-evaluation  
and Revised Decision Document**

**Permittee:** Mallard Basin, Inc.

**Proposed Transfer Permittee:** Atchafalaya Investments, LLC

**Permit No:** MVN-2010-1080-WLL  
MVN-2010-1032-WLL (Nationwide No. 7)

**This document constitutes my Environmental Assessment, Statement of Findings and review and compliance determination in accordance with the Section 404(b)(1) Guidelines for the proposed project (proposed transfer permittee's preferred alternative), as described in the attached public notice.**

**I. Proposed Project:** The location and description of the proposed project are detailed in the attached public notice.

**II. Environmental and Public Interest Factors Considered:**

**A. Purpose(s) and need(s) of permitted facilities:**

**(1) Overview of permittee's purpose and need and the public interest:**

After review of an after-the-fact permit application received from Mallard Basin, LLC in 2010, the Corps issued to the applicant an individual Department of the Army Sec. 404 (Permit No. MVN-2010-01080-WLL) and found the applicant eligible for a Nationwide No. 7 permit, thereby authorizing three facilities previously constructed or installed in waters of the United States at the Fisher Bottom property. The Nationwide No. 7 permit authorized a water intake pipe and associated electric pump and discharge pipes installed on the west bank of the Whiskey Bay Pilot Channel in 2001 and the individual permit authorized restoration / re-construction of an approximately 1,900' water conveyance ditch running from one of the electric pump's outfall structures to the northeast end of the Fisher Bottom impound area, and construction / installation of a variable crested aluminum water control structure and associated earthwork, installed in 1999 and replacing one of two old wooden weirs.

Mallard Basin constructed these facilities, and sought authorization for their continued use, in order "to improve waterfowl and wetland habitat" in Fisher Bottom. Mallard Basin, LLC was a limited liability company formed by a group of individuals interested primarily in duck hunting and wildlife enjoyment. The group obtained a water management plan from State of Louisiana biologists designed principally to attract waterfowl to Fisher Bottom. Scott Sebastien, one of the Mallard Basin owners, explained the group's purpose in a March 7, 2012 affidavit:

We contacted the Louisiana Department of Wildlife & Fisheries and invited an experienced biologist named Robert Helm to the property to give us professional guidance in aquatic wildlife and habitat management. He visited the property several times after we completed the purchase to help us refine a successful wetland stewardship

program based on the expertise of the Department of Wildlife & Fisheries.  
(See Attachment I: affidavit of Scott Sebastien, dated March 7, 2012).

The water management plan developed by the Louisiana Department of Wildlife and Fisheries (LDWF) for Mallard Basin, LLC followed a general waterfowl habitat enhancement approach known as "moist soil management" which emphasizes the necessity for active water management in order to preserve the health of an aquatic habitat:

Effective management of wetlands for native moist soil vegetation in the Mississippi Alluvial Valley provides abundant, high quality, food and cover for native game and non-game wildlife species in Louisiana. Many of these wetland wildlife species are of high economic, recreational and conservation importance in the region. In order to effectively manage land for moist soil vegetation, three things are necessary: 1. The ability to add and remove water at specified times; 2. Means to manipulate vegetation in order to maintain early successional species; and 3. A monitoring program of sufficient detail where specific management actions can be evaluated and improved upon, based on the results.  
(See Attachment II, Management Plan for Fisher Bottom prepared by LDWF for Mallard Basin, July 2010).

Under this program, the water level in Fisher Bottom is drawn down for limited periods of time to expose portions of the shallow water bottom and allow native grasses and desirable emergent plant species to germinate and take root. Invasive species like black willow, cattail, hyacinth, salvinia and alligator grass may be cut back or treated with herbicides. These draw-downs also help to dry out dead organic material on the water bottom, thereby minimizing the draw on dissolved oxygen in the water column that decaying plant materials otherwise impose. When left unmanaged, submerged accumulations of decaying invasive species like hyacinth and salvinia can float up and create a mat of dead vegetation called "floton," which cuts light penetration and contributes to hypoxia, an indicator of an oxygen-starved water body and a common phenomenon in some parts of the Atchafalaya Basin.

Water levels in Fisher Bottom are restored by closing the water control structure and resuming pumping of water from the Pilot Channel until the impound area returns to full pool. Maintaining higher water levels prevent many invasive species from germinating, thereby helping to control a portion of the managed area from undesirable colonization by unwanted species.

This water management strategy is primarily designed to promote native emergent, vegetative food sources, to eliminate non-native, opportunistic invasive species, and to attract migratory waterfowl to Fisher Bottom in the fall, maximizing hunting opportunities for the property's owners. But the water management plan provides broader environmental benefits as well. Following a joint site visit to Fisher Bottom on March 30, 2012, Paul Link, a biologist with the Louisiana Department of Wildlife and Fisheries who accompanied the Corps' team and who specializes in moist soil management projects, offered the following assessment of the Fisher Bottom project:

In my opinion, the wildlife habitat was greatly improved via this project's activities. Without the annual management and manipulation of the water control structures the area that currently produces a multitude of beneficial seed-producing plants for waterfowl would quickly be overtaken by less desirable species such as willow and Chinese tallow. Further, the addition of the electric pump and conveyance ditch provides dependable

water to an area that historically flooded on a more routine basis prior to the construction of the flood protection levees and straightening of the Atchafalaya River.”  
(See Attachment III: email from Paul Link, LDWF, dated April 2, 2012)

Because the moist soil management plan could not be effectively implemented without the ability to lower water levels in the impoundment area and later to restore water levels, Mallard Basin, LLC had a need for a water control structure capable of maintaining variable levels of water in the impoundment area, as well as a water conveyance system to bring water into Fisher Bottom when the moist soil management plan called for restoring higher water levels. The facilities Mallard Basin constructed fulfilled this need and made the moist soil management plan possible. Replacement of the old wooden weirs with a flap-gated aluminum water control structure had been recommended to Mallard Basin by LDWF Waterfowl Biologists Robert Helm and Tony Vidrine. In a March 2010 letter, Mr. Vidrine reached conclusions similar to Paul Link’s findings:

... many undesirable plant species were invading this area and without repairs to the old structures this area would be lost as desirable waterfowl habitat in the future. With the ability to control water levels on this site, more desirable waterfowl plant foods would be able to thrive on this site (see Attachment IV: letter dated March 15, 2010 from LDWF signed by Tony Vidrine).

Mallard Basin’s water management plan has measurable public interest benefits. Moist soil management programs provide benefits to a variety of species and contribute to increasing and maintaining the biodiversity of an area. By promoting favorable habitat for waterfowl and encouraging diverse food sources, inevitably other species are attracted to the area. Birds, mammals, reptiles and amphibians benefit from the projects’ available feeding, resting and nesting opportunities. From a human perspective, preservation of a healthy inundated wetland environment at Fisher Bottom is beneficial to the broader health of the Atchafalaya Basin.

Mallard Basin improved the functionality of existing water management structures built by previous owners of the Fisher Bottom property. As described in Section (2), below, an original earthen embankment with two weirs and a water conveyance ditch were constructed on the property sometime in the mid-twentieth century. The historical record demonstrates that prior owners of the property had an on-going need over more than fifty years to convey water into Fisher Bottom by artificial means and to retain water in the impoundment area in order to better nourish and maintain its inundated wetlands.

## **(2) Effects of historical navigation and flood control works on water circulation:**

Navigation and flood control works built throughout the Atchafalaya Basin over the last century have substantially altered natural water circulation patterns within the floodway. Some areas have experienced increased flooding and a build-up of sediment deposits that have erased numerous small lakes, depressions and ponds through the accretion of many feet of silt: “Since 1932, there has been a net accretion of nearly 2,500 million cubic meters of sediment in the floodplain of the Lower Atchafalaya River Basin.” (*Hale, L.F. 1997. Large-Scale Patterns and Rates of Accretion in the Atchafalaya River Basin. Final Project Report submitted to USGS cooperative extension, Louisiana State University, Baton Rouge, LA*). Other areas of the basin, including the area around Fisher Bottom, have seen a reduction in the levels of annual flooding.

The deepening of the main channel of the Atchafalaya River, excavation of the Whiskey

Bay Pilot Channel, and construction of levees and other flood control structures have reduced the frequency and scale of seasonal flooding in areas surrounding the Fisher Bottom property. The river now carries more water within its navigation channels during high water. Excavated material placed along the banks of the Whiskey Bay Pilot Channel during major dredging between 1934 and 1937 formed a significant man-made spoil ridge that now blocks lesser flood-stage water flows from entering the adjacent wetlands (see *Designing the Bayous, The Control of Water in the Atchafalaya Basin*, Martin Reuss, U.S. Army Corps of Engineers, 1998, p. 153). Mallard Basin noted in its permit application that as a consequence of these navigation and flood control measures, Fisher Bottom no longer receives as much flood water, leaving the project area drier than its historical norm and more vulnerable to overgrowth by invasive shrub and tree species such as Black willow (*Salix nigra*) and Chinese tallow (*Sapium sebiferum*).

### **(3) Construction undertaken at project site by previous owners:**

Prior to Mallard Basin's purchase of the Fisher Bottom property in 1999, previous owners constructed a 380' long embankment approximately 20' wide along the southeastern end of the ponding area in order to better retain water and create a more permanent water impound. They also installed two wooden weirs within this embankment to regulate water flows into adjacent downstream areas. (The weirs were replaced with the variable crested water control structure installed by Mallard Basin in 1999). These previous owners excavated the original water conveyance ditch from the Whiskey Bay Pilot Channel in order to bring water into the impoundment area, and installed a portable diesel pump along the channel to pump water into Fisher Bottom.

After Mallard Basin purchased the property in 1999, the group hired a professor of Forestry at LSU, Dr. Donald Reed, to take borings from two bald cypress trees and a red maple tree rooted at the top of the embankment to estimate the age of the trees in order to ascertain an approximate date when the embankment was constructed. Dr. Reed determined that the trees had established themselves atop the berm "well prior to the year 1960;" (see Attachment I-a, letter from Don Reed, Professor of Forestry and Wildlife Specialist, LSU, dated April 5, 2010).<sup>1</sup> Based on the professor's finding, we conclude that the embankment and related infrastructure – the original weirs and the water conveyance ditch – were most likely constructed before 1960 and before enactment of the modern Clean Water Act in 1972. This historical activity falls within the grandfathering provisions of the Clean Water Act and the Corps' "unasserted jurisdiction permit," a broad nationwide permit granted by the agency for discharges of fill material in jurisdictional wetlands occurring prior to 1975, as set forth in 33 CFR §330.3 "Activities occurring before certain dates."

### **(4) Mallard Basin's construction and water management activity:**

In 1999 Mallard Basin removed the original wooden weirs and recontoured the embankment to create one outflow point, where it installed a water control structure across the gap (see Photos 1 and 4). In 2001 Mallard Basin installed a permanent electric pump on a

<sup>1</sup> We note that the administrative record contains several affidavits submitted through Leigh Haynie, former counsel for the Louisiana Crawfish Producers Association - West, which attest that the affiants fished in Fisher Bottom during the 1970s and 1980s and have no memory of a dike or water control structure at "Fisher Lake." Without contesting the truthfulness of these affidavits, the District finds the evidence presented by LSU professor Don Reed in his April 5, 2010 letter to Mallard Basin conclusive that an earthen embankment existed at Fisher Bottom sometime before 1960.

separate parcel of its property along the Whiskey Bay Pilot channel (replacing the previous owner's portable diesel pump), and bored and installed a 42" pipe to carry water from the new pump through the channel's high spoil bank into the water conveyance ditch. Another arm of the pump's discharge pipe empties into a borrow canal used for fishing. Mallard Basin then cleared and improved the old water conveyance ditch to carry Pilot Channel water about 1,900 feet into the northern end of the Fisher Bottom containment area. Apparently, some portions of the old ditch were too heavily overgrown to restore so Mallard Basin instead dug new sections of ditch to complete the system, mostly across non-jurisdictional uplands but including some wetland areas.

Mallard Basin's excavation work to improve water flow from the river channel into Fisher Bottom involved the unpermitted sidecasting of approximately 4,062 cubic yards of earthen material into jurisdictional wetlands (see Photos 21, 24, 25, 26). The excavated material was used to improve about 380 feet of access trail and to strengthen and contour the impoundment berm to accommodate the new water control structure. Approximately 9,083 cubic yards of additional material were excavated from non-jurisdictional wetlands and side-cast onto adjacent non-wet areas during restoration of the portions of the conveyance ditch that traverse upland property. All of the work in jurisdictional wetlands was completed by Mallard Basin without a Department of the Army Sec. 404 permit, in violation of law. Approximately nine-tenths of one acre of wetlands were impacted by the unauthorized activity.

After the New Orleans District received a complaint about Mallard Basin's unauthorized activity, the Surveillance & Enforcement Branch issued a Cease & Desist Order (C&D) to Mallard Basin, LLC in March 2010. In May 2010 Mallard Basin submitted an after-the-fact permit application, pursuant to 33 CFR 326.3(e), "Unauthorized activities - After-the-fact permit applications." In that application, Mallard Basin indicated that the reason for the project was to "to improve waterfowl and wetland habitat" and further described the project purpose as "to create more favorable waterfowl habitat and to prevent undesirable plant species from invading the area." In the subsequent Joint Public Notice issued on May 24, 2010, the purpose of the project was described as "to provide facilities required to control water levels over a forested wetland area ... with an overall goal of providing high quality wetland habitat that provides amenities critical in sustaining various fish and wildlife communities."

The Corps subsequently authorized two permits to Mallard Basin, LLC: on July 6, 2010 we affirmed that the intake pipe in the Whiskey Bay Pilot Channel qualified for a Nationwide No. 7 permit (pursuant to Sec. 10 of the Rivers & Harbors Act) and on October 6, 2010 we issued an individual Clean Water Act Sec. 404 after-the-fact permit, with conditions, for the water conveyance ditch and variable crested water control structure.

#### **(5) New owner's stated plans for Fisher Bottom property:**

Mallard Basin sold the Fisher Bottom property in July 2011 to a new owner, Atchafalaya Investments, LLC. In September 2011 Atchafalaya Investments submitted a written request to the Corps to transfer the existing Mallard Basin permits into its name (see Attachment II-a, Atchafalaya Investments, LLC letter, dated September 21, 2011). In its request for a transfer of the permits, Atchafalaya Investments expressed its intention to continue to manage Fisher Bottom in compliance with the terms of the existing permit and to continue to follow Mallard Basin's moist soils management plan for the purpose of duck hunting as well as additional

private recreational uses, including deer hunting, frogging, fishing, crawfishing, bird watching, alligator hunting, and general wildlife enjoyment by the property's owners and invitees.

Atchafalaya Investments, LLC has expressed its intention to persist with the moist soil management plan begun by Mallard Basin approximately twelve years ago, utilizing the pump, water conveyance ditch and water control structure to maintain water within the Fisher Bottom impoundment area (see Attachment I: affidavit of Scott Sebastien). The water management plan appears to generally benefit the Atchafalaya Basin by safeguarding the health of Fisher Bottom's forested wetland habitat, preserving good feeding sources for various species of fish, mammals, reptiles and invertebrate aquatic life dependent upon shallow-water emergent and submerged vegetation, and attracting waterfowl and other aquatic birds. Preservation of Fisher Bottom's inundated wetland also helps to offset the loss of this habitat type in other parts of the Atchafalaya Basin while providing hunting and recreational opportunities for the property's owners.

#### **(6) Project Purpose:**

In its permit application, Mallard Basin cited dual purposes for this project - to improve waterfowl and wetland habitat. These purposes are complimentary and the moist soil management regime accomplishes both. In its request to transfer the permits, Atchafalaya Investments states that it intends to continue to follow the moist soil management plan both for duck hunting and for other wildlife and recreational uses.

Although a project to improve waterfowl habitat which is intended solely to attract waterfowl could be implemented in a non-wetland, implementation of a moist soil management program within a wetland produces greater biodiversity for both plant and animal wildlife and attracts and provides suitable food and habitat for a greater diversity of waterfowl. Natural wetland soils support germination of native wetland plants and their low permeability inhibit subsurface water loss, allowing for more effective water control. Accordingly, even a project intended for the sole purpose of attraction of waterfowl will likely be more successful and more effective if sited within a wetland.

A project intended to improve wetland habitat is also more likely to succeed if sited within a wetland. While the natural/historic functions of former wetlands may be re-established, a project sited within degraded wetland is able to take advantage of and build upon existing wetland morphology. With appropriate management, a project to enhance or to restore wetlands is far more likely to succeed over the long-term than a project to create wetlands in an upland site.

Considered together, the success of the dual and complimentary purposes of these projects is to a great degree dependent on siting within a wetland. However, even if the dual purposes could be accomplished outside of a wetland, we find that the overall project purpose is to improve wetland and wildlife habitat within Fisher Bottom through the use of a moist soil management program. Significantly, the projects impacted only nine-tenths of one acre of wetlands; the impacted habitat has now recovered and remains jurisdictional wetland. However, approximately 600 acres of wetlands benefit from the hydrologic management and invasive species control that are part of the moist soil management program. Because the permittee is able to utilize pre-existing water control features, it is able to implement its moist soil management program within the larger Fisher Bottom site with only minimal wetland impacts associated with the installation of the new features (0.9 acre). Further, if the project permits

were revoked and the site returned to pre-project conditions, the high quality wetland habitat within Fisher Bottom would likely degrade.

## **B. Alternatives (33 CFR 320.4(a)(2), 40 CFR 230.10)**

### **(1) No Action alternative:**

The scope of the permit actions under analysis in this Environmental Assessment (the "permit project") is limited to the work undertaken by Mallard Basin within jurisdictional areas since it acquired the property in 1999; it excludes the pre-existing original earthen embankment and the unimproved and non-jurisdictional portions of the water conveyance system.

The Nationwide No. 7 permit authorized a water intake pipe and associated electric pump and discharge structures installed on the west bank of the Whiskey Bay Pilot Channel in 2001. This intake, pump and discharge system provide water from the Pilot Channel to a borrow canal (through one discharge pipe) and to a conveyance ditch (through a second discharge pipe) that carries water to Fisher Bottom. Only the water intake pipe in the Pilot Channel is within a jurisdictional area; the pump and the discharge pipes are located in uplands. The individual permit authorized restoration / re-construction of approximately 1,900' of a water conveyance ditch running from one of the electric pump's outfall pipes to the northeast end of the Fisher Bottom impound area, and construction / installation of a variable crested aluminum water control structure and associated earthwork, which was installed in 1999 and which replaced an old wooden weir.

The No Action alternative would involve returning Fisher Bottom to "pre-project" conditions. If the District were to revoke the individual permit and demand site restoration to "pre-project conditions," we would require the owner to cease pumping water from the Whiskey Bay Pilot Channel into the conveyance ditch and we would order the removal of the variable crested water control structure at the southern end of Fisher Bottom. Because the adverse impacts that would be caused by filling the conveyance ditch or degrading the improved portions of the retention berm far outweigh any potential benefits, we would not require the improved portions of the water conveyance ditch or the retention berm to be returned to their respective conditions before Mallard Basin's activity. Although 0.9 acre of wetlands was temporarily impacted by the Mallard Basin's unauthorized activities, those areas were not converted to uplands and remain functioning wetlands within this high-quality wetland habitat. Any action to attempt to remove or re-deposit soil would cause unnecessary adverse impacts to these wetlands. Thus, abandonment of the water conveyance ditch would be the appropriate action to limit new impacts to jurisdictional areas. Revocation of the NWP No. 7 would require removal of the water intake pipe from the Pilot Channel.

Restoration of the site to pre-project conditions under the "No Action" alternative is defined as the removal of the current water control structure, cessation of pumping water into Fisher Bottom from the Whiskey Bay Pilot Channel, suspension of the existing water management plan, and abandonment of the water conveyance ditch.

Implementation of the No Action alternative would substantially diminish Fisher Bottom's water retention capacity. Without a steady water source and with reduced water storage capacity because of the absence of a control structure, Fisher Bottom would hold less water throughout the year and would tend to dry out more quickly when flood waters recede,



leaving the site significantly drier than it has been in recent decades. Floodwater levels in the Atchafalaya Basin floodplain, which typically reach peak stages between March and April, (*Soil Survey of Saint Martin Parish, U.S. Department of Agriculture, 1977*) may not be high enough to crest above the Whiskey Bay Pilot Channel's spoil bank and would likely not be sufficient to supply adequate water necessary to maintain the current habitat conditions at Fisher Bottom, where the evidence shows that persistent levels of water impoundment are important for habitat preservation.

During a site visit to Fisher Bottom on March 30, 2012, the Atchafalaya River measured a flood-stage reading of 14 feet at the Butte LaRose gauge, but the surrounding forested floodplain was not inundated with water, even though spring flood season was approaching its height. This is believed to be a result of the "severing effect" of the Whiskey Bay Pilot Channel's spoil bank on the historical flow of flood waters into the project area.

We conclude that the No Action alternative, requiring removal of key features of the property's water supply and retention system, would cause adverse environmental impacts throughout Fisher Bottom, which would extend to neighboring areas. The No Action alternative would end a hydrological management regime that is designed to sustain a high-quality forested wetland environment. We conclude that this would likely lead to a decline in the quality and health of the property's inundated wetland habitat. This habitat supports recreational fishing and hunting opportunities, which may also be affected. Because water impoundment would diminish, the aquatic footprint would shrink, decreasing food sources at Fisher Bottom and pressuring fish and wildlife communities now established at the site. Colonization of the area by invasive plant species could also be hastened under the No Action alternative. With the degradation of the quality and extent of the wetland habitat, the local water quality may deteriorate as the area loses its capacity and opportunity to filter excess nutrients and pollutants from the water. Flood storage capacity would also diminish.

## **(2) Other project designs (smaller, larger, different etc.):**

The major objective of the proposed action is to control water levels within the 600 acre Fisher Bottom inundated wetland in accordance with a professionally-designed management plan intended to optimize a native swamp habitat and its diverse waterfowl, fish, wildlife and other aquatic communities. The project's fixed infrastructure appears to have sufficient flexibility to accommodate differing annual precipitation and floodwater conditions, allowing for more water intake during dry years, while in wet years the flap-gated water control structure may be gradually opened to better manage excess run-off. The existing system seems capable of handling broad variances in natural conditions. We conclude that a "smaller" project design would not offer a less damaging practicable alternative because less pumping and less water storage capacity would more likely make preservation of the present wetland habitat more difficult. In other words, a smaller project footprint or smaller project features would not be less damaging. To the contrary, a reduction in water supply or water storage capacity would offer fewer environmental benefits than the current project features. Similarly, the existing system's flexibility and apparent success in habitat management suggest no need for more infrastructure.

The current design is believed to be the most practical and beneficial option. Any modification of the existing water management infrastructure would likely cause unnecessary new adverse impacts to jurisdictional wetlands without providing appreciable or needed benefits. We find that the existing system, if operated in accordance with the project's water management

plan, appears to adequately sustain Fisher Bottom's aquatic habitat by promoting desirable vegetation and controlling invasive species.

**(3) Other sites available to the applicant (40 CFR 230.10):**

The water management infrastructure upgraded by Mallard Basin approximately a decade ago has operated at Fisher Bottom for over 50 years in order to maintain a 600 acre forested wetland habitat for the wildlife enjoyment and hunting opportunities of the property's owners. Utilization of other sites would not adequately meet the project's private and public purposes.

Alternative sites within the Atchafalaya Basin for wetland recreation include Corps of Engineers-managed boat launches and State-owned wildlife parks. But hunting is restricted in most of these public facilities and the private enjoyment of a wetland habitat would be impossible at a public venue.

From a public-interest perspective, operation of the Fisher Bottom property in conformance with the terms of the existing Sec. 404 permit offers an opportunity to secure environmental protection of valuable wetland resources that might otherwise be degraded through discontinuance of the present water management program. While similar inundated wetlands have silted-in and been lost in other sections of the Atchafalaya Basin, the successful management of Fisher Bottom as an inundated wetland would preserve its diversity of wildlife and aquatic resources, through all stages of reproduction and growth, helping to sustain viable populations of numerous foraging species. For example, the Black Crowned Night Heron (*Nycticorax nycticorax*) utilizes Fisher Bottom for its rookeries, dispersing into other parts of the Atchafalaya Basin after nesting season. Because the Fisher Bottom site has been hydrologically managed for more than 50 years, the project area represents an opportunity to preserve and enhance the wetland habitat benefits that have accrued during the long-term management of the site. It also offers existing water management features that can be utilized to improve the wetland habitat through its moist soil management program without further impacting jurisdictional wetlands.

**(4) Other sites not available to the applicant:** See (3) above.

**(5) Determination:**

We conclude that the current project features and management plan as permitted represent the least damaging practicable alternative. Use of a different site or alteration of project features or modifications to the existing management plan would result in greater adverse impacts to Fisher Bottom and neighboring areas than the current permit project. Although the unauthorized activity temporarily impacted 0.9 acre of jurisdictional wetlands, the impacted areas were not converted to uplands; these areas continue to be functioning wetlands within this overall high-quality wetland habitat. While initial impacts were minimal, the projects benefit the 600 acre Fisher Bottom site as well as the surrounding areas as described elsewhere in this evaluation.

**C. Physical/chemical characteristics and anticipated changes (check applicable blocks and provide concise description of impacts):**

**(X) Substrate.** Soils within the proposed project area have been identified as unconsolidated sediments, including spoil from the Whiskey Bay Pilot Channel, Convent Soils,

frequently flooded (*CO*) and Fausse Soils (*FS*). According to the United States Department of Agriculture, Soil Conservation Service, *CO* soils are listed as frequently flooded and are subject to scouring and deposition with an elevation range from about 14 to 26 feet above sea level. Some areas within Fisher Bottom follow a ridge and swale pattern. Typically *CO* soils have a surface layer of silt loam about 4-inches thick on top of a layer of very fine sandy loam. *CO* soils are high in fertility. Water and air move at a moderate rate through these soils.

*FS* soils occur in large tracts of swamp on the alluvial plain inside the Atchafalaya Basin Floodway. They are subject to flooding by the Atchafalaya River. Typically, Fausse soils are a dark, mucky clay about 7-inches deep followed by layers of clay. The water table usually settles between 0.5 feet above the surface to 1.5 feet below the surface throughout the year. *FS* soils are high in fertility. Air and water move very slowly through them.

Minor adverse effects to the substrate, including disruption of profiles in dredged areas and compaction in areas where spoil material was placed in wetlands, may have occurred when excavation work took place more than a decade ago. But no long term adverse impacts to the local aquatic ecosystem are evident. Site investigations show that spoil placement areas are minimal in size and possess hydric characteristics and functions that support wetland communities. Spoil placement areas are now relatively flat and are vegetated with wetland plant species. During a field site visit on March 30, 2012, typical native wetland plant species were observed in these areas, including buttonbush (*Cephalanthus occidentalis*) and Arkansas managrace (*Glyceria arkansana*); (see attachment V: photos 5, 7, 8, 9, 10).

**(X) Currents, circulation or drainage patterns.** Surface and subsurface project hydrology is greatly affected by seasonal flooding cycles of the Atchafalaya River. The river level generally rises in late November and peaks in March and April. Rising floodwaters can inundate much of the project area and are unaffected by project structures. But during low water periods in the river, circulation within the project area depends on rainfall and mechanical pumping from the river. Areas where excavated material was placed by Mallard Basin about a decade ago now present little to no increase in elevation over natural ground contours and are not anticipated to impede sheet flow.

Since water levels in the impound area would diminish to a few small pools during low water periods in the river without augmentation through pumping of water from the Pilot Channel, the project's water conveyance and management system provides a needed water supply to preserve the aquatic environment of Fisher Bottom. During high flood cycles when the river reaches 18- foot flood stage at the Butte LaRose gauge, project structures would be submerged and would not impede floodwater circulation patterns.

During the March 30, 2012 site visit, the Atchafalaya River registered 14.1 feet elevation at the Butte LaRose gauge; (see attachment VI: Butte LaRose Gauge data for March 1-2, 2012; rivergauges.com). At that stage, the forested areas in and surrounding the project area contained no floodwaters. But backwater flows from Warner Lake had substantially raised levels in the Fisher Bottom area over target management goals and excess water was being released through the flap-gated water control structure (see Attachment V: photos 1, 4).

Water levels at Fisher Bottom are controlled through a conveyance ditch that delivers water drawn from the Whiskey Bay Pilot Channel by an electric pump through an intake pipe. Much of the conveyance ditch was constructed through non-wet habitat (see Attachment V:

Photos 2, 3, 6, 21, 23, 24, 25, 26). A portion of the conveyance ditch was dredged through wetlands, with the spoil spread along its banks. This work occurred approximately 10 years ago and today little to no adverse impact to natural contour elevations is evident. The areas where spoil was broadcast now support vegetative communities typical of local forested wetlands (see Attachment V: photos 5, 7, 8, 9, 10).

**(X) Suspended particulates; turbidity.** Wetlands and submerged aquatic vegetation communities on the project site function to filter and remove suspended particulates from localized storm water runoff and/or floodwaters passing through them. Reduced turbidity is a benefit of the project's wetlands and promotes the growth of submerged aquatic vegetation.

**(X) Water quality (temperature, salinity patterns and other parameters).** Project wetlands provide flood storage capacity that enhances water quality through sediment/toxicant retention, nutrient removal/transformation, and ground water recharge. The water budget for the site is dominated by the flood cycles of the Atchafalaya River and secondarily by precipitation, and/or mechanical pumping. In 2010 the State determined that the water management program at Fisher Bottom met Louisiana water quality standards and issued the then property owner, Mallard Basin, LLC, a water quality certification on August 19, 2010 (WQC100518-03/ AII70878/ CER20100001). In a document titled "Rationale for Decision," dated October 18, 2010, the Louisiana Department of Environmental Quality made the following comments:

Based on a careful review and evaluation of the entire administrative record, including the public comments, the Louisiana Department of Environmental Quality, Office of Environmental Services, finds that Mallard Basin's project, as proposed in the application for a water quality certification, will not violate the water quality standards of Louisiana.

As previously described, the presence of high quality swamp and moist soil habitat provides a natural filter for water-borne sediments and pollutants, thereby improving water quality.

**(X) Flood control functions.** Flooding at the project site is a natural occurrence in the Atchafalaya Basin, despite significant changes in floodwater circulation caused by human activity during the last century, as discussed above. We do not anticipate that the project's water management regime will adversely affect regional flood control functions. On the contrary, flooding of the Atchafalaya River and its floodplain is likely to inundate the project site with floodwaters when the river reaches levels of +17-18 feet elevation at the Butte LaRose gauge. The improved water impoundment capacity of Fisher Bottom due to project features serves to retard floodwater run-off and to enhance the property's inundated wetland habitat.

**(X) Storm, wave and erosion buffers.** The Fisher Bottom water management plan appears to encourage and enhance growth of native wetlands species which act to reduce erosion of surface soils during precipitation runoff and /or flood conditions.

**(X) Erosion and accretion patterns.** The project site is relatively isolated from much of the river's natural flood waters due to the elevated spoil bank along the western bank of the Whiskey Bay Pilot Channel. While depriving the project site of some floodwaters that otherwise would have reached Fisher Bottom during flood season, the spoil bank has protected the site from the accretion of sediments that characterizes many other areas of the basin, a consequence

of the high sediment load in Atchafalaya River floodwaters. The fact that Fisher Bottom has not filled in during the last 50 years is evidence that accretion is not a major problem at the site. The Fisher Bottom water management infrastructure would have little to no discernable impact on accretion patterns associated with overbank flooding from the Atchafalaya River.

**(X) Aquifer recharge.** Maintenance of approximately 600 acres of flooded swamp and bottomland hardwoods could provide benefits to the aquifer through the availability of a more permanent surface water pool.

**(X) Baseflow.** Mallard Basin's work to improve the water conveyance ditch and to update the water control structure with the use of heavy equipment may have temporarily compacted surface soils. Reduced water permeability in compacted soils could restrict groundwater flow, but observations made during visits to the project site and a jurisdictional determination performed by Corps biologists showed no indications of adverse impacts to base flow. As indicated previously, the work areas have re-vegetated and continue to function as part of the wetland ecosystem.

**(X) Other.** N/A

**Additionally, for projects involving the discharge of dredged material:**

**(X) Mixing zone, in light of the depth of water at the disposal site; current velocity, direction and variability at the disposal site; degree of turbulence; water column stratification; discharge vessel speed and direction; rate of discharge; dredged material characteristics; number of discharges per unit of time; and any other relevant factors affecting rates and patterns of mixing.** The project site experiences minimal current, if any, except during periods of active flooding. Natural topography, density of tree growth and emergent vegetation influence currents and circulation patterns which, in turn, affect the mixing zone. During flood stages in the Atchafalaya River, when floodwaters reach elevations capable of inundating the project site, the current velocity, patterns of mixing and discharge rates of sediment load will follow ambient conditions in the surrounding, inundated floodplain.

**D. Biological characteristics and anticipated changes (check applicable blocks and provide concise description of impacts):**

**(X) Special aquatic sites (wetlands, mudflats, coral reefs, pool and riffle areas, vegetated shallows, sanctuaries and refuges, as defined in 40 CFR 230.40-45).** Construction of the project caused temporary impacts to approximately 0.9 acres of jurisdictional swamp wetlands. But project area wetlands today show no persistent damage from spoil placement a decade ago and are considered high quality due to the maturity and diversity of the swamp habitat. Tree species associated with swamp wetlands found throughout the project site include Bald Cypress (*Taxodium distichum*), Drummond's red maple (*Acer rubrum* var. *drummondii*), Black willow (*Salix nigra*), and Tupelo Gum (*Nyssa Aquatica*). Project area wetlands provide resting, nesting, feeding, and breeding habitat for many avian species, such as raptors, woodpeckers, wood ducks, migratory waterfowl and songbirds. Mammals like raccoon, eastern

cottontail, deer, opossum, armadillo, and gray squirrel are also dependent on the project habitat. Artificial pumping of water into the project's inundated wetlands along the water conveyance ditch offsets the interruption to floodwater flows in the area caused by spoil placement along the Whiskey Bay Pilot Channel.

If the Fisher Bottom water conveyance infrastructure were removed and the owner's management plan suspended, healthy and productive native habitat would likely diminish in quality as undesirable vegetative species find greater opportunities to establish themselves and upset the native balance.

As stated above, the property's new owners have advised the New Orleans District of their intention to manage the project in conformance with water management recommendations provided to the previous owner by waterfowl biologists from the Louisiana Department of Wildlife and Fisheries. Waterfowl biologists from the LDWF accompanied Corps personnel during the project site visit on March 30, 2012 to assess the health of the property's aquatic habitats and the effects of the ongoing management plan. LDWF found the site to be in excellent condition, exhibiting characteristics of a successfully managed moist soil area and after the site visit their biologists expressed the view that removal of the water conveyance and control structures would promote an invasion of noxious plant species in the project area and would diminish many of the benefits the project's water conveyance and storage infrastructure now provides (see Attachment III: email from Paul Link, LDWF, dated April 2, 2012).

**(X) Habitat for fish and other aquatic organisms.** Wetlands within the project area experience cycles of rising and receding flood waters. Many species, including aquatic invertebrates and amphibians, find these areas excellent habitat due to the seasonal shallow cover provided by aquatic vegetation which protects eggs and larval stages from predation by fish and birds. Preventing noxious invasive species from choking out this more desirable emergent vegetation also helps to maintain larger open water areas important to aquatic species during mature phases of their life cycle. Crawfish populations will benefit from the higher water levels usually retained in Fisher Bottom during periods of dry conditions, when habitats outside the project area may lose standing water.

The periodic draw-downs of water required for proper moist soil management mimic the natural drying cycle and allow some of the vegetative substrate to release seeds and nutrients into the soil, which encourages the germination of another cycle of emergent vegetation. Early summer draw-downs also concentrate invertebrates in remaining pools, providing optimum feeding habitat for young waterfowl, shorebirds and herons.

**(X) Wildlife habitat (breeding, cover, food, travel, general).** The forested wetlands of Fisher Bottom provide wildlife habitat for a variety of mammals, birds, mammals, reptiles and amphibians. These species utilize the property's inundated wetlands habitat for feeding, nesting, and resting. Moist soil management promotes the growth of beneficial native emergent plant species which birds and waterfowl use as a food source. Maintained water levels are beneficial to migratory waterfowl. The presence of open areas free from woody growth, and shallow water with a healthy crop of seed-bearing vegetation in the Fall of the year, are highly sought after by migratory waterfowl and other migrating birds common to the South Louisiana flyway. Maintenance of this habitat diversity is the expressed goal of the Fisher Bottom management plan, achieved through the continued operation of the property's water conveyance and

impoundment infrastructure.

**(X) Endangered or threatened species.** We evaluated the potential effects of the project on all species listed as endangered or threatened, pursuant to the Endangered Species Act (ESA), that have designated habitat in the area of Fisher Bottom. We have also evaluated the potential effects of the project on any endangered or threatened species for which there is a reasonable chance that individuals of the species could occupy or travel through the Fisher Bottom property. One threatened species, the Louisiana black bear, potentially occurs in the project area. Although U.S. Fish & Wildlife Service records indicate that no bears have been documented within or near the project area in recent history, the Fisher Bottom property is located inside the boundaries of the bear's designated critical habitat. Comments submitted by Ms. Leigh Haynie on June 4, 2010, then counsel for the Atchafalaya Basinkeeper, in response to our original request for public comment included expressions of concern about potential adverse project impacts to three other species: the peregrine falcon, the Florida panther and the Ivory-billed woodpecker. Comments from the Atchafalaya Basinkeeper (and others) submitted during our re-evaluation of these projects cite concerns regarding the Louisiana black bear, the Florida panther and the Ivory-billed woodpecker.

While the peregrine falcon receives certain protections under the Migratory Bird Treaty Act (MBTA), the falcon is not an ESA-listed species. The falcon's range may extend to areas within the Atchafalaya Basin that include Fisher Bottom. But the species typically nests on cliffs and high rock ledges, physical features that do not exist in the Atchafalaya Basin, if anywhere in Louisiana. Consequently we believe that the Fisher Bottom project does not present a threat to the peregrine falcon.

The Florida panther is an ESA-listed endangered species with a range identified by the U.S. Fish & Wildlife Service (USFWS) to primarily cover 16 counties in the State of Florida, where the panther is the official state mammal. Wildlife biologists estimate the total population of the species to be under 100 individuals. To our knowledge no recent verified sightings of the Florida panther have been made in the Atchafalaya Basin.

The Ivory-billed woodpecker is an ESA-listed endangered species believed by the USFWS to possibly inhabit the Big Woods region of eastern Arkansas, though its historic range probably included the Atchafalaya Basin and the Pearl River basin in eastern Louisiana. Scientific controversy over possible recent sightings of the Ivory-billed woodpecker continues, with several well-regarded teams of biologists claiming that the species has gone extinct. (See *Conservation Biology*, February 2012 issue, "Uncertain Sightings and the Extinction of the Ivory-Billed Woodpecker.") The most acclaimed Ivory-billed woodpecker expert, the ornithologist Dr. James Tanner, estimated that by the late 1930s the total population of the species did not exceed 22 individuals.

During various site visits to the Fisher Bottom property, involving close observation of surface, understory and canopy foliage and features, the Corps' biologists encountered no signs of the Peregrine falcon, Florida panther or the Ivory-billed woodpecker. And silence at the regional level about the possible presence of the Florida panther or Ivory-billed woodpecker in the Basin affirms our field observations at Fisher Bottom. The New Orleans District processes numerous regulatory actions throughout the Atchafalaya Basin each year, often in close coordination with the USFWS, the Louisiana Department of Wildlife and Fisheries, and the

Environmental Protection Agency; during these consultations over regulated activities none of the agencies has reported any evidence of the Florida panther or the Ivory-billed woodpecker within Atchafalaya Basin habitat.

The rarity of these animals, and the absence of reliable contemporary sightings near the project area, lead us to conclude that the likelihood of the presence of individual Florida panthers or Ivory-billed woodpeckers at or near Fisher Bottom is negligible. We conclude that the project will have no effect on the Florida panther or the Ivory-billed woodpecker.

The possibility that the Louisiana black bear may utilize Fisher Bottom habitat is higher, though we have not yet seen evidence of the bear on the property. Fisher Bottom's forested wetland swamp is designated critical habitat for the Louisiana black bear (*Ursus Americanus Luteolus*). The project site is located within the boundaries of Unit 2 of Critical Habitat for the endangered Louisiana black bear.

During the processing of Mallard Basin's after-the-fact permit application, the Corps anticipated receiving comments about potential project effects on the Louisiana black bear from the USFWS, after we posted a request for public comment on May 24, 2010. The Service did not comment. In the context of this re-evaluation of the Mallard Basin permits, we wrote the USFWS on February 2, 2011 to specifically request consultation on endangered and threatened species; (see Attachment VII-a: letter from USACE New Orleans District to U.S. Fish and Wildlife Service date February 2, 2011). The Service responded by letter on February 28, 2012, explaining that it has established a policy by which it declines to comment on all Department of the Army "after-the-fact" permit applications (see Attachment VII: letter from USFWS to New Orleans District, dated February 28, 2012). Because we were unable to obtain guidance from the USFWS, the District sought assistance from State experts on the Louisiana black bear in order to reach a better-informed determination of the Fisher Bottom project's possible effects on the Louisiana black bear. The Corps obtained the assistance of Louisiana biologists and black bear experts Paul Davidson, chairman of the Black Bear Conservation Coalition, and Maria Davidson, Large Carnivore Program Manager for the Louisiana Department of Wildlife and Fisheries. Both participated in the Corps' Fisher Bottom field visit on March 30, 2012.

On March 30, 2012 Paul Davidson and Maria Davidson toured the Fisher Bottom site, in the company of LDWF waterfowl management experts Paul Link and Jason Olzsac, the Corps' environmental resource specialists Ronnie Duke and Michael Herrmann, Botanist/ Agent for Mallard Basin Tim Morton, a Mallard Basin partner and previous owner of the property, Mr. Scott Sebastien, and a partner in Atchafalaya Investments, LLC, Dr. William Schumacher, recent purchaser of the property. The parties observed all of the projects' features discussed in this Decision Document. Both Paul Davidson and Maria Davidson studied several sections of the water conveyance ditch, paying particular attention to the forested habitat and spoil placement areas along the conveyance ditch. Observations were also made of the electric pump and intake pipe at the Whiskey Bay Pilot Channel, the flap-gated water control structure at the lower end of the water impoundment area, and various sections of the property's open-water inundated swamp / moist soil management area.

Paul Davidson provided follow-up comments to the Corps in a letter dated April 10, 2012. His letter contains the following observations:

On March 30, 2012, I accompanied Corps personnel, LA Dept. of Wildlife and Fisheries personnel, and the current and previous landowner to a site on the west side of the



Whiskey Bay Pilot Channel, just south of Interstate 10 in St. Martin Parish. The purpose of the site visit was to assess the impacts of a water impoundment on the federally listed (ESA) Louisiana black bear (*Ursus americanus luteolus*).

We looked at the water control structure, pump and water distribution system, a boathouse and toured the impoundment. The water level in the unit was being lowered, so water was running out of the water control structure, attracting a lot of activity from fish in the outflow.

The basic habitat needs for black bears include abundant and diverse natural foods, water, escape cover, dispersal corridors, and den sites. I saw nothing at any of the sites that would be anything but good for a black bear. Soft mast, primarily blackberry, was abundant, and the area was densely vegetated, providing excellent cover for bears and any other wild fauna that might be found there. Everything that I saw was excellent bottomland hardwood habitat for bears and nothing associated with the water control structure or pump and piping could be described as detrimental to bears or bear habitat. Areas to the south of the site are likely too wet to provide good habitat for bears, but the Mallard Basin site, albeit void of bears at present, will likely attract bears as the bear population in the region continues to increase.”

(See Attachment IX: letter from Paul Davidson, Executive Director, Black Bear Conservation Coalition, dated April 12, 2012).

Maria Davidson noted during the field trip that the Fisher Bottom site is not known to be a black bear breeding area, or to have a current population of black bears. After the site visit, the LDWF Large Carnivore Section provided the following comments by letter dated May 2, 2012:

The professional staff of the Louisiana Department of Wildlife and Fisheries (LDWF) Large Carnivore Section has reviewed the above listed project. Based upon this review, and a field visit on March 30, 2012; we have found the project has no impact to the Louisiana black bear and have no objection to this project.

(See Attachment X: letter from LDWF Large Carnivore Section to Pete Serio, Chief, Regulatory Branch, U.S. Army Corps of Engineers New Orleans District, dated May 2, 2012).

During the site inspection the Corps’ Regulatory Branch biologists, Michael Herrmann and Ronnie Duke, examined the project infrastructure, taking note of the condition and quality of the Fisher Bottom habitat from the perspective of potential black bear inhabitants or visitors, as well as other species. The inundated wetlands appeared healthy, with a variety of freshwater emergent plant species present. The open water areas were fringed with mature clusters of Bald Cypress trees, occasional Black Willow and Red Maple trees, as well as stands of emergent vegetation such as Smartweed, Arkansas mannagrass and Walteri millet. Submerged aquatic vegetation, including coontail and milfoil, populated the shallow water flats.

While traveling around the site by boat, several alligators were observed along with small groups of Blue Winged Teal, Wood Ducks, Yellow Crowned Night Herons, Great Blue Herons and Glossy Ibis. Several individual crawfish were spooked from the shallow shore lines and retreated into deeper water. The impoundment area extends to a stand of flooded cypress and also includes shallow open water areas. It appeared to be excellent habitat for waterfowl and wading birds. The former landowner, Scott Sebastien, informed us that Fisher Bottom has

become a rookery for multiple species of herons and ibis.

Throughout the site visit, Duke and Herrmann had the opportunity to observe the bottomland hardwoods surrounding the impoundment from various vantage points, as well as the conveyance ditch connecting the Whiskey Bay Pilot Channel to the inundated swamp. The habitat includes a mix of healthy, mature hardwoods. While they found no black bear den trees and no evidence of any individual black bears, they also saw no evidence of any detriment or harm to black bear habitat within the project area. Instead Fisher Bottom shows a consistently healthy native ecosystem that could provide good forage opportunities for the black bear.

Based on our field investigations and consultation with biologists from the Black Bear Conservation Coalition and the Louisiana Department of Wildlife and Fisheries, we find that the project's effects are either beneficial or insignificant. The project area contains healthy bottomland hardwood habitat with abundant soft mast and dense vegetation. The areas where spoil was broadcast are now densely vegetated with communities typical of local forested wetlands and there is little to no adverse impact to the natural contour elevations. The water conveyance and management system provides a needed water supply to preserve the aquatic environment of Fisher Bottom. Although there is no evidence that Louisiana black bears currently utilize the project area, the habitat at Fisher Bottom could provide food sources and cover if bears were to move into the area.

In consideration of our observations during the March 30, 2012 site visit, and the comments received from the State's black bear experts who have years of professional experience dedicated to the Louisiana black bear and its habitat, the Corps determines that the above permitted activities – in particular, operation of Fisher Basin's existing water control structure, water pumping and water conveyance ditch in conformance with the moist soil management plan made part of the Sec. 404 individual permit – may affect, but are not likely to adversely affect, the Louisiana black bear or its habitat.

After the draft decision document was released for public comment, we again sought Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service regarding the project's potential effects on the Louisiana black bear. In a letter dated October 15, 2012, we requested concurrence with our determination that the projects are not likely to adversely affect the Louisiana black bear. We also requested formal consultation in the event the Service was not inclined to concur with our determination and we attached this document as our biological assessment in accordance with 50 CFR 402.12 and 402.14. See Attachment XII.

On December 17, 2012, the Service responded by re-iterating its policy that it does not enter Section 7 consultation when permit applicants are seeking after-the-fact authorization. See Attachment XIII.

The Service did offer some information as "technical assistance." According to the Service's database, bears have not been documented within or near the project area in recent history. Further, because project construction was complete and the moist soil management program was ongoing at the time the Service designated black bear critical habitat in 2009, the projects' features, the management program and the projects' effects are considered as part of the environmental baseline in the critical habitat designation.

On the basis of our findings specific to the Louisiana black bear, the District concludes that transfer of the existing permits to the property's new owner, Atchafalaya Investments, LLC,

and Atchafalaya Investment's continued operation of the water control and water conveyance facilities constructed by Mallard Basin, LLC in accordance with the existing permits are not likely to adversely affect the Louisiana black bear.

Separately, we find that the project and transfer of the project will have no effect on other listed species, in particular the Ivory-billed woodpecker and the Florida panther, as noted above. We reach this conclusion after due consideration of the scientific literature and the absence of any reliable contemporary sightings of these species near the project area. The Corps processes numerous regulatory actions in the Atchafalaya Basin each year, in close coordination with the USFWS, the Environmental Protection Agency, and State resource agencies, in particular the Louisiana Department of Wildlife and Fisheries. No evidence of the presence of the Ivory-billed woodpecker or the Florida panther has come to our attention through our on-going coordination with fellow agencies.

Moreover, considerable debate persists among ornithologists over the validity of alleged sightings of individual Ivory-billed woodpeckers during the last decade near the White River National Wildlife Refuge in the "Big Woods" region of eastern Arkansas, along the Mississippi River. In any case, that area is approximately 300 miles north of the Fisher Bottom project site and we conclude that the possibility Ivory-billed woodpeckers may inhabit or utilize Fisher Bottom habitat is statistically *de minimis*. Similarly, the Florida panther is believed by USFWS biologists to inhabit areas of southern Florida near Lake Okeechobee, more than 800 miles east of the Fisher Bottom region of the Atchafalaya Basin. While reports of recent sightings of big cats in the Atchafalaya Basin have been made, the evidence indicates that these animals are cougars, not Florida panthers. We conclude that the likelihood of finding Florida panthers in the project area is extremely small.

**(X) Biological availability of possible contaminants in dredged or fill material, considering hydrography in relation to testing of material from the vicinity of the project; known significant sources of persistent pesticides from land runoff or percolation; spill records for petroleum products or designated (Section 311 of the CWA) hazardous substances; other public records of significant introduction of contaminants from industries, municipalities or other sources.** The soil excavated during Mallard Basin's ditching improvement work a decade ago is not believed to have carried any significant levels of contaminants. Project construction may have introduced *de minimis* levels of contaminants such as particulates from vehicle emissions, oils, radiator fluids, and rubber. If so, it is probable that any such contaminants were quickly diluted with no detectable, harmful concentrations. The project site vegetation would act to filter out contaminants from waters flowing through the area. No indications of significant impacts to water quality are evident at the project site. The Louisiana Department of Environmental Quality issued a water quality certificate for the project on August 19, 2010.

**(X) Other.** N/A

**E. Human use characteristics and impacts (check applicable blocks and provide concise description of impacts):**

**(X) Existing and potential water supplies; water conservation.** Water for use under the project's water management plan is expected to come primarily from the Whiskey Bay Pilot

Channel. We believe that water usage rates consistent with the project's water management plan would not affect the availability or delivery of water from the river to municipal systems dependent on the Atchafalaya River.

**(X) Recreational or commercial fisheries.** Management of Fisher Bottoms provides water on site during periods of dry conditions. The availability of habitat with food and protective cover should contribute to overall populations of crawfish, which are free to migrate in and out of the project area. During periods of temporary water level draw-down, Fisher Bottom would continue to retain significant pools of water in the lowest contours of the site, where aquatic species may shelter. Thus the water management plan is expected to provide habitat that supports various fish species as well as the highly sought-after red swamp crawfish, all of which may benefit recreational and commercial interests.

**(X) Other water-related recreation.** The objective of the project's water management plan is to maintain a high quality inundated wetland habitat that supports an abundance of wildlife, including fish and game species of recreational interest to the property's owners, who have indicated by letter to the Corps their interest in deer and alligator hunting, waterfowl hunting, frogging, crawfishing, fishing, canoeing, and bird watching.

**(X) Aesthetics of the aquatic ecosystem.** Spoil placement areas and conveyance ditches where Mallard Basin undertook excavation work during project construction a decade ago have fully re-vegetated, blending in with adjacent, unaffected woodlands. The water control structure interjects a mechanical facility within the project area's natural setting, but it is relatively hidden within the forest canopy. The electric pump is screened by scrub and its operation is significantly quieter than the prior owner's diesel pump. Aesthetic values benefit from the protection of a mature cypress swamp habitat preserved within the project's impounded moist soil management area.

Photographs of the Fisher Bottom impoundment area were taken during the March 30, 2012 site visit to provide visual evidence of the current aesthetics of the managed site (see photographs of Fisher Bottom impoundment area Attachment V: photos 1-30, by Michael Hermann, U.S. Army Corps of Engineers, New Orleans District).

**(X) Parks, national and historic monuments, national seashores, wild and scenic rivers, wilderness areas, research sites, etc.** The project site is near the Atchafalaya National Wildlife Refuge and the Indian Bayou Wildlife Management Area. These publicly-owned recreational areas are utilized by hunters, anglers, birdwatchers, boaters and those interested in nature. We believe the potential benefits of the Fisher Bottom water management plan to protect the health of the inundated Cypress-Tupelo swamp and bottomland hardwoods on the property will positively compliment these adjacent public habitats.

**(X) Traffic/transportation patterns.** Local traffic will not be significantly affected by the property owners' and their invitees' use of Fisher Bottom because the site is isolated and accessible primarily by boat.

**(X) Energy consumption or generation.** Gasoline for boats and ATVs may be consumed on the property by the permittee and his guests during recreational outings. There are

no proposed actions for the exploration and/or production of energy on the project site.

**(X) Navigation.** The project site is not situated in an area used or accessible for general navigation, except during high flood stages in the Atchafalaya River. During periods of high water, navigation may be possible throughout the area despite the project's structures and during periods of low water, navigation into Fisher Bottom would not be possible even if the water control structure were not present. The area to the west/northwest of the water control structure was not improved when the structure was installed in 1999 and offers access equivalent to before the permit project. No significant impediment to navigation on public waters will be caused by continued operation of the project's water management infrastructure.

Comments received by the Corps during the public comment period included expressions of concern that the project's water control structure blocks navigation and prohibits crawfishermen and boaters from entering Fisher Bottom. During multiple site visits to Fisher Bottom, the District's biologists observed a wooded floodplain below the water control structure. Even during flooded periods, boat access to the area below the water control structure would be difficult due to the presence of trees, felled trees and limbs, and heavy vegetation. A water conveyance ditch that had previously run south from the water control structure across neighboring property was filled and the area restored in 2010 after the Corps issued a Cease and Desist Order to that property's owner.

During the March 30, 2012 field investigation to the site, Scott Sebastien, Curtis Robin and William Schumacher stated that the Atchafalaya River must reach a flood stage of 17 to 18-feet elevation or higher at the Butte LaRose gauge for backwater flooding to allow navigation into Fisher Bottom. During such flood stages the Fisher Bottom site is accessible from multiple locations, and bypassing of the water control structure is possible. During the March 30, 2012 site visit the Butte LaRose gauge measured 14.1 feet and flooding of the area was not evident.

As part of the permitting process, the Corps coordinated with the Louisiana Office of State Lands. A request for comments with a copy of the application and drawings was initially forwarded on August 17, 2010. No comments were received. On October 12, 2012, the project manager contacted Clay Carter of that office via telephone and asked if he would review the Mallard Basin application and drawings and provide a written response. Subsequently Mr. Carter responded in an email that "The dredging and water control structure are not located on state claimed land or water bottoms. Our office has no objection to the activity." (See email from Clay Carter, Office of State Lands dated October 12, 2012, Attachment XIV.)

Additionally, on August 17, 2010, the Corps forwarded the permit application to and requested comments from the State of Louisiana Attorney General as to whether the proposed dam would unlawfully impede a public right of passage on navigable waterways under state law. No response was received. Pursuant to Corps' regulations, a lack of response is presumed to indicate a lack of objection to a project.

**(X) Safety.** Boating access to the Fisher Bottom site during non-flood conditions is effectively impossible and attempts to reach the property by watercraft would be unsafe and unwise.

**(X) Air quality.** The project has been analyzed for conformity with regulations

implementing Section 176(c) of the Clean Air Act. The activities allowed under the existing project permit do not exceed *de minimis* levels of direct emissions of any criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons a conformity determination is not required for this project.

**(X) Noise.** Utilization of ATVs and watercraft, as well as hunting, fishing and water management activities may present an increase in ambient noise levels. However, elevated noise levels associated with project usage would be periodic and of short duration, with no anticipated serious long-term impacts to the local biological or human environments.

**(X) Cultural resources.** The State Historic Preservation Office (SHPO) was forwarded a copy of the original public notice prior to issuance of this permit. No comments were received from the SHPO in response to the public notice. During several site visits, Corps personnel found no evidence of historic or archaeological structures or artifacts at the Fisher Bottom property. We conclude that the project has not negatively impacted any known cultural resources. A condition (General Condition No. 3) is contained in all Department of the Army permits that requires the permittee to notify the District office if previously unknown historic or archaeological remains are discovered. Such notification would initiate coordination with the appropriate State and/or Federal agencies to determine if the remains warrant a recovery effort, or if the site is eligible for listing in the National Register of Historic Places.

**(X) Land use classification.** The Fisher Bottom tract is classified as a Cypress-Tupelo swamp and bottomland hardwood habitat, similar to much of the land mass within the Atchafalaya floodway. The present property owners are seeking a transfer of the existing DA permit in order to retain water control and water conveyance structures intended to preserve an approximately 600 acre inundated aquatic environment, a characteristic feature of the Atchafalaya ecosystem. Land use should not change as a result of the continued implementation of the owner's water management plan. Additional recreational activities may be pursued by the permittee, including hunting, trapping, fishing, crawfishing, and birdwatching. No changes to the existing water control and conveyance structures or water management plan has been requested.

**(X) Economics.** The local economy would receive benefits from the sales and tax revenues associated with the purchase of hunting, fishing, and other state licenses, recreational equipment and supplies, fuel and associated recreational expenses paid by the property's owner and invitees.

**(X) Prime and unique farmland (7 CFR Part 658).** No portion of the project site includes any farmlands. Soils listed under Section II C. are not identified as prime and unique farmlands because of potential flooding restrictions, as described in the St. Martin Parish Soil Survey published by the U.S. Department of Agriculture, Soil Conservation Service. Any attempted farming efforts would probably cause significant disturbances to existing bottomland hardwood habitat and would be subject to a high risk of devastating flooding and crop failure.

**(X) Food and fiber production.** No commercial production of food or fiber products is anticipated from the continued use of Fisher Bottom as a hunting and recreational property by its new owners under the terms of the existing permit. Oversight of the habitat in conformity with the water management plan should preserve the property's 600 acre forested swamp in a generally inundated condition, attracting waterfowl and other aquatic species. Recreational hunting by the property's owners and their invitees may lead to the negligible acquisition of specialty food items, such as waterfowl. Fishing and crawfish harvesting in Fisher Bottom is expected to remain a recreational activity of the property's owners. Because access to Fisher Bottom by watercraft is limited to periods of elevated floodwaters, as described above, and because legal entry by commercial crawfishermen may require permission from the property's owners, we cannot forecast the future level of commercial production of crawfish at Fisher Bottom, if any.

**(X) General water quality.** Submerged and emergent aquatic vegetation within the project area help to improve water quality through the natural filtration that these plant species provide. During the March 30, 2012 site visit the District's biologists found the water quality to be clear enough to allow penetration of sunlight to submerged plants and to the substrate.

**(X) Mineral needs.** N/A

**(X) Consideration of private property.** Department of the Army permits grant no property rights nor authorize damage to property. Documentation provided to the District by the party seeking this permit transfer, Atchafalaya Investments, LLC, indicate that it is the property's new owner, having purchased Fisher Bottom from the original permittee, Mallard Basin, LLC.

**(X) Other.** N/A

#### **F. Summary of secondary and cumulative effects:**

##### **(1) Secondary effects:**

The DA permit under re-evaluation here was issued to Mallard Basin, LLC on October 6, 2010 on an after-the-fact basis. After receiving notice of unpermitted work undertaken in jurisdictional wetlands on the subject property the District followed the requirements of 33CFR 331.10 and initiated the regulatory process to bring the unpermitted work into compliance with the terms of Sec. 404 of the Clean Water Act. The unpermitted activity consisted of the replacement of one or more existing wooden weirs with a modern structure, improvements to an embankment around the new water containment structure, the clearing of 1,878 linear feet of a water conveyance ditch through both wetlands and uplands, including excavation of sections of new ditch, and the installation of a water intake pipe in the Whiskey Bay Pilot Channel. About 1,491 feet of the water conveyance ditch cross non-jurisdictional uplands which are not subject to regulation by this agency. The electric pump used to draw water through the intake pipe is also located in a non-jurisdictional area.

Today the habitat surrounding sections of the water conveyance ditch traversing jurisdictional wetlands shows minimal elevation changes, indicating that spoil banks have eroded and flattened, with indicators of hydric soils, including a healthy cover of wetlands plant species,

now the norm.

On the basis of our recent field investigation at the project site we find no present adverse secondary effects persisting as a consequence of the placement of fill material on jurisdictional wetlands approximately a decade ago during construction / reconstruction of the water control and water conveyance structures for which the after-the-fact DA permit was issued. Although some wetlands acreage may have experienced temporary setbacks at the time of construction, no residual adverse effects can now be detected.

On the other hand, we find evidence of persistent secondary benefits to the Fisher Bottom wetland habitat arising from the reconstruction work undertaken by the property's prior owner to improve the property's water management system. Approximately 600 acres of inundated wetland habitat characteristic of the Atchafalaya Basin is more likely to be preserved in a healthy condition under the water management plan developed by Mallard Basin LLC, which the new property owner has committed to follow, than if the property's water control and conveyance infrastructure were removed and the water management plan abandoned.

## **(2) Cumulative effects:**

In preparing this EA, we established the scope of our cumulative impacts analysis to include the greater Atchafalaya Basin habitat. While this project – specifically its variable crested water control structure, approximately 1,900 linear feet of water conveyance ditch, water pumping, and continued operation of these facilities in accordance with the existing “moist soil” water management plan – affects only a small part of the over-all Atchafalaya habitat, we believe the project will likely provide long-term benefits for the wider floodway by improving and preserving the health of Fisher Bottom's 600 acres of inundated bottomland hardwood and swamp environment. These benefits contrast with a broader picture of negative cumulative impacts of human activity that have collectively degraded other parts of the wider floodway, as discussed below.

Over the last century, the natural bottomland hardwood ecosystem of the Atchafalaya Basin, the largest contiguous freshwater swamp habitat in North America, has experienced numerous changes as a consequence of public and private navigation activities, construction of flood control levees and structures, oil and gas exploration and production, saltwater intrusion, and agricultural and commercial development. Large civil works water resource projects inspired in part by the Flood of 1927, including dredging and straightening of the Atchafalaya River and construction of the Whiskey Bay Pilot Channel, have cumulatively contributed to major changes in the Atchafalaya's hydrology and water circulation patterns, promoting accelerated sedimentation in some parts of the basin and a reduction in floodwater flows in other parts, among other effects.

While the Corps permits projects that affect the nation's waters, including wetlands, within the Basin, the Corps strictly adheres to policy and regulatory requirements to ensure “no net loss of wetlands” and to ensure that resource losses are mitigated. In every case, impacts from Corps' permitted projects are avoided and minimized to the extent practicable and any remaining unavoidable impacts to wetlands are offset by sufficient compensatory mitigation to ensure that the functions, values and services of the impacted habitats are replaced by habitats providing benefits equivalent to those lost. This same process is followed in evaluation of after-the-fact permits. When determining whether impacts could be avoided or minimized, the Corps may order completed portions of the project to be restored to pre-project conditions or may order



modifications to the project or may add specific conditions to the permit designed to minimize the effects of the activity. Finally, if the Corps determines that impacts have been avoided and minimized to the extent practicable, to offset any remaining unavoidable habitat losses, the Corps will order compensatory mitigation as a condition of the permit. Because for all permits it issues, the Corps ensures that adverse impacts are avoided and minimized to the extent practicable, that any remaining adverse impacts are compensated, and that issuance of the permit is in the public interest, the net effects of the activities authorized by Corps permits do not add to environmental degradation within the Basin.

The District finds that the water and moist soil management regime underway at Fisher Bottom is likely to maintain and to improve the property's forested wetland habitat, while removal of the water control structure and water conveyance ditch and cessation of pumping from the Whiskey Bay Pilot Channel, as required if we were to adopt the "no action" alternative, would more likely lead to a shrinking of the present 600 acres of inundated swamp and the increasing presence of various invasive species. While the cumulative effect of past human activities and projects on wetlands in the Atchafalaya Basin is a present reduction in the footprint of high quality forested wetlands within the floodway, we find that this project's net benefits will offset some of those cumulative losses through the project's likely preservation of the Fisher Bottom inundated wetland habitat in a healthy condition. Finally, the Corps is unaware of any proposed or reasonably foreseeable future actions that are expected to adversely impact the Fisher Bottom area.

#### **G. Mitigation:**

The District reconfirms its original finding that no permanent loss of wetland habitat appears to have occurred as a consequence of the construction activities undertaken a decade ago by Mallard Basin and permitted through the after-the-fact permitting process. We found no evidence of adverse project impacts at Fisher Bottom during any of the agency's site investigations, although short-term temporal losses may have occurred at the time of project construction.

The healthy native bottomland hardwood habitat that presently characterizes the Fisher Bottom property appears to owe some of its wetlands values to the on-going moist soil management program begun by Mallard Basin, LLC. Because we can measure no project-related wetland losses, mitigation is not required as a permit condition.

### **III. Findings:**

#### **A. Other authorizations:**

**1. Water quality certification:** WQC 100518-03/AI 170878/CER20100001

**Date:** 19 August 2010

**Issued** ☒ **denied** ☐ **waived** ☐ **Special**

**Conditions** Yes ☐ No ☒ (If yes see attached)

**2. Coastal zone management consistency determination:** N/A

**3. State and/or local authorizations (if issued): None**

**B. A complete permit application was received on 6 May 2010 and a joint public notice describing the project was issued on 24 May 2010. Public notice was sent to interested parties (mailing list) and published on the District website in accordance established procedure. This revised Decision Document and permit reevaluation was prepared in response to a written request by the property's recent buyer, Atchafalaya Investments, LLC, for a transfer of the existing permit into the buyer's name, and allegations by the Louisiana Crawfish Producers Association – West and others, that the original Decision Document failed to adequately analyze project-related impacts to endangered species. The comments below are set forth in two sections for chronological clarity – Section 1 contains a summary of the original comments received after publication of the original public notice, along with updated agency responses, and Section 2 contains comments received after publication on July 31, 2012 of this revised Decision Document along with agency responses.**

**1. SUMMARY OF COMMENTS RECEIVED IN RESPONSE TO PUBLICATION OF THE ORIGINAL PERMIT APPLICATION AND AGENCY'S RESPONSES:**

**a. Federal agencies:**

**i) U.S. Army Corps of Engineers.** The permit application was forwarded to the New Orleans District (NOD), Real Estate Division to determine whether the proposed project would impact real estate interests under the jurisdiction of the NOD. By memo dated May 28, 2010, the Real Estate Division indicated that no real estate instrument was required for issuance of the original permit.

**ii) U.S. Fish and Wildlife Service (Service).** No response to Public Notice was received. On February 2, 2011, the Corps again advised the Service, by letter, of the Mallard Basin after-the-fact permit, noting that no comments related to possible effects to endangered or threatened species had been received from the Service. Our letter included the following observation:

The Corps is concerned with ensuring proper consultation with FWS concerning threatened and endangered species namely the Louisiana Black Bear. By this letter, we are providing FWS with the opportunity to express any comments or concerns regarding the permitted activity and any possible negative effects on Louisiana Black Bear habitat. The Corps will then consider all comments and the possibility of a modification to the existing permit authorizations.

(See Attachment No. VII-a: letter from USACE New Orleans District to USFWS, dated February 2, 2011).

On February 28, 2011 the Service responded by letter and included the following explanatory comments:

The Service does not enter into Section 7 consultations on permit applications when applicants are seeking "after the fact" authorization for projects or portions of projects that have already completed. Such completed projects effectively limit any options for

formulation or implementation of reasonable and prudent alternatives that avoid jeopardizing the continued existence of federally listed species or destroying or modifying their designated critical habitats. The consultation process is intended to address the impacts of "proposed" actions rather than past, ongoing, or future effects of completed projects. Therefore, the Service, by policy, does not consult after-the-fact on completed actions.

(See Attachment VII: letter dated February 28, 2012 from USFWS to New Orleans District.)

**iii) Environmental Protection Agency (EPA).** The EPA submitted no comments during the original public notice period.

**b. State and local agencies:**

**i) Louisiana Department of Wildlife and Fisheries (LDWF).** The Louisiana Department of Wildlife & Fisheries, by letter dated June 7, 2010, stated that the applicant shall provide adequate and appropriate mitigation for impacts to wetland functions. Any forested vegetation cleared should be chipped and spread in a beneficial manner, or hauled offsite to a non-wetland disposal location.

The Corps found no adverse impacts to wetland functions at the time the original permit application was reviewed. Additionally, because construction of the water control structure and restoration / excavation of the water conveyance ditch occurred approximately ten years before the District received Mallard Basin's after-the-fact permit application, vegetative debris from project construction activity had already decomposed to an insignificant state, obviating the LDWF's best practice guidance recommending the chipping and spreading of this material. A water management plan prepared by the LDWF for the project became a condition of the issued permit.

**ii) Louisiana Department of Environmental Quality.** In 2010 the State determined that the water management program at Fisher Bottom met Louisiana water quality standards and issued the then property owner, Mallard Basin, LLC, water quality certification on August 19, 2010 (WQC100518-03/ AI170878/ CER20100001). In a document titled "Rationale for Decision," dated October 18, 2010, the Louisiana Department of Environmental Quality made the following comments:

Based on a careful review and evaluation of the entire administrative record, including the public comments, the Louisiana Department of Environmental Quality, Office of Environmental Services, finds that Mallard Basin's project, as proposed in the application for a water quality certification, will not violate the water quality standards of Louisiana.

See Attachment XV.

**c. Organizations.**

A comment letter dated April 15, 2010 was submitted by Leigh Haynie, attorney-at-law, 15 Chapel Hill Street, Pike Road, AL 36064, on behalf of Atchafalaya Basinkeeper and the Louisiana Crawfish Producers Association (LCPA)-West, offering numerous comments and opposing issuance of this permit. Ms. Haynie presented allegations of environmental harm, or procedural inadequacy by the agency during permit processing, related to numerous topics, including the following: traffic safety, the public notice process, omission of geographic

features from project plats, inadequacy of the proposed water management plan, sheet flow of rain and floodwaters, dredging in an existing bayou, need for an Environmental Impact Statement for the project, potential production of project-related greenhouse gases, the danger of sediment accumulations with the Basin, wetlands losses within the project site, prospective harm to special aquatic sites and shellfish production areas, oxygen deprivation to waters within the Atchafalaya Basin, the inadequacy of duck hunting as a project purpose, disruption of water circulation at Fisher Bottom by project structures, an absence of project-related mitigation, inadequacy of project drawings, a need for public hearings, protection of the culture and livelihood of local inhabitants and Cajun heritage, project effects on endangered species including the Louisiana black bear, Florida panther, peregrine falcon and the Ivory-billed Woodpecker, the danger of oxygen depletion in water bodies within the Basin, harms caused by invasive species, and various additional comments.

**d. Individuals.** No comments from individuals were received.

**e. Agency response to comments received after publication of permit application.**

Comments received during the original public notice period were compiled and forwarded to the applicant, Mallard Basin, LLC. In a letter dated July 15, 2010 Mallard Basin offered its responses. See Attachment XI.

After agency review of the questions and objections presented by Ms. Haynie and review of the permit applicant's responses to her allegations, as well as our review of the management plan for Mallard Basin furnished by the Louisiana Department of Wildlife and Fisheries, our review of the District's jurisdictional determination for the project site, and our observations of project habitat during various site visits, we determined that the project's likely preservation of approximately six hundred acres of flooded, Cypress/ Tupelo swamp and bottomland hardwood habitat was more favorable to the surrounding ecosystem than the alternative action recommended by Ms. Haynie, removal of the existing embankment and water control structures, which would cause Fisher Bottom's flooded swamp to drain significantly during extended portions of the year. Wetlands that may have been disturbed during project construction a decade ago now display healthy wetlands values. On the basis of these observations and conclusions, we determined that the project was not contrary to the public interest.

**2. SUMMARY OF COMMENTS RECEIVED DURING THE PERMIT RE-EVALUATION AND REVISED DECISION DOCUMENT PUBLIC COMMENT PERIOD, AND AGENCY'S RESPONSES:**

The draft Revised Decision Document was issued on August 6, 2012 for 20 day public review and comment. At the request of counsel for the Louisiana Crawfish Producers - West, the comment period was extended until September 4, 2012. Additionally, meetings with Corps representatives and Atchafalaya Basinkeeper Dean Wilson and Tulane Environmental Law Clinic attorney Lisa Jordan were held on August 1, 2012 and August 27, 2012. In those meetings, Mr. Wilson presented his opinions concerning the permit project. We have considered all of the comments submitted and where appropriate, we have modified our evaluation.

**a. Federal agencies.**

i) **U.S. Fish & Wildlife Service.** In a letter dated October 15, 2012, we requested concurrence with our determination that the projects are not likely to adversely affect the Louisiana black bear. We also requested formal consultation in the event the Service was not inclined to concur with our determination and we attached this document as our biological assessment in accordance with 50 CFR 402.12 and 402.14. See Attachment XII.

On December 17, 2012, the Service responded by re-iterating its policy that it does not enter Section 7 consultation when permit applicants are seeking after-the-fact authorization. See Attachment XIII.

The Service did offer some information as "technical assistance." According to the Service's database, bears have not been documented within or near the project area in recent history. Further, because project construction was complete and the moist soil management program was ongoing at the time the Service designated black bear critical habitat in 2009, any project features and project effects were considered as part of the environmental baseline in that designation.

ii) **U.S. Environmental Protection Agency.** In electronic mail correspondence dated August 22, 2012, Tamara Mick stated that the EPA has no comments on or objection to the projects. Attachment XVIII.

#### **b. State agencies.**

i) **Louisiana Department of Wildlife and Fisheries.** On March 30, 2012, waterfowl biologists with the Louisiana Department of Wildlife and Fisheries attended a site visit to Fisher Bottom to observe the project infrastructure and assess the quality of habitat subject to the owner's on-going water management plan. In an e-mail dated April 2, 2012, Paul Link, waterfowl biologist with LDWF, provided written observations and advised that removal of the project, or suspension of the water management plan, could adversely affect the project's wetlands:

In my opinion, the wildlife habitat was greatly improved via this project's activities.

Without the annual management and manipulation of the water control structures the area that currently produces a multitude of beneficial seed-producing plants for waterfowl would quickly be overtaken by less desirable species...

(See Attachment III: email from Paul Link LDWF, dated April 2, 2012.)

In a letter dated April 20, 2012, LDWF made no objection to the current management plan (see Attachment VIII: letter from Louisiana Department of Wildlife and Fisheries dated April 20, 2012).

An LDWF biologist who specializes in studying the Louisiana black bear and its habitat, and who leads the LDWF Large Carnivore Section, Maria Davidson, also participated in the March 30, 2012 visit to Fisher Bottom to observe project structures, features and habitat. Following the field trip Ms. Davidson sent a letter to the Corps, received on May 7, 2012, in which she concluded that the Fisher Basin project showed no adverse impact on the Louisiana Black bear (see Attachment X: letter from LDWF Large Carnivore Section received May 7, 2012).

ii) **Louisiana Office of State Lands.** On October 12, 2012, Clay Carter of that office provided by email that "The dredging and water control structure are not located on state claimed land or water bottoms. Our office has no objection to the activity." (See email from Clay Carter, Office of State Lands dated October 12, 2012, Attachment XIV.)

### c. Organizations.

i) **Black Bear Conservation Coalition.** Paul Davidson, Executive Director of the Black Bear Conservation Coalition, commented by letter dated April 10, 2012 in follow-up to his visit to the Fisher Bottom site on March 30, 2012. Mr. Davidson stated that after looking at the water control structure, pump, water distribution system and the Fisher Bottom impoundment area, he saw nothing that could be adverse to the well being of the black bear. Mr. Davidson observed that the Fisher Bottom [Mallard Basin] site possesses excellent bottomland hardwood habitat for bears and other wild fauna. Mr. Davidson saw no evidence of black bears on the property, but said he would expect bears to use the area as a transit corridor as their population increases (see Attachment IX: letter from Paul Davidson, Executive Director BBCC, dated April 20, 2012).

ii) **Atchafalaya Basinkeeper, Louisiana Crawfish Producers-West, and the Louisiana Environmental Action Network.** In a letter dated September 4, 2012, legal counsel for Atchafalaya Basinkeeper, Louisiana Crawfish Producers-West, and the Louisiana Environmental Action Network, Lisa W. Jordan of the Tulane Environmental Law Clinic (TELC), submitted extensive comments (25 pages of comments and 35 exhibits together totaling more than 360 pages) in opposition to the project. (See Attachment XVI.) Many of these comments do not pertain to the permit re-evaluation and therefore are not relevant to this decision document. Only comments raising issues not addressed in the above evaluation and which concern the permit projects are addressed below.

### 1. Generally

Many of Ms. Jordan's comments assert opinions regarding the environmental impacts of the projects that are contrary to the results of the Corps' evaluation regarding the projects' effects. The Corps' evaluation is set forth at length above and will not be reiterated here. Similarly, the District's findings concerning effects to navigation are summarized above and will not be re-iterated here.

Most comments complain of the public's inability to access Fisher Bottom for the purposes of commercial crawfishing. The Corps does not get involved in property disputes and such disputes are not a factor in the Corps' public interest decision. An applicant's signature on a permit application is an affirmation that the applicant possesses the requisite property interest to undertake the proposed activity. The Corps is not required to determine property rights in its permit evaluation. Department of the Army permits do not convey any property rights and do not authorize any injury to property or any invasion of other rights. And, when asked if the project could impede a state law public right of passage, the State Attorney General had no comment.

In several instances, the comments mischaracterize the nature of these projects. The pump in the Whiskey Bay Pilot Channel draws water from the channel into the water conveyance ditch, which flows into the northern end of Fisher Bottom. At the southern end of

Fisher Bottom, a retention berm built more than 60 years ago and a water control structure hold the water within Fisher Bottom. Without these project features that provide water to Fisher Bottom and then keep it there, Fisher Bottom would be much drier for longer periods of the year. Water is not pumped out of Fisher Bottom. During a drawdown, water is allowed to flow out of the water control structure, which occurs naturally due to relative elevations above and below the structure. Fisher Bottom is not a naturally-occurring lake. Removing the impoundment berm and the water control structure would allow the site to drain and naturally stay drier for much longer periods, which would encourage takeover by woody invasives such as willow and Chinese tallow.

## **2. "Mallard Basin Drains Fisher Lake dry for large parts of the year."**

The goal of the moist soil management plan, including the impoundment and water control features of this project, is to allow the maintenance of positive water levels within Fisher Bottom. Water is drawn-down for short periods of time to allow the humus to dry, to control invasive species by mechanical means or herbicide and to allow germination of desirable species of wetland plants. This management process of drawing down and later recapturing water has been carried out on this property by various landowners for more than 50 years. Consultation with the Louisiana Wildlife and Fisheries confirms that similar moist soil management programs occur on many thousands of acres of private property throughout the Mississippi River Valley and on publicly-managed areas such as Sherburne Wildlife Management Area's South Farm Unit, Greentree Reservoir, Lake Martin, and Catahoula Lake.

## **3. "These actions altered the hydrology of 600 acres or more of forested hardwood swamp and Fisher Bottoms."**

The Corps conducted a Jurisdictional Determination (JD) on the project site, particularly the areas where work was conducted. The JD shows that the hydrology of the site remains a wetland. The areas under the moist soil management plan were inundated with water during the site visits, as seen in the attached photographs, which evidence that the hydrology of the managed areas remains a forested swamp and bottomland hardwood. Even the 0.9 acre of wetlands that was temporarily impacted by project construction remains functional wetlands.

## **4. "The Corps invited participants who were on their side or dubiously neutral. Therefore the facts are one sided."**

The Corps is neither a proponent nor opponent of any permit proposal. In processing permits, the Corps obtains information from permit applicants. The public and other resource agencies are allowed to comment on proposed permits, which comments are considered in processing the permit application. If the Corps needs additional information from the applicant on particular issues, the applicant is given the opportunity to provide information on those issues. If the applicant wishes to contact or to meet with objectors to his permit, he may, but he is not required to do so. The Corps alone is responsible for reaching a decision on the merits. Because of specific concerns raised with respect to the permit projects, the Corps has sought the views of the applicants and other resource agencies on those issues. The Corps has considered all comments and where appropriate, its evaluation has been modified.

The Corps sought input from the same agencies that regularly comment on the evaluation of regulatory projects, namely, the U.S. Fish and Wildlife Service and the Louisiana Department

of Wildlife and Fisheries. The Corps was aware of the LDWF Large Carnivore Program, which specializes in the Louisiana black bear, and specifically requested the help of Maria Davidson of that program. The Corps also requested the assistance of Paul Davidson, Chairman of the Black Bear Conservation Coalition, who has years of field experience regarding Louisiana black bears. The Corps further obtained the assistance of waterfowl biologists Jason Olzsac and Paul Link, who specialize in moist soil management programs for waterfowl. These individuals are highly qualified to provide expert assessments regarding the projects' effects on wetland habitat and Louisiana black bears.

The Corps project manager sought the assistance of these personnel specifically because they were the most knowledgeable individuals within their respective organizations available to view the project and to give expert and unbiased opinions; he had never spoken to most of these individuals prior to the Mallard Basin project. These individuals have provided signed documents that clearly express the opinion that the Mallard Basin project is not harmful to Louisiana black bears and that the project area habitat is in good functioning condition.

**5. "None of the Corps representatives who had seen the site in 2010 were present in 2012."**

In 2010 Ronnie Duke of the Corps Regulatory Division attended a site visit to Mallard Basin with Gary Couret and Randal Firmin from Surveillance and Enforcement Section. Also in 2010, Michael Herrmann, Corps project manager, attended a site visit to Mallard Basin with Scott Sebastien. Both Ronnie Duke and Michael Herrmann were present on the site visit to Mallard Basin in March of 2012.

**6. "The project works great for the permittees to attract mallards; however, the rest of the project's impacts on the ecosystem and human environment are negative."**

The project site is high quality swamp, bottomland, and emergent shallow water habitat. All of the resource agency personnel who visited the site agreed that the habitat quality is good. Waterfowl habitat is among the most productive habitat and the establishment of good feeding habitat for waterfowl benefits a host of other animal life. See also Response No. 9.

**7. In its reevaluation decision, the Corps failed to consult with USFWS and failed to ensure that the project "is not likely to result in the destruction of critical habitat."**

The Corps solicited input from the Service regarding the potential effects of this project on the Louisiana black bear and/or its critical habitat in February 2011 and again in October 2012. The Service has declined to enter into consultation on this project due to its policy that it does not enter ESA Section 7 consultation when permit applicants are seeking after-the-fact authorization. However, the Service did inform the Corps that these projects are part of what was considered to be the environmental baseline when the Service designated black bear critical habitat in 2009. Accordingly, maintaining the project features and management as they existed in 2009 ensures that the projects will not result in the destruction or adverse modification of black bear critical habitat.

**8. "In its discussion of alternatives, the Corps again errs. First, it never considers allowing the pump and ditches north of the lake to remain, but requiring removal of the dam and water control structure south of the lake or constructing an alternate**



**water control structure which would hold water in Fisher Bottoms during dry periods, but allow the public to access the lake during the spring and other high water periods."**

Removal of the impoundment levee and/or the water control structure on the southern end of Fisher Bottom would cause the site to become much drier for longer periods of the year. The site would likely experience increased occurrence of invasive species, which could eventually take over the areas that are currently maintained as open water. Because the overall habitat quality would likely degrade and because Fisher Bottom would no longer provide attractive habitat for waterfowl, this alternative would not satisfy the project's purpose and need.

Regarding the suggested "alternate" water control structure, first, the current structure is adequate to accomplish the project purposes while it is not clear what form such an "alternate" structure would take or whether such an "alternate" structure would be sufficient to meet project goals. Second, the Corps does not get involved in property disputes. A permit applicant's signature on the permit application certifies that he has the requisite property interests to undertake the proposed activity. The Corps is not required to determine property rights for its permit evaluations and it is not required to resolve property disputes through its permit decisions. Similarly, the Corps is not required to consider an alternative the sole purpose of which is to gratify disputed property rights.

**9. "Additionally, it limits its analysis to discussion of whether alternatives would offer the same benefits to Fisher Bottom as the current project, without examining whether alternatives to the project would provide less negative impacts to the rest of the area."**

The Corps has not found any indication that the project is causing any negative impacts to the rest of the area. To the contrary, the Corps finds that the project may benefit the surrounding area by providing improved habitat for a variety of local wildlife, which may migrate to and from the project area into the surrounding areas. Additionally, the wetlands perform valuable water quality maintenance functions by removing excess nutrients and pollutants from the water and the area provides floodwater storage during high water events.

**10. "Though the Corps states that draining the lake alone (without herbicides) helps clear out invasive vegetation like black Willow and Chinese Tallow, the Corps is wrong. In the attached letter from Gary Schaffer, Professor of Biological Sciences at Southeastern Louisiana University specializing in wetland ecology, Professor Schaffer corrects that drying out the "lake" actually encourages, not discourages, the growth of invasive species like Black Willow, Chinese tallow, cattail, and Japanese privet."**

It is not the Corps' position that the draining of the project site helps clear out invasive vegetation. It is the maintenance of water levels that assists in the suppression of invasive species. It is true that drying out a water body can encourage woody growth since many wetland tree and woody plant species need this situation for germination. Along with maintaining water levels, the draw-down period is part of a moist soil management plan. The sustained water levels prevent germination of many of these undesirable species for most of the year, while the drawdown lasts for only short periods. This allows the water bottoms to be exposed; decomposition of excess plant matter is possible; desirable plant species are able to germinate;

planting can take place when necessary; and undesirable plant species can be removed by mechanical means or the use of herbicides.

### **3. EVALUATION:**

**I have reviewed and evaluated, in light of the overall public interest, the documents and factors concerning the proposed transfer of this permit, as well as the stated views of other interested agencies and the concerned public. In doing so, I have considered the possible consequences of this action in accordance with regulations published in 33 CFR Part 320 to 330 and 40 CFR Part 230. The following paragraphs set forth my evaluation of comments received and my conclusions regarding the project's degree of compliance with the foregoing regulations based on the above evaluation.**

#### **a. Consideration of Comments**

##### **i) Consideration of original comments received in response to public notice of permit application:**

The Atchafalaya Basinkeeper provided numerous comments and recommendations on a variety of environmental, economic, navigation and natural resource topics. The Corps reviewed these comments, forwarded them to the permittee, and reviewed the permit applicant's detailed responses. For reference to comments provided by Atchafalaya Basinkeeper, see April 15, 2010 letter from Leigh Haynie. For reference to responses provided by Mallard Basin Inc., see letter from Tim Morton and Associates dated July 15, 2010, Attachment No. XI.

With regard to the Basinkeepers' allegation, submitted by Ms. Haynie, that the project restricts access by commercial fishing interests to Fisher Bottom, the Corps concluded, after multiple field investigations of the project site, that the shallow watercourse below Fisher Bottom's water control structure discharges into a forested floodplain whose mature trees are too tightly distributed to allow access by watercraft, except during extreme flood stages when the Atchafalaya River reaches 17 feet or higher at the Butte LaRose gauge. During these high water events, most of the project site is accessible by boat through the flooded, forested areas and the project structures would not obstruct passage.

With regard to the Basinkeepers' demand that compensatory mitigation be required to fully offset any project related impacts, the Corps reaffirms after recent site visits the validity of our Surveillance and Enforcement Division's Jurisdictional Determination, which found no adverse, project-related impacts to wetlands. All affected areas within the project site remain functioning wetlands with obvious benefits from the permittee's water management regime. Due to these findings, we conclude that no mitigation is required as a condition of the subject permit.

Other comments provided by the Basinkeeper were satisfactorily answered/ responded to in a letter provided by Tim Morton and Associates on behalf of Mallard Basin Inc. except comments related to threatened or endangered species, which the District independently investigated.

Sampling and testing of excavated material deposited as spoil during Mallard Basin's channel improvement work a decade ago was not indicated because the site is not believed to contain any significant soil contaminants or pollutants, making further analysis to ensure

compliance with the Environmental Protection Agency's guidelines for disposal of fill material unnecessary (see also discussion above).

In our original evaluation, we found that because no significant environmental impacts to the project site arising from operation of the water control and conveyance system in accordance with the project owner's water management plan could be found, preparation of an Environmental Impact Statement would not be required. We concluded that the project clearly helps to preserve approximately 600 acres of existing forested wetland which has benefited from an active water management program for more than fifty years. Significant environmental impacts could occur if the water management infrastructure is removed and the management program is suspended.

**ii) Consideration of comments received during the public comment period for the permit re-evaluation.**

As noted above, Lisa Jordan, on behalf of Louisiana Crawfish Producers Association - West and others, submitted comments in opposition to these projects on September 4, 2012. Attachment XVI. In addition to Ms. Jordan's comments discussed above, the Louisiana Crawfish Producers Association - West opposes the permit projects on the following grounds as alleged by Ms. Jordan: adverse environmental effects; biased, arbitrary and capricious agency action; non-participation in a site visit; violation of the Endangered Species Act; failure to consider cumulative impacts; violation 404(b)(1) guidelines; violation of the National Environmental Policy Act; and as contrary to the public interest, among others.

The permittee was given an opportunity to respond to the comments submitted in opposition to the permit project. On behalf of the permittee, Nadia de la Houssaye submitted a response to Ms. Jordan's comments on October 5, 2012. Attachment XVII. Ms. de la Houssaye defended the permit action as unbiased and defended the project's moist soil management plan. Ms. de la Houssaye also noted that Fisher Bottom is not a lake and that the Crawfish Producer's arguments about navigation and access are irrelevant.

The substance of the public comments and the results of the Corps' evaluations on those issues have been adequately addressed elsewhere in this document.

**b. Evaluation of Compliance with 404 (b)(1) guidelines (restrictions on discharge, 40 CFR 230.10).**

The regulatory language of 33 CFR 320.4(a) states that "[f]or activities involving 404 discharges, a permit will not be granted if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines." Similarly, 33 CFR 323.6(a) states that "The district engineer will review applications for permits for the discharge of dredged or fill materials into the waters of the United States in accordance with guidelines promulgated by the Administrator, EPA, under authority of section 404(b)(1) of the CWA." (see 40 CFR part 230.)

**i) Alternatives test:**

- 1) Based on the discussion in II B, are there available, practicable alternatives having

X  
Yes No less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that do not involve discharges into "waters of the United States" or at other locations within these waters?

X       
Yes No 2) Based on II B, if the project is in a special aquatic site and is not water-dependent, has the applicant clearly demonstrated that there are no practicable alternative sites available? See II B.

**ii) Special restrictions. Will the discharge:**

     X  
Yes No 1) Violate state water quality standards.

     X  
Yes No 2) Violate toxic effluent standards (under Section 307 of the Act).

     X  
Yes No 3) Jeopardize endangered or threatened species or their critical habitat.

     X  
Yes No 4) Violate standards set by the Department of Commerce to protect marine sanctuaries.

X       
Yes No 5) Evaluation of the information in II C and D above indicates that the proposed discharge material meets testing exclusion criteria for the following reason(s).

( ) Based on the above information, the material is not a carrier of contaminants.

(X) The levels of contaminants are substantially similar at the extraction and disposal sites and the discharge is not likely to result in degradation of the disposal site and pollutants will not be transported to less contaminated areas.

( ) Acceptable constraints are available and will be implemented to reduce to acceptable levels within the disposal site and prevent contaminants from being transported beyond the boundaries of the disposal site.

**iii) Other restrictions. Will the discharge contribute to significant degradation of "waters of the U.S." through adverse impacts to:**

- |  |  |
|--|--|
| <input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No | 1) Human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife and special aquatic sites?  |
| <input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No | 2) Life stages of aquatic life and other wildlife?   |
| <input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No | 3) Diversity, productivity and stability of the aquatic ecosystem, such as loss of fish or wildlife habitat, or loss of the capacity of wetland to assimilate nutrients, purify water or reduce wave energy? |
| <input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No | 4) Recreational, aesthetic and economic values?  |

**iv) Actions to minimize potential adverse impacts (mitigation).**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | 1) Will all appropriate and practicable steps (40 CFR 230.70-77) be taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem?<br>Yes: Applicant agrees to comply with the special conditions contained in the existing Department of the Army permit. |
|--|--|

**c. General Evaluation (33 CFR 320.4(a)):**

**i) The relative extent of the public and private need for the proposed work...**

The project would provide private landowners recreational opportunities through the management of approximately 600 acres of forested swamp and bottomland hardwoods. The project would help to preserve a semi-open canopy swamp and moist soil vegetative area which will provide direct and cumulative benefits to the regional aquatic environment through preservation and/or improvement of biodiversity of vegetative communities and wildlife species. Since the turn of the Twentieth Century, the Atchafalaya Basin has lost numerous acres of shallow water features due to accretion of floodwater sediments. The protection of approximately 600 acres of shallow water cypress and tupelo swamplands will help to offset losses of similar habitat in other portions of the Atchafalaya Basin.

**ii) The practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work...** The permittee has provided sufficient information to identify the public and private value of the project and has reasonably demonstrated that no less environmentally damaging alternatives exist that could practicably provide similar preservation benefits, as previously addressed in Section II-B of this document.

**iii) The extent and permanence of the beneficial and/or detrimental effects that the proposed structures or work may have on the public and private uses to which the area**

**is suited...** The project area currently provides habitat for wildlife and aquatic organisms that depend on forested wetlands. It also improves water quality and functions to absorb nutrients, trap sediments, store storm water, and provide detrital material for adjacent wetlands and water bodies. While the project owners' interests primarily focus on recreational activities, these align with the long-term public benefit that continued water management of the property should provide, in particular the preservation of approximately 600 acres of forested wetlands and the protection of numerous fish and wildlife communities.

**d. Significant national issues of overriding importance to state or local issues and why.**

None.

**4. DETERMINATION:**

**a. Finding of No Significant Impact (FONSI) (33 CFR Part 325.)** Having reviewed the information provided by the original permit applicant, by the proposed transfer permittee, and by interested organizations and individuals, as well as the assessment of environmental impacts contained in Part II B of this document, I find that transfer of these permits without modification will not have a significant impact on the quality of the human environment. Therefore, an Environmental Impact Statement will not be required.

**b. 404(b)(1) Compliance/Non-compliance Review (40 CFR 230.12).**

- ☐ The discharge complies with the guidelines.
- ☒ The discharge complies with the guidelines, with the inclusion of the appropriate and practicable conditions listed above (in III.B.3.b.iv) to minimize pollution or adverse effects to the affected ecosystem.
- ☐ The discharge fails to comply with the requirements of these guidelines because:
- ☐ There is a practicable alternative to the proposed discharge that would have less adverse effect on the aquatic ecosystem and that alternative does not have other significant adverse environmental consequences.
- ☐ The proposed discharge will result in significant degradation of the aquatic ecosystem under 40 CFR 230.10(b) or (c).
- ☐ The discharge does not include all appropriate and practicable measures to minimize potential harm to the aquatic ecosystem, namely the relocation of the project to the non-wet portions of the property.
- ☐ There is not sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with the guidelines.

**c. Public Interest Determination:** I find that the previous issuance/authorization of DA Permit No. MVN-2010-1080-WLL (with special conditions) and its transfer to the new owner of Fisher Bottom, Atchafalaya Investments, LLC, as well as

recognition of Atchafalaya Investments, LLC as a qualified permittee under Nationwide Permit No. 7 (MVN-2010-1032-WLL), as prescribed by regulations published in 33 CFR Parts 320 to 330, and 40 CFR Part 230:

  X   is not contrary to the public interest            is contrary to the public interest

2/13/2013

Date

[Signature]

Preparer

2/13/2013

Date

Donell S. Barbara

Reviewer

13 Feb 2013

Date

Martin S. May

Approving Official

## APPENDIX

- Attachment I :** Statement of Scott Sebastien, March 7, 2012, prior owner of Fisher Bottom
- Attachment I-a:** April 5, 2010 letter from Don Reed, Professor of Forestry and Wildlife, LSU
- Attachment II:** Moist Soil Management Plan for Fisher Bottom, July 2010, prepared by LDWF for Mallard Basin Inc.
- Attachment II-a** Permit transfer request from William Schumacher, Atchafalaya Investments, LLC to the New Orleans District. Corps of Engineers, dated September 21, 2011
- Attachment III :** E-mail from Paul Link LDWF April 2, 2012
- Attachment IV:** Letter dated March 15, 2010 from LDWF, signed by Tony Vidrine
- Attachment V:** Photographs 1 - 30 of Mallard Basin site, including Fisher Bottom water impoundment area, taken by Michael Hermann, USACE, on March 30, 2012
- Attachment VI :** Butte LaRose Gauge data from March 1-2, 2012 (rivergauges.com)

- Attachment VII:** Letter dated February 28, 2012 from U.S. Fish and Wildlife Service, re: Mallard Basin MVN-2010-1080-WLL and Scott Sebastien MVN-2010-1032-WLL)
- Attachment VII-a:** Letter from U.S. Army Corps of Engineers, New Orleans District (USACE/NOD) to U.S. Fish and Wildlife Service date February 2, 2011.
- Attachment VIII:** Letter from Louisiana Wildlife and Fisheries dated April 20, 2012
- Attachment IX:** Letter from Paul Davidson, Executive Director Black Bear Conservation Coalition, dated April 10, 2012
- Attachment X:** Letter from Maria Davidson, Louisiana Department of Wildlife and Fisheries, Large Carnivore Program Manager, dated May 2, 2012.
- Attachment XI:** Letter from Tim Morton and Associates to New Orleans District, dated July 15, 2010.
- Attachment XII:** Letter from U.S. Army Corps of Engineers, New Orleans District to U.S. Fish & Wildlife Service, dated October 15, 2012
- Attachment XIII:** Letter from U.S. Fish & Wildlife Service to U.S. Army Corps of Engineers, New Orleans District, dated December 17, 2012
- Attachment XIV:** Electronic mail from Clay Carter of the Louisiana Office of State Lands to Mike Herrmann of U.S. Army Corps of Engineers, New Orleans District, dated October 12, 2012
- Attachment XV:** Louisiana Department of Environmental Quality documents concerning the issuance of water quality certification for these projects dated August 19, 2010 and October 18 2010.
- Attachment XVI:** Letter from Lisa Jordan on behalf of the Atchafalaya Basinkeeper and others to U.S. Army Corps of Engineers, New Orleans District, dated September 4, 2012 (excluding the 300-plus pages of exhibits).
- Attachment XVII:** Letter from Nadia de la Houssaye on behalf of the permittees to U.S. Army Corps of Engineers, New Orleans District, dated October 5, 2012.
- Attachment XVIII:** Electronic mail correspondence dated August 22, 2012, from Tamara Mick , U.S. Environmental Protection Agency, to Mike Herrmann, U.S. Army Corps of Engineers, New Orleans District