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Via Email and Regular Mail

July 18, 2018

Re: Comments on Behalf of Atchafalaya Basinkeeper, Gulf Restoration Network, the Louisiana Crawfish Producers Association-West and the Delta Chapter of Sierra Club regarding the proposed Buffalo Cove Management Unit – Element 10 and Draft Environmental Assessment (EA #441) for the Atchafalaya Basin Floodway System, Buffalo Cove Management Unit

Dear Mr. Roberts,

This comment letter is submitted on behalf of Atchafalaya Basinkeeper, Gulf Restoration Network, the Louisiana Crawfish Producers Association-West and the Delta Chapter of Sierra Club to the U.S. Army Corps of Engineers' ("the Corps") proposed element of the Buffalo Cove Management Unit ("BCMU"), one of two "pilot" management units authorized for the Management Unit feature of the Mississippi River and Tributary, Atchafalaya Basin Floodway System, Louisiana, project ("ABFS"). This comment letter also addresses the Draft Environmental Assessment for the Atchafalaya Basin Floodway System, Buffalo Cove Management Unit, Southern Water Circulation Improvements published in June 2018 (hereinafter "EA #441"). The ABFS Management Unit feature was authorized by the Flood Control Act and contains features to provide "public access, environmental protection, flood control through flowage and development control, water management, canal closures and water circulation improvements, and recreational development in the Lower Atchafalaya Floodway." *Public Notice*, at 1.

The ABFS project authorizes the construction of two "pilot" management units: (1) the Buffalo Cove Management Unit, and (2) the Henderson Lake Management Unit. Three other management units (Beau Bayou, Flat Lake and Cocodrie Swamp) have received conditional authorization – dependent upon the construction, operation, monitoring and evaluation of the "operational success of each of the 'pilot' units in the restoration of historic overflow conditions to benefit the aquatic ecosystem." *Public Notice*, at 2. After evaluation and analysis of the operational success of the "pilot" management units, a recommendation to the Chief of Engineers will be made with regard to the three conditionally authorized management units.

The Buffalo Cove Management Unit – Element 10 feature is located in Iberia Parish, between I-10 and U.S. Hwy 90, with the proposed work to occur northwest of the Attakapas Wildlife

Management Area. The 58,000 acre BCMU is located in south central Louisiana, in the southwest portion of the Atchafalaya Basin between Lake Fausse Pointe and the Atchafalaya River. The proposed action (Element 10) "consists of three sub-components designed to improve/restore circulation patterns within a historic flow corridor of approximately 2 miles in the south/central area of BCMU. Excavation of three elevated areas has been identified . . . . The corridor begins in the north at the southern end of Buffalo Cove Lake and terminates in the south near Poncho Chute. On average, a hydrologic connection currently exists along the flow corridor during high water events for approximately 2 months of the year." *Public Notice,* at 2.

The proposed action will impact approximately 18.2 acres by dredging (6.8 acres) and disposal (11.4 acres) activities, directly impacting approximately "4.4 acres of existing open water bottoms, 12.3 acres of low quality bottomland hardwood (i.e., Willow) forest, and approximately 1.5 acres of low-moderate quality mixed Cypress-Tupelo-Willow." *Public Notice,* at 3.

Atchafalaya Basinkeeper ("ABK") is a non-profit organization comprised of over 1,1000 members dedicated to protecting and restoring the ecosystems within the Atchafalaya Basin for future generations. **Gulf Restoration Network** ("GRN") is a diverse coalition of individual citizens and local, regional, and national organizations committed to uniting and empowering people to protect and restore the natural resources of the Gulf of Mexico. **Louisiana Crawfish Producers Association-West** ("LCPA") is a nonprofit organization whose purpose is to educate the public and advocate for the right to access navigable waters. Its members are commercial and recreational fishermen, hunters and nature photographers. Its members regularly use the Atchafalaya Basin and other public waters and lands in pursuit of these interests. The members of LCPA have economic, recreational, cultural, historic, spiritual and aesthetic interests in the Basin. **Sierra Club** is a national grassroots organization whose mission it is to explore, enjoy and protect the wild places of the Earth; to practice and promote the responsible use of the Earth's ecosystems and resources; and to educate and enlist people to protect and restore the quality of the natural and human environment.

Atchafalaya Basinkeeper, Gulf Restoration Network, the Louisiana Crawfish Producers Association–West and the Delta Chapter of Sierra Club reserve the right to rely on all comments to this permit application submitted by any party.

In response to the proposed BCMU Element 10 project, we respectfully request that the Corps elect not to authorize the proposed action. Rather, the Corps should halt the BCMU project, reassess options that will ameliorate rather than exacerbate the ongoing harms and accretion, modify the project to reflect more sound methods to improve the area, develop a plan to keep river sand from the BCMU project area and use remaining funds to restore deep water habitat negatively impacted by the project. Following through with a failing project not only seals its fate in failing to improve the area but also contributes to additional harms, threatening the health and longevity of the BCMU area and surrounding wetlands. In consideration of the observed outcomes on the ground in the BCMU area (*see* Exhibit A*,* BCMU Project – *Friday, July 13, 2018 Trip Report* (hereinafter "Report")), the Corps should not authorize the BCMU project's Element 10 and rather continue assessing the ongoing accretion, consider viable alternative courses of action in the area and develop a proper plan to restore areas already impaired by this project. In consideration of the public interest and the magnitude of impacts resulting from this project, the Corps should hold a

public hearing to address the proposed activity and allow for public comment on the draft environmental assessment.

I. SUMMARY

The Atchafalaya Basin is "a national treasure, a part of Louisiana's culture, and an educational, economic and recreational asset for the public." *See* Atchafalaya Basin Floodway System, Louisiana Project, State Master Plan, April 1998, at 6-1, *available at* http://www.dnr.louisiana.gov/assets/docs/Atchafalaya_Basin/StateMasterPlan.pdf (hereinafter, "State Master Plan"). The swamps of the Atchafalaya Basin are critical to protect coastal Louisiana from Mississippi River floods. The Basin's wetlands provide some of the most important habitat for neotropical migratory birds in the Western Hemisphere and for a vast array of fishes, mammals, amphibians and other wildlife. The Basin's productive wetlands provide fishing grounds for commercial and recreational fishermen, as well as serve important cultural significance to the surrounding communities.

Threats to the sustainability, longevity and health of the Basin and its ecosystems include hydrologic impairments as a result of non-compliance and paltry enforcement in the Basin. However, the greatest threat is excessive sedimentation and the uneven distribution of sediments in the Basin causing rapid filling of irreplaceable swamps, lakes and bayous. In 2001, the USGS estimated that since 1932, there has been a net accretion of nearly *2.5 billion cubic meters* of sediment in the Basin, which has resulted in the conversion of open water and cypress-tupelo swamps into bottomland forests. *The Atchafalaya Basin – River of Trees,* USGS 2001, *available at* http://www.dnr.louisiana.gov/assets/OCM/ABP/River_of_Trees_USGS_2001.pdf. (hereinafter "USGS 2001") (emphasis added). More than 70% of the Basin's swamps, lakes and bayous have already been lost as a result of human intervention and development. According to the State Master Plan, "[o]ne of the major problems facing the Corps is the rapid sedimentation – the Atchafalaya Basin Floodway System carries more than 57,000,000 cubic yards of sediment annually. Sediment deposits in the basin affect the carrying capacity of the floodway, fish and wildlife habitat, and regeneration of forests and other vegetation." *State Master Plan,* at 3-2.

The sediment threats in the Basin also impact the state of our coast, which is deprived of sediments. According to DNR, "[a]pproximately 21 percent of the total suspended load and 50 percent of sands in the Atchafalaya River are sequestered within the Atchafalaya Basin and do not reach the coast where they are needed. Ongoing rapid and detrimental sedimentation in the Atchafalaya River Basin (ARB) fills swamps and waterways, impairs water quality, and degrades habitats. Conversely, areas of the Louisiana coast outside the Atchafalaya Basin protection levees are experiencing erosion and subsidence and are in need of sediment sources for restoration projects." *FY 2017 Annual Plan, Atchafalaya Basin Program*, at 5, *available at* http://www.dnr.louisiana.gov/assets/OCM/ABP/2017_plan/2_4_16LOWRes2017_ABP_Plan.pd.

Atchafalaya Basinkeeper works to protect what remains of our Basin. Basinkeeper, the Louisiana Crawfish Producers Association-West, Gulf Restoration Network and Sierra Club Delta Chapter have been working tirelessly to protect and restore the Atchafalaya Basin since before 2004.

Background Information: Basin Management & the Buffalo Cove Management Unit

The mission of the Atchafalaya Basin State Master Plan is to "conserve, restore, and enhance (where possible) the natural habitat and give all people the opportunity to enjoy the Atchafalaya Experience." *State Master Plan*, at 1-1, 2-2. It was created to promote effective management of the Atchafalaya Basin with a vision for the future, one that re-orients anthropocentric institutions "toward a stewardship approach" to the region. *Id.* at i. The State Master Plan envisioned an interagency relationship based on coordination and communication between DNR and the Corps "to an extent not previously experienced" as the primary agencies overseeing the management of the Basin. *Id.* at ii. The primary objectives outlined in the Master Plan include public access, environmental concerns, water management and recreation. The Plan acknowledged that "(t)o save the Basin, problems with water quality and sedimentation must be solved by working with the Corps of Engineers, Department of Wildlife and Fisheries, Louisiana State University, and others to monitor the results of water management features planned by the Corps with assistance from the State and implemented by the Corps." *Id.* at 1-2.

The plan recognizes the limitations of development in the Basin, particularly in light of concerns regarding varying water levels, navigation, public access and sedimentation. *State Master Plan*, at 3-7, 3-8. Recognizing that the floodway system in the Basin must be capable of carrying 1,500,000 cubic feet per minute of diverted flow through the MR&T project, the plan emphasizes that developments "must be limited to facilities which do not affect the carrying capacity." *Id.* at 3-7. Likewise, the plan acknowledges that the "long-term use or enjoyment in many areas may be limited by build-up of sediments which may eliminate water access and which changes the character of trees and vegetation." *Id.* at 3-8.

The 2003 Environmental Assessment entitled "Atchafalaya Basin Floodway System, Buffalo Cove Management Unit, Water Circulation Improvements and Sediment Management Unit" ("EA #366") proffered an array of water management options or "elements" for implementation in the BCMU. Since the Finding of No Significant Impact was signed in March 2004, the Corps has implemented all of the elements for the final selected plan in EA #366.

Although Element 10 was part of the original plan for the water circulation improvements and sediment management features considered in EA #366, more engineering data and considerations under the National Environmental Policy Act warranted tabling implementation of this element of the greater BCMU pilot project. Since, the Corps has developed EA #441, published in June 2018, providing additional information on the BCMU Southern Water Circulation Improvements.

The Corps asserts that Element 10 is "necessary for project goals within BCMU because north to south flow from Buffalo Cove Lake was highly restricted," and that, because this element is "the southern-most element for improved drainage, it remains recognized, and monitoring data support, that improving north-south flow via Element 10 would also increase the function of other BCMU elements to the north (i.e., upstream)." *Public Notice,* at 2.

The Corps asserts that the proposed cuts at Element 10 "would restore hydrologic connectivity to 12 months each year and improve water circulation for approximately 7-8 months during elevated stages." *Public Notice,* at 3. The Corps further proposes to remove spoil banks from two access

canals (10A and 10C) and one elevated ridge (10B) to improve hydrologic connection between Buffalo Cove Lake and the Ice Box, and to reconnect flow to the Atchafalaya River. *Id.* However, as discussed more herein, there is nothing left to connect. During low water, there is no longer any deep water habitat to connect to – there is essentially no longer a Buffalo Cove Lake because it has already filled in, Bayou Eugene is completely filled in and Bayou Gravenburg and Jackass Bay are no deeper than 4' during low water. *See* Report.

The purported purpose of this action, in connection with all elements of the BCMU project generally, is aimed at "improving flow, circulation and water quality, and preserving high quality wetlands within the BCMU." *Id.* The Corps further claims that the results would minimize sediment accretion and improve dissolved oxygen within the Buffalo Cove Lake and the adjacent swamp. *Id.* However, as discussed herein, the goals of the project are contrary to the occurrences on the ground since the BCMU pilot project began implementation. Rather than improving the quality of the area, observations of massive accretion resulting in disappearing cypress swamps and deep-water habitat is plaguing the area. *See* Report. Projects like the BCMU created by the Corps are forever destroying valuable wetlands to improve water quality on those wetlands.

II. DISCUSSION

In response to this public notice, the Corps must review the environmental assessment for compliance with the Clean Water Act the National Environmental Policy Act and other applicable laws and regulations, as well as coordination and assessment by other state and federal agencies. The depth of the Corps' environmental review is considerable, particularly with respect to the role the Corps plays in sediment management, as indicated by the State Master Plan, and its responsibilities under the Clean Water Act. In addition to the Clean Water Act §§ 404 and 401 considerations, the Corps' environmental review must include evaluations made pursuant to the National Environmental Policy Act ("NEPA"), the Endangered Species Act, the National Historic Preservation Act, the Migratory Bird Treaty Act and the Coastal Zone Management Act, to name a few. Likewise, in light of the robust role the State of Louisiana has undertaken in regard to the restoration, preservation and management of the Atchafalaya Basin and the coast, the Corps must also conduct its review with consideration made to the State Master Plan, the Coastal Protection and Restoration Authority's Master Plan for a Sustainable Coast, coastal management consistency review and state-wide efforts to protect wetlands and the coast.

a. CLEAN WATER ACT COMPLIANCE

Congress enacted the Clean Water Act in 1972 with aims to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). In pursuit of this aim, the CWA prohibits the discharge of any pollutant, including dredged or other fill material, into the waters of the United States unless specifically authorized by a permit. *Id.* at § 1311(a). The Corps requires all discharges of dredged or fill material into waters of the U.S. to be authorized under a Section 404 permit, issued by the Corps, unless otherwise exempt by statute. *Id.* §§ 1344(a)-(e). The Corps issues individual section 404 permits after conducting an analysis and review of the proposed action, its impacts and public interest analysis, providing public notice and opportunity for hearing, and ultimately making a formal determination. 33 C.F.R. § 322.3; (see pts. 323, 325).

When issuing permits and approvals pursuant to § 404 of the CWA, the Corps must comply with the § 404(b)(1) Guidelines of the Clean Water Act at 40 C.F.R. Part 230. These legally binding guidelines establish requirements that must be met prior to authorizing the discharge of dredge and fill material into waters of the U.S. Additionally, the Corps has its own regulations it must follow to avoid unnecessary destruction or alternation of waters of the U.S., including wetlands. *See* 33 C.F.R. § 320.4. Between the 404(b)(1) Guidelines and the Corps' regulations, the Corps must conduct a thorough environmental review prior to authorizing the proposed action. As discussed herein, the Corps cannot authorize the activities proposed pursuant to the BCMU Element 10 project because it fails to meet the § 404(b)(1) Guidelines' requirements as well as the Corps' regulations. *See* 40 C.F.R. § 230.10; 33 C.F.R. 320.4.

i. **The proposed BCMU project – Element 10 fails to satisfy the requirements of the Clean Water Act Section 404(b)(1) Guidelines**

The stated purpose of the Guidelines mirrors that of the Clean Water Act, "to restore and maintain the chemical, physical and biological integrity of waters of the United States through the control of discharges of dredged or fill material." 40 C.F.R. § 230.1(a). The Guidelines prohibit the discharge of dredged or fill material absent a showing that the discharge "will not have an unacceptable adverse impact either individually or in combination with known and/or probably impacts of other activities affect the ecosystems of concern." *Id.* at (c). In viewing the degradation or destruction of special aquatic sites to be among the most severe environmental impacts, the guiding principle behind these sections of the CWA is that "degradation and destruction of special sites may represent an irreversible loss of valuable aquatic resources." *Id.* at (d). Special aquatic sites include wetlands and are defined as "geographic areas . . . possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values." *Id.* at §§ 230.4(q-1); 230.41. This project will ultimately result in the discharge of tons of fill material into some of the most productive swamps in the world, an irreversible loss of the special characteristics of productivity, habitat, wildlife protection and other important and easily disrupted ecological values of those wetlands.

Section 230.10 of the § 404(b)(1) Guidelines lists four requirements the Corps must find to issue a § 404 permit under the CWA. These requirements include (1) no practicable alternative, (2) no violation of other laws, (3) no significant degradation and (4) minimization of adverse impacts. 40 C.F.R. § 230.10. In conducting its environmental review of the proposed activity, the Corps must compare its factual determinations with the four discharge requirements listed above to make and document its Findings of Compliance before authorizing the activity. 40 C.F.R. §§ 230.5(l); 230.10; 230.11; 230.12. The BCMU project meets none of these requirements.

1. **The Corps cannot authorize the proposed BCMU project – Element 10 because there are practicable alternatives to the proposed discharge**

In accordance with the Guidelines, in order to authorize the project under § 404, the Corps must determine that there is no "practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant

adverse environmental consequence." 40 C.F.R. § 230.10(a); *see also* 33 C.F.R. § 320.4. Under this requirement, "practicable alternatives" include, but are not limited to, activities that do not involve a discharge of dredged or fill material into U.S. waters or a discharge at other locations. *Id.* at (a)(1).

The Guidelines create a presumption that alternatives that are both practicable and less harmful to aquatic ecosystems and special aquatic sites exist. 40 C.F.R. § 230.10(a)(3). The Corps must clearly demonstrate the unavailability of practicable alternatives that do not involve a discharge into a special aquatic to overcome this presumption. *Id.* However, the Corps cannot meet this burden. There are practicable alternatives to the BCMU pilot project that do not involve making cuts and discharging dredged or fill material into a special aquatic site.

The Corps cannot improve water quality in wetlands by destroying those wetlands. One simple alternative includes a no action alternative, which is appropriate if and until sufficient funding and management is identified to carry out a scientifically-supported, long-term solution for this area – none of which has been identified or otherwise provided to support the "need" for this project. Poor water quality will always be better than no water quality due to the loss those wetlands. To continue on the proposed path will cause more harm than halting the project and conducting additional research to determine an adequate solution for the ongoing harms.

There needs to be more collaborative efforts between the agencies to ensure efficacious, results-oriented projects aimed at efficient use of funds and available resources such as excessive inland sediments being redirected or shipped to coastal areas in need. The BCMU project is completely counterintuitive to the protection and restoration of these delicate ecosystems. Viable alternatives include (1) halting the project to allow for further assessment and evaluation; (2) modifying the project as expected, encouraged and considered in the "adaptive management" pilot method envisioned by these pilot management projects, considering on-the-ground observations and sediment trends, (3) developing a plan to keep river sands away from the BCMU project area. By fixing the area's plumbing (as we presume was the initial intent of the project, but, unfortunately, has exacerbated the harms) by removing spoil banks and restoring lakes and bayous in the area (annual or regular dredging to restore water depth, ecosystems and habitat) will ameliorate water quality and wildlife habitat without the detrimental effects of introducing more sediment-laden river water into the BCMU project area. Element 10 will introduce more river water, river water flows into the Buffalo Cove area from all of the other elements of the project that have already been implemented and the project will increase the current coming from those elements.

Finally, we are overdue for a more up-to-date assessment and Master Plan for the Basin to effectively oversee the preservation, and hopefully restoration, of the Atchafalaya Basin. Authorizing projects that offer short-term results to the detriment of long-term sustainability does not align with the overall goals of these agencies, and the state. There are a plethora of viable alternatives that should be carefully considered before authorizing this proposed project's dredge and fill activities at Element 10 in the BCMU pilot project area. The Corps must acknowledge and address the existing problems before embarking on a fishing expedition of short-term fixes that do not adequately address the underlying sources of the problem.

2. **The Corps cannot authorize the proposed BCMU project – Element 10 because the project will jeopardize wildlife habitat**

In accordance with the Guidelines, the Corps cannot permit a project if the project (1) "causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable state water quality standard," (2) "violates any applicable toxic effluent standard or prohibition," or (3) "jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act." 40 C.F.R. § 230.10(b)(1)-(3). The proposed project's impacts to state water quality standards and effluent limitations are discussed further herein under the water quality and Section 401 discussion.

The Corps must consider the project's impact on habitat for the pallid sturgeon (*Scaphirhynchus albus)*, which is federally and state endangered, as well as the shovelnose sturgeon (*Scaphirhynchus platyrhynchus*), which is federally threatened and state protected, before authorizing this project. These two types of sturgeons have been found at the Older River Control Structure as well as other points downstream as far as Morgan City. The Corps must coordinate with the Louisiana Department of Wildlife and Fisheries to determine whether the proposed project's direct, *indirect and cumulative* impacts will jeopardize the continued existence of these listed sturgeons. *See LDWF Atchafalaya Basin Lake History and Management Issues,* attached to SCR 154 Study Group Report, Appendix R, at 163, *available at* http://www.dnr.louisiana.gov/assets/OCM/ABP/SR154.ReportA.pdf. Although the draft EA claims that the project would "neither significantly improve nor degrade habitats considered important to the sturgeon," it is inconceivable that the Corps would opine that rapid filling in of deep-water habitat and cypress-tupelo swamps does not negatively impact wildlife habitat, including that of the endangered pallid sturgeon. *EA #441*, at 28.

The draft EA #441 provides that the proposed activity "is designed to create, protect, and improve water quality and wetland habitat." *EA #441,* at 27. However, as can be observed on the ground, the project is filling in wetlands and deep-water habitat at an alarming rate. The Corps fails to address this ongoing trend and how Element 10 will ameliorate or not otherwise exacerbate this harm to wildlife habitat. The EA continues on to claim that the project's placement of dredged material on existing spoil banks will improve wildlife corridors in the interior swamp. *Id.* However, this position fails to account for the damage that spoil banks cause: impeding navigation and water flow, impairing water quality and fisheries and causing destructive patterns of sediment dispersal across the Basin. Adding to this phenomenon is not a legitimate "improvement" to wildlife habitat. In fact, most of these spoil banks flood during the annual water rise in the Basin or major flood events – albeit, not enough to meaningfully increase flow and allow for safe navigation - meaning these areas can harm wildlife if small game species populations that establish on the spoil banks become trapped in these high water events.

Because the project's Element 10 will result in the continued filling in of valuable wetlands, impairing water quality, disrupting wildlife habitat and, in the long term, exacerbating hypoxia, the Corps cannot authorize the proposed activity

3. **The Corps cannot authorize the proposed BCMU project – Element 10 because the project will continue to cause significant degradation**

In accordance with the Guidelines, the Corps cannot permit a project that will "cause or contribute to significant degradation of the waters of the United States" based upon "appropriate factual determinations, evaluations, and tests." 40 C.F.R. §§ 230.10(c); 230.11. Contributors to degradation considered individually or collectively, pursuant to these Guidelines, include: adverse effects on wildlife and special aquatic sites; adverse effects on aquatic ecosystem diversity, productivity and stability, including loss of fish and wildlife habitat; or adverse effects on recreational, aesthetic and economic values. *Id.* at 230.10(c)(1)-(4).

The impacts of this project will continue to be detrimental to the long-term health of the surrounding wetlands. The ultimate result will be the ongoing filling in of these areas with sediment, filling in the interior swamps until no additional sediment-laden water can flow through. The impacts of new sediment deposits in the area will have even more catastrophic impacts on the surrounding fisheries and wetlands. Despite the many claims to the contrary, in particular that the proposed activity at Element 10 will "allow fish passage through the year improve spawning and recruitment," the Corps fails to consider the fact that, based on observations on the ground, there is no longer an area to allow for fish passage. *EA #441*, at 26. As indicated in the attached Report depicting on the ground observations of the project area, Buffalo Cove Lake, Jackass Bay, Bayou Eugene and Bayou Gravenburg are essentially filled-in, and the project as implemented is destroying what little deep-water habitat remains. Fish cannot benefit from a project that is facilitating the filling-in all the deep-water habitat in the BCMU.

4. **The Corps cannot authorize the proposed BCMU project – Element 10 because there are additional steps that should be taken to consider and minimize all adverse impacts**

Finally, in accordance with the Guidelines, the Corps must require "appropriate and practicable steps to minimize adverse impacts of the discharge on the aquatic ecosystem." 40 C.F.R. § 230.10(d). In accordance therewith, the Corps must fully consider all impacts of the project, including short and long-term impacts as well as the direct, indirect and cumulative impacts.

The 404(b)(1) Guidelines provide examples of actions that can be employed to minimize adverse effects of discharges of dredged and fill material. 40 C.F.R. § 230.70-77. These actions may include managing the method of dispersion, using technology to employ appropriate maintenance on site, avoiding sites with unique habitat or other value, using planning and construction practices to restore and develop habitat or perform regular maintenance in areas that support fish and wildlife recreation and human use. *Id.* at § 230.73-76. The Buffalo Cove Water Management project expressly discounts the more traditional water management alternatives in favor of the pilot approach which would allow for modifications and additions based on continual monitoring of conditions prior to, during, and following project construction. However, continuing on the same ill-fated path will result in increased harm to the surrounding ecosystem. Additional steps through halting and reassessing the project elements can minimize and, if appropriately developed, result in a plan that could reverse and restore some of the harms resulting from the project thus far.

Ultimately, if the permitted activity will result in a significant ecological change to the aquatic environment as is anticipated by this project, "the permitting authority should consider the ecosystem that will be lost as well as the environmental benefits of the new system." 40 C.F.R § 230.77(d). Therefore, regardless of the management plans for the project, because the ultimate result will degrade beyond repair the irreplaceable wetlands in the area, the Corps cannot authorize this project.

In sum, the Corps cannot guarantee satisfaction of this requirement without looking into the lasting impact this project will continue to have on the surrounding ecosystems. The ultimate impact of this project will be contrary to its stated purpose, to the State Master Plan and applicable state and federal environmental laws. The BCMU project – Element 10 cannot meet the minimization of adverse impacts requirement when the lasting result will leave the area in worse shape than before the project was implemented.

a. The Cops must consider all impacts of the proposed BCMU project – Element 10

The CWA Guidelines require the Corps to determine the potential short and long-term effects of the proposed activity to make a finding of compliance or non-compliance with the articulated "restrictions on discharge." 40 C.F.R. § 230.11. The National Environmental Policy Act also requires consideration of cumulative, secondary and indirect impacts in considering mitigation options. 40 C.F.R. § 1508.25; *see also O'Reilly v. U.S. Army Corps of Eng'rs,* 447 F.3d 225, 235 (5th Cir. 2007).

Given the information available in public documents, and in EA #441, it does not appear that the Corps has fully weighed the costs and benefits relevant to the Project. Direct, indirect, secondary, and cumulative impacts of the proposed wetland fill and clearing remain overlooked. The Applicant must answer these "IT questions."

i. Direct Impacts

The proposed action will impact approximately 18.2 acres by dredging (6.8 acres) and disposal (11.4 acres) activities, directly impacting approximately "4.4 acres of existing open water bottoms, 12.3 acres of low quality bottomland hardwood (i.e., Willow) forest, and approximately 1.5 acres of low-moderate quality mixed Cypress-Tupelo-Willow." *Public Notice,* at 3. This construction will increase the amount of river water coming from the north and will create new pathways for sediments to move into back swamps and deep-water habitats, like lakes and bayous, threatening thousands of acres of wetlands which will eventually be filled in a converted to bottomland hardwood forests. This seemingly minimal direct impact of 18.2 acres will have gargantuan impacts to the surrounding area, as discussed more below.

Additionally, the public notice fails to contain any discussion on proposed mitigation to offset these anticipated direct impacts. Absent compensatory mitigation measures employed to offset these unavoidable direct impacts, the project fails to comply with the Guidelines and Corps

regulations as it will result in direct losses and degradation to special aquatic areas and productive wetlands in the Atchafalaya Basin.

ii. **Indirect Impacts**

The CWA Guidelines also require the Corps to consider the secondary effects associated with the proposed activity prior to issuing a permit decision. 40 C.F.R. § 230.11(h)(1). Secondary effects include "effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material." *Id.* The Code of Federal Regulations recognizes the significance of secondary impacts from wetland destruction by emphasizing that "minor loss of wetland acreage may result in major losses through secondary impacts." 40 C.F.R. §230.41.

The project is already diverting huge amounts of river silt and sand into the BCMU project area, accelerating the demise of cypress forests and deep-water habitat. The presumably "minor" loss of 18.2 acres of wetlands will result in major, irreversible losses throughout the BCMU project area.

iii. **Cumulative Impacts**

The CWA Guidelines also require the Corps to "predict[] to the extent reasonable and practical," collect and solicit information, and consider during the decision-making process the cumulative effects attributable to the discharge activity. 40 C.F.R. § 230.11(g)(2).[1] The Corps must analyze and address the cumulative impacts of this project. 40 C.F.R. § 1508.25(c)(3). This includes addressing impacts of past, present and reasonably foreseeable future actions, also such impacts that may be the result of minor but "collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7.

It has been acknowledged and accepted that the changes in hydrology in the Basin are significant and warrant consideration in determining how best to manage, preserve and restore the Basin's ecosystems. The long-term impact of this project will continue to result in exacerbated sedimentation in the project area and eventual filling in of the interior swamps. This project area already suffers from the introduction and dispersal of sediments into the area, which will continue year after year, for the foreseeable future. The enhancement of sedimentation into the BCMU area will make it more difficult for cypress to regenerate, promoting the growth of highly competitive species such as water elm, swamp privot and vines (ladies eardrop and Brunnichia Ovata). Similar projects like the Beau Bayou Project, and including the elements already implemented in the BCMU, are already filling wetlands, the cumulative impacts of these combined projects to the Basin's wetlands are significant and must be considered.

Part of this cumulative and secondary impacts analysis must include an assessment of the unpermitted fill and conversion of wetlands resulting from elements already implemented as well as current accretion trends in the area before Element 10 is authorized. Otherwise, the Corps will not be able to determine which impacts result from the BCMU project activities or from the existing spoil banks and other impediments.

[1] Cumulative impacts are defined as "the changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material." 40 C.F.R. § 230.11(g)(1).

Although the draft EA #441 claims there are many benefits the proposed activity will provide to complement earlier implemented elements of the BCMU pilot project (as discussed in the "cumulative effects" portion of the EA at page 32-34, prior implemented projects, such as the Beau Bayou Project, and elements of the BCMU and other proposed projects, such as the East Grand Lake project, have and will move huge amounts of sediment-laden river water into the project areas. The result is catastrophic, destroying thousands of acres of swamps, lakes and bayous. The accumulative impacts of all of these projects are huge and cannot be overstated or overlooked by the Corps.

Specifically, the EA discusses the anticipated future conditions of the wetlands in the area with no action versus with the proposed action. *EA #441,* at 24-25. However, the EA suffers from basic misinformation with respect to conditions on the ground and widely accepted within the Basin. With no action, the EA anticipates that:

> historic north to south flow regimes would not be fully achieved. The area in the vicinity of Element 10 would continue to experience stress from a combination of increased sedimentation, extended flooding cycles and hypoxic conditions. Consistent sedimentation patterns could induce local proliferation of dense willow thickets that are less valuable to wildlife. Open water lakes such as Buffalo Cove Lake and the Ice Box would gradually convert to wetlands. Existing Cypress-tupelo swamps would gradually convert to a mixed association of early and mid-successional bottomland hardwoods including willow, cottonwood, sycamore, ash, and maple. Swamps that dry occasionally would convert to a shrub swamp dominated by buttonbush and water elm. Overall, a net increase in wetlands is expected in the vicinity of Element 10 as deeper waters transition to shallow open water, and shallow open water converts to vegetated wetlands.
>
> *EA #441,* at 24.

Meanwhile, the Corps supposes that the future outlook of this area with the proposed action would:

> reestablish annual flooding and dewatering cycles that would benefit wetlands that are now either drying out or that exist in stagnant, waterlogged conditions. Over bank flooding prepares bare mineral soil seedbeds for species such as willow, cottonwood, and cypress by washing away heavy deposits of organic material. Floodwater dispersal selectively establishes some species on bare ground, while immersion improves the germination rates of others. However, with more frequent spring flooding, successful regeneration of some bottomland hardwood species could be adversely affected. Because complete submergence checks seedling growth and prolonged submergence stresses and eventually kills seedlings, regeneration would favor more flood tolerant cypress-tupelo seedlings, a habitat which is becoming increasingly rare in the Atchafalaya Basin.
>
> With the proposed construction of Element 10, it is possible that the back swamp would be able to completely drain, resulting in favorable conditions for forest regeneration and a reduction in the existing hypoxic conditions. This reduction of

> hypoxic conditions could improve the vigor of trees that are experiencing stress from such conditions. Further, decomposition of accumulated organic material would greatly increase which would have a positive effect on water quality during subsequent floods. Aquatic organisms such as crawfish and their terrestrial predators would also benefit from the periodic expansion of the floodplain habitat and the prolonged existence of the aquatic swamp habitat.
>
> *EA #441,* at 25.

Unfortunately, this does not accurately reflect the ongoing trends on the ground. The wetlands are already filling in at a rapid rate due to sediment accretion, however, cypress-tupelo are not "dying out." Rather, as accretion elevates the Basin floor, cypress and tupelo are being replaced by hardwood species. The project has increased the amount of river sand and silt introduction into the area, and areas that used to be shielded from this sediment introduction are being lost at an alarming rate.

While decreased water levels due to accretion may increase cypress seedling survival, a decrease on the amount of time that those forest are flooded promotes the growth of plants that will outcompete cypress, like swamp privot, water helm, lady's ear drop vines and eventually hardwood trees. Nearly all accreted areas in the Basin are either a big thicket of vines and bushes or hardwood forests.

The three photos below were taken on July 14, 2018 on the east-side of the Atchafalaya Basin on an accreted swamp along Bayou Canon at the following coordinates: 30° 07'12.34" N 91° 21'49.15" W. These photos depict a common result of accretion whereby the elevated basin floor promotes the growth of plants that outcompete cypress. In these photos you can see that the cypress forests are being taken over by lady's ear drop vine as a result of accretion.

Most cypress swamps in the Basin do not regenerate because of very high water levels during the spring and early summer, not because the swamp does not drain during the low water months. Prolonged periods of flooding are critical to keep competition at bay and for the survival of cypress forests.

Despite the EA's claims that implementation of the proposed project will result in favorable conditions for water quality and reforestation, in fact the opposite is true. Since the surrounding swamps are already filling in with sand and silt, with help from the BCMU project which is greatly accelerating the rates of accretion, at this rate all swamps eventually will be replaced with bottomland hardwood habitat and crawfish will disappear due to loss of habitat completely. In effect, this and other projects like it not only fail to improve water quality and habitat in the project area, but actually result in increased harm and degradation of the project site. The totality of the impacts, including those on irreplaceable cypress-tupelo swamps, which will forever be lost if this and other similar projects continue to channel river silt and sand into the project area.

It is incumbent upon the Corps to assess the entire Buffalo Cove Water Management unit area in assessing cumulative impacts related to this project, including the spoil banks and sediment plumes already present. The magnitude of the cumulative impacts that implemented elements of the BCMU have and will continue to have on this fragile ecosystem, in conjunction with the proposed Element 10 activity, necessitates, at a minimum, the preparation of a full environmental impact statement to consider the reasonable, proposed alternatives and total impacts this project has and will continue to have in this area.

ii. The Corps cannot authorize the proposed BCMU project – Element 10 for failure to comply with the Corps Regulations

The Corps' Regulations also provide general policies the Corps must apply in its review of all permit applications. 33 C.F.R. § 320. These regulations include mitigating for unavoidable harms and weighing public interest factors prior to authorizing the activity. If the Corps adequately considers these factors in accordance with its regulations, it cannot authorize the dredge and fill activities proposed in the BCMU project area at Element 10.

1. The lack of mitigation for the BCMU project – Element 10 fails to account for the anticipated wetlands losses

The Guidelines require minimization of potential adverse impacts, but not mitigation explicitly. *See* 40 C.F.R. §230.10(d). However, Corps regulations require the agency to include "appropriate and practicable" compensatory mitigation conditions in Section 404 permits for unavoidable impacts as a result of the permitted activity. *See* 40 C.F.R. § 230.91; *see also* 33 C.F.R. §§ 320.4(r), 332.1 (mitigation is required to ensure compliance with the 404(b)(1) Guidelines).

Here, it appears that no mitigation has been proposed despite the significant direct, indirect and cumulative adverse impacts of this project to irreplaceable swamps.

Compensatory mitigation is defined as "the restoration (re-establishment or rehabilitee), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved." 33 C.F.R. § 332.2. Compensatory mitigation is intended to compensate for the aquatic resources that will be lost due to the permitted activity. *Id.* at § 332.3(a)(1). Although the permit applicant (here the Corps) is responsible for proposing appropriate compensatory mitigation for the proposed activity, the mitigation requirements must be commensurate with the amount and type of impact associated with the permit. *Id.* Generally, the method of restoration should be considered first due to the "potential gains in terms of aquatic resource functions" when compared to enhancement and preservation. *Id.* at 332.3(a)(2). With these parameters in mind, the Corps must consider the anticipated conversion of wetlands in the BCMU area to require restoration mitigation measures if the conduct is permitted.

The Corps must review the proposed project for compliance with the § 404(b)(1) Guidelines to determine whether it can issue a permit considering the lack of appropriate and practicable compensatory mitigation. Considering the totality of impacts that have and will continue to result from the BCMU pilot project, the failure to require any mitigation to compensate for the anticipated environmental harms of the project is justification alone to deny authorization for element 10 under NEPA and the CWA. The Corps must, at a minimum, require some degree of compensatory mitigation to offset the unavoidable conversion of wetlands that will result. In consideration of the project's impacts and the lack of compensatory mitigation proposed, the Corps must deny to authorize the project's element 10 component.

2. The public interest is best served by not authorizing the BCMU project – Element 10 under the CWA § 404

Pursuant its own regulations, and in compliance with § 404(B)(1) Guidelines and § 10 of the Rivers and Harbors Act, the Corps must conduct a public interest review weighing the adverse impacts against the potential benefits of the proposed project. 33 C.F.R. 320.4(a). This review considers the specific facts of the potential permit and the individual and cumulative impacts of the proposed action. *Id*. If this balancing indicates that the project is not in the public interest the Corps cannot issue the permit. *Id.*; 33 C.F.R. § 320.4(b)(4). Additionally, the Corps' public interest review is informed by the evaluation of the proposed project under the aforementioned Section 404(b)(1) Guidelines. 33 C.F.R. § 320.4(a)(1) ("For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such a permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines.").

Based on the information provided in the Public Notice and the accompanying, modified draft EA #441, the Corps fails to overcome the burden created by the § 404(b)(1) Guidelines, which requires a clear showing that there are no practicable alternatives with less adverse impacts to wetlands. 33 C.F.R § 230.10. Additionally, the project will ultimately result in significant degradation of the surrounding wetlands and wildlife habitat. Because the proposed permitted activity does not comply with the Guidelines' requirements it must likewise be denied under the Corps' public interest review. 33 C.F.R. § 320.4(a)(1); *see also* 33 C.F.R. § 320.4(b)(4) ("In evaluating whether a particular discharge activity should be permitted, the district engineer shall apply the Section 404(b)(1) guidelines (40 C.F.R. § 230.10(a)(1),(2),(3)).").

In addition to the 404(b)(1) Guidelines and other applicable criteria, the Corps must deny a permit if the district engineer determines that it would be contrary to the public interest. *Id.* The Corps must consider all factors which may be relevant to the proposed project, including the cumulative effects thereof. 33 C.F.R. § 320.4(a)(1). These factors include, but are not limited to, conservation, economics, aesthetics, general environmental concerns, wetlands, fish and wildlife values, flood hazards, floodplain values, navigation, accretion, recreation, water quality and safety. *Id.*

Specifically, the draft EA presumes that a no action alternative would be more detrimental to recreational interests, asserting that "rapid growth and density of aquatic vegetation would limit access to internal waterways for recreational users. Recreational fishing and craw fishing would be negatively impacted as water quality continued to deteriorate and quality would likely lead to unsuccessful reproduction due to either unsuitable spawning conditions or increased mortality of young fish." *EA #441,* at 29. However, this presumption is fatally flawed. The discussed effect of the project in accelerating accretion in the area, and filling in of deep-water habitat, will cut off not only fish passage but access by boat. In addition, the negative impacts on water quality will impair fisheries. The result of the action alternative will negatively affect recreation and commercial fishing in the area.

For the reasoned outlined below, and in addition to other applicable public interest factors, the proposed BCMU pilot project in its entirety is contrary to the public interest.

a. **The BCMU project will continue to negatively impact valuable wetlands**

The Corps' regulations describe the significant, productive and valuable public resource wetlands provide. 33 C.F.R. 320.4(b)(1). In addition to the critical biological and habitat functions wetlands provide, the regulations acknowledge the impact that alternations to wetlands can have on natural drainage and sedimentation patterns. *Id.* at (b)(2)(ii), (iii). The authorizations made pursuant to the BCMU have already resulted in detrimental effects on the surrounding wetlands and sedimentation distribution patterns in particular. Implementation of another element pursuant to the previously flawed environmental analysis and planning will not correct this ongoing trend. Not only are the wetlands of the Atchafalaya Basin unique, scarce and nationally renowned, they protect millions of people from river floods, provide habitat for a myriad of wildlife and aquatic birds, support commercial fishing of cultural importance to the unique Cajun fishing communities in the area and protect from severe weather events. *See id.* at (2)(i)-(viii). It is indisputable that the wetlands of the Atchafalaya Basin are of particular public interest, importance and significance. Alterations to this invaluable ecosystem, even in the name of "preservation", must be scrutinized thoroughly.

Congress, the Corps and EPA have clearly identified the detriments of dredge and fill projects of the type proposed in this permit application. By devoting an entire permitting program under the Clean Water Act to the disposition of dredge and fill material, Congress signaled its clear recognition that dredge and fill activities may be harmful to the environment and should be conducted with caution. *See* 33 U.S.C. § 1344. Moreover, including this permitting program in the Clean Water Act, the stated goal for which is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," shows that Congress considered the disposed dredge and fill material to be an impairment to our waters. 33 U.S.C. § 1251. This is especially important when the waters at issue includes wetlands. As the Corps' 404 permitting regulations explain, "[since] most wetlands constitute a productive and valuable public resource, the unnecessary alterations or destruction of which should be discouraged as *contrary to the public interest*." 33 C.F.R. §320.4(b)(1) (emphasis added). The Corps' regulations further state that wetlands provide important "biological functions" including general habitat for wildlife, as well as nesting and spawning grounds. *Id*. The applicability of these functions to the Atchafalaya Basin cannot be controverted. *See, e.g.,* 16 U.S.C. §§1451-53 (declaring a national policy to "to preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone for this and succeeding generations" and defining coastal zone to include coastal wetlands).

EPA regulations describe many values that could be lost as a result of the discharge of dredged or fill material in wetlands, including a likelihood "to damage or destroy habitat and adversely affect the biological productivity of wetland ecosystems." 40 C.F.R. § 230.41(b); *see also* 40 C.F.R. § 230.41(b) ("Discharges can also change the wetland habitat value for fish and wildlife."). But while Congress, the Corps and EPA have clearly identified the public interest in preserving wetlands and forbidding the destructive effect of discharged dredge and fill material, the Corps has not clearly identified all potential benefits and detriments to the public interest in undertaking the BCMU project. A very short-lived improvement in water quality does not justify the permanent destruction of wetlands, robbing future generations of these irreplaceable resources.

The Corps' regulations provide that, despite the relatively minor change that may result from a particular alternation of a wetland, the Corps must evaluate the cumulative effect numerous minor changes can have on a complete and interrelated wetland area. 33 C.F.R. § 320.4(b)(3). As previously noted, the cumulative impact of this project on the surrounding wetlands is significant and irreversible. With respect to its adverse effect on the Basin's wetlands, the BCMU project as implemented and proposed is clearly contrary to the public interest.

b. The BCMU project will continue to impair the Basin's capacity to contain floodwaters

The value of floodplains in mitigating flood damage and protecting from storm surges requires close consideration of adverse impacts and a heightened scrutiny for permitting that could impact the functionality of the floodplain. 33 C.F.R. § 320.4(l). With this project more so than any other project proposed for permitting before the Corps, it is imperative that the Corps consider the cumulative effects this and other activities in the area will have on the values and functions of the floodplain, and the increased potential for harm to upstream and downstream activities. *Id.* at (l)(2). Development in a floodplain must comply with Executive Order 11988, Floodplain Management. 33 C.F.R. § 320.4(l)(3). The EO requires agencies to consider alternatives "to avoid adverse effects and incompatible development in the floodplains." EO 11988, Sec. (2)(a)(2).

The Atchafalaya River is the largest distributary of the Mississippi River. Flood protection improvements, constructed primarily under the Mississippi River and Tributaries (MR&T) project, are critically important to the lower Mississippi River area. *State Master Plan*, at 3-4. The MR&T project distributes half of the 3,000,000 cubic feet per second of design project flood at Old River down the Mississippi River and the other half into the Atchafalaya Basin Floodway. *Id.* The levee system along the banks of the Mississippi River protect densely populated areas from New Orleans to less populated communities below the Morganza Floodway. *Id.* Meanwhile, the flood protection in the Basin, including levees, control structures, locks and floodwalls, protects surrounding communities, farms and industries that have developed in areas adjacent to the floodway. *Id.*

In 2016, nearly every Parish in the state was flooded by enormous rains from an overheated Gulf of Mexico. In the aftermath of the Gulf Flood of August of 2016, twenty parishes were declared disaster areas, thirteen people perished, and 122,000 people filed for assistance with FEMA. Julia O'Donoghue, *Louisiana Flood: 8 things you need to know about the aftermath,* NOLA.com, The Times Picayune, Aug. 25, 2016, *available at* http://www.nola.com/politics/index.ssf/2016/08/louisiana_flood_public_safety.html. Reducing flood storage throughout Acadiana by filling valuable wetlands impairs the capacity of the basin spillway to contain floodwaters and protect surrounding communities. These wetlands and waters will only become more valuable for flood attenuation as climate change accelerates, and large rains become more frequent and intense. Van der Wiel, et al. *Rapid attribution of the August 2016 flood-inducing extreme precipitation in south Louisiana to climate change*, Hydrol. Earth Syst. Sci. Discuss., 2016, *available at* https://www.hydrol-earth-syst-sci.net/21/897/2017/hess-2016-448.pdf.

The Atchafalaya Basin is critically important for flood control. Between 1932 and 2001, there has been a net accretion of nearly 2.5 billion cubic meters of sediment in the Basin floodway, converting a substantial amount of open water and cypress swamps to bottomland hardwood

forests. *See* USGS 2001. The ability of the Atchafalaya Basin to move flood waters is severely diminished due to this trend of accelerated accretion. During the 2016 flood, Grand River at Bayou Sorrel crested at 10.39' on August 17, 2016, while across the levee inside the floodway it crested at only 7.1' on August 14, 2016 (levels are fluctuating as the Mississippi River rises). The Atchafalaya Spillway is critical to protect countless cities and communities along the Mississippi River Delta, including the cities of Baton Rouge, New Orleans, Lafayette, Morgan City and the entire industrial corridor along the Mississippi River. As the Basin fills with sediments, its loses its capacity to protect these communities from Mississippi River floods.

Projects like the BCMU pilot project with long-term impacts that accelerate the accretionary process contribute significantly to the impairment of the Basin's spillway functionality. The impact of the BCMU project on the Basin's capacity to manage floodwaters is contrary to EO 11988 and the public interest. In the interests of public safety and floodplain management, the Corps should not authorize the Buffalo Cove Management Unit project – Element 10 as proposed, it should reassess the environmental impacts the BCMU has already had on the project area and surrounding wetlands, it should redesign the project with the goal of restoring the deep-water ecosystems damaged by the project and to develop and implement appropriate measures to manage sediment dispersal away from valuable, irreplaceable wetlands. Atchafalaya Basinkeeper is working with Dr. Ivor VanHeerden on developing those measures and hopes to work with the regulatory agencies towards a sustainable solution.

c. The BCMU project will continue to impair water quality in the long-term

The Corps' regulations require evaluation of the proposed activity's compliance with applicable effluent limitations and water quality standards during and after construction of the proposed activity. 33 C.F.R. § 320.4(d). Similarly, the EPA Guidelines prohibit dredging or discharging fill material if that dredging or discharging should violate "any applicable State water quality standard." 40 C.F.R. § 230.10(b)(1).

Section 401 of the Clean Water Act requires DNR to obtain certification from the Louisiana Department of Environmental Quality for the proposed project which will result in a discharge of dredge and fill material into waters of the U.S. 33 U.S.C. § 1341.

Article IX, Section 1 of the Louisiana Constitution provides that "the natural resources of the state, including air and water, and the healthful, scenic, historic, and esthetic quality of the environment shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people." When issuing permits, LDEQ must satisfy its constitutional mandate as a "public trustee" pursuant to Article IX, Section 1. *See Save Ourselves v. La. Envtl. Control Comm'n,* 452 So. 2d 1152, 1157 (La. 1984). Prior to issuing a final permit, state agencies must determine "that adverse environmental impacts have been minimized or avoided as much as possible consistently with the public welfare." *Id.* LDEQ must conduct an individualized consideration of the proposed project element, balancing environmental factors in good faith before reaching a permitting decision. LDEQ must review the application and all comments and determine that the BCMU project – Element 10 will not violate State Water Quality Standards prior to issuing a water quality certification for this project. *See* LAC 33:IX.1507.F.3.

i. **Louisiana Water Quality Standards**

The Surface Water Quality Standards are intended to serve the objectives of the CWA and to preserve and protect Louisiana's aquatic ecosystems. LAC 33:IX.1101.A. The Antidegradation Policy requires the maintenance of waters that support "an unusual abundance and diversity of fish and wildlife resources" to be maintained at their existing high quality. *Id.* at § 1109.A.1. It ensures that new discharges will not exceed specified standards and that designated uses will not be adversely impacted. *Id.* at 1119.C. Additionally, the waters of the state must be "protected for recreational uses and for the preservation and propagation of desirable species of aquatic biota and indigenous species of wildlife." *Id.* at § 1109.B.1. Wetlands are held to a particular degree of importance and are seen as a valuable resource to the state, including commercial, recreational and cultural uses. *Id.* at § 1109.J.1. Louisiana wetlands serve many important functions, including "biological and physiochemical functions that include . . . buffering against hurricanes and storms, holding excess floodwaters during high rainfall or high tides, . . . and improving water quality by filtering pollutants and taking up nutrients." *Id.* The general, numerical and biological criteria applicable to wetlands can be found at LAC 33:IX.1113.B, C.

Applicants seeking a state water quality certification are required to submit an application to LDEQ's Department of Environmental Quality. LAC 33:IX.1507.A. The information contained in the application must include, among other things, "the nature of the activity to be conducted by the applicant, including estimates of volume of excavation for dredge and fill activities;" "the location of the discharge"; "the nature of the receiving water, including type (creek, river, swamp, canal, lake or pond), nature (fresh, brackish or salt), and direction or flow;" "the type of discharge"; "and the location of discharges into receiving waters." *Id.* at (A)(1)(a)-(n). Upon completion of the review process by LDEQ, the Applicant shall publish the public notice "in each parish in which the activity is to be conducted" allowing for a 10-day comment period. *Id.* at (D). The notice shall include, among other details, the activity proposed in the application along with the nature and location of the activity. *Id.* at (D)(1)(c). LDEQ cannot certify the proposed project without first identifying applicable water quality standards and water use designations of the various streams and open waters and assessing how the project will impact those standards.

The proposed project's impact on applicable criteria includes impacts on sedimentation rates and distribution patterns, which can affect the floating, suspended or settleable solids contained in the waters (1113.B.3), turbidity (1113.B.9) and the biological and aquatic community integrity of the waters (1113.B.12). The numerical criteria of concern in relation to the BCMU project include, but are not limited to, dissolved oxygen values (1113.C.3.). Most concerning is the impact to the designated uses of the area, which include primary contact recreation, secondary contact recreation, fish and wildlife propagation and drinking water supply. LAC 33:IX.1123.D. With respect to the present and future anticipated accretion as a result of this project, these uses cannot possibly be maintained or preserved. The fragile state of the cypress swamps in the BCMU area cannot be maintained with the nutrient loading hypoxia that will result or the potential for contaminated sediment to be introduced from years of industrial development, extraction/transportation in the area and fertilizers, pesticides and herbicides from agriculture. While LDEQ must ensure the affected water bodies maintain their recreational uses and support the preservation and propagation of desirable species of aquatic biota and indigenous species of

wildlife, the project's public notice fails to address these functions or the impacts this project with have thereon, and the draft EA does nothing to save from this deficiency. LAC 33:IX.1109.B.

The draft EA provides that the proposed activity at Element 10 will have the following effect on water quality:

> The proposed action would benefit water quality in the southwest portion of the BCMU by removing hydrologic barriers so that interior areas may drain southward during falling river stages for 7-8 months during a typical year. This would allow for the natural exchange of stagnant, swamp water with shallow, open-water from Buffalo Cove Lake by reconnecting the biogeochemical processes in the forested wetlands and swamps. The rate of sediment accretion on the south end of Buffalo Cove Lake would decrease by establishing a direct hydrological connection to the Ice Box immediately south. This would also allow for the transport of organic debris and water hyacinth which would improve circulation along the 2 mile corridor. Because habitat in the BCMU is regularly flooded and largely uniform, the spread of invasive species, such as water hyacinth, is not anticipated.
>
> The proposed element construction would be consistent with the goals of the BCMU for improving flow, circulation, and water quality as well as to preserve wetlands and sustain biodiversity among aquatic and wildlife habitats. Gaps of 25 feet would be designated as no fill zones on each spoil bank every 200 feet to minimize hydrological impacts and allow for lateral circulation. Thus, localized stagnant conditions would be minimized by the improvements to north-south flow and east west-west flow; water circulation would improve and water velocity would increase.
>
> *EA #441*, at 31.

However, the Corps' reasoning is flawed. A more direct route will increase the amount of water moving through the system, increasing water velocity and allowing for more river sand to move farther south towards what used to be Buffalo Cove Lake. Sediment deposition will increase in sensitive, unprotected areas that are targeted for preservation on the south side of Buffalo Cove Lake. The reduced depths caused by sedimentation would result in higher water temperatures, which are correlated with hypoxic conditions. In general, water quality would continue to worsen, and conditions would actually be less suitable for desirable aquatic species.

As the Basin's wetlands fill with sediments and become uplands, their ability to absorb river nutrients and pollutants is forever lost and, in the long term, impacting the state's ability to manage the dead zone in the Gulf. Considering the long-term effects of completely transforming the hydrology of the impacted area by exacerbated and accelerated sedimentation creating uplands, LDEQ cannot find that the BCMU project – Element 10 will comply with applicable water quality standards and effluent limitations. The project is incompatible with sustainable water quality improvements and is contrary to the interests of the commercial fishing communities that rely on the fisheries, and the public at large.

d. **Fisheries and Wildlife Habitat**

Part of the public interest analysis includes coordination with agencies responsible for fish and wildlife resources, with a focus on conservation by prevention of direct and indirect loss and damage to wildlife resources as a result of the proposed activity. 33 C.F.R. § 320.4(c); *see also id.* at § 320.3(e), the Fish and Wildlife Coordination Act. Similarly, the Clean Water Act Guidelines consider the impacts and potential loss of value in recreational and commercial fisheries due to the discharge of dredged and fill materials. 40 C.F.R. § 230.51. Furthermore, the State Master Plan states that the "preservation of pockets of old growth is a goal of this Master Plan." *State Master Plan*, at 3-2. The Master Plan recognizes the public interest in protecting the remaining old growth cypress trees that were spared from the massive harvesting operations that dominated the early 20th century.

As discussed at length throughout this comment letter, the negative impacts to fish and wildlife habitat cannot be overstated. This project has already impaired the project area as a result of accelerated accretion. To authorize Element 10 would exacerbate this ongoing harm, directly and negatively impacting surrounding wildlife habitat and fisheries.

3. **The harms that will result from the implementation of the BCMU project – Element 10 significantly outweigh its purported benefits**

In addition to the aforementioned factors the Corps must consider in making a public interest determination regarding the proposed activity, the regulations also provide general criteria that must be considered in every application evaluation. 33 C.F.R. § 320.4(a)(2)(i) – (iii). These general criteria include public and private *need* for the project, the practicability of using reasonable alternative methods or locations to accomplish the project's objective and the extent and permanence of the beneficial and/or detrimental impacts the project will have on the area. *Id.*

The Corp's environmental assessment is flawed, and includes inaccurate information and inconsistencies. The Corps should prepare a full environmental impact statement that accurately reflects and considers true, on the ground conditions of the project area, all alternatives and contributors to the ongoing harm.

The project's Public Notice fails to provide basic information upon which the public interest balancing inquiry can be performed as required by 33 C.F.R. § 320.4(a)(1). Despite the many years of research and monitoring performed in the project area as articulated in the draft EA, there is a void of scientific support offered to justify the project, assessing the long and short-term effects with an accurate depiction of the current status of the project area and ongoing trends across the Atchafalaya Basin. The Corps cannot authorize the proposed activity if it fails to consider the true and accurate on-the-ground status of the project area as a result of its previously implemented project elements.

The Buffalo Cove Management Unit project's objectives was to introduce river water from the north, improve internal circulation, remove barriers to southerly flow and to reduce or redirect sediment disposition in the area. As a result of project implementation, the Buffalo Cove

Management Unit has introduced huge amounts of sediments into the area, many of the cuts filled with sand within one year and have willow trees growing on the sandbars today.

Additionally, the Beau Bayou Project (finished in 2017) is also introducing huge amounts of sediments into the project area with deltas already forming. In around 2000, an oil access canal was dug 0.9 miles from the Bayou Sorrel Locks that brought sandbars over four (4) feet high into the area. Around the same time, the Corps dug a ditch along the northern end of the Bayou Sorrel Locks dredge disposal site into Cow Bayou that filled much of Cow Bayou and a significant amount of surrounding swamps.

The Coastal Protection and Restoration Authority of Louisiana contends that "a sustainable landscape is a prerequisite for both storm protection and ecological restoration." Coastal Protection and Restoration Authority of Louisiana, *Executive Summary*, Louisiana's Comprehensive Master Plan for a Sustainable Coast, at 3 (2007). Furthermore, the cost of destroying Louisiana's wetlands can be measured in billions of dollars per year. *See* Coastal Protection and Restoration Authority of Louisiana, Louisiana's Comprehensive Master Plan for a Sustainable Coast, at 74 (2017). We cannot afford to continue to degrade our wetlands at such a high cost to the economic interests of the state and to public health and safety. Public funds should not be used to fill in irreplaceable swamp habitat while the coast is starved for sediments. Projects like the BCMU project contribute to this ongoing harm and deprivation at the coast.

In accordance with the regulations, the Corps cannot permit conduct impacting valuable wetlands in the Atchafalaya Basin without expressly finding that benefits of the project outweigh the damage to the wetlands resource. 33 C.F.R. § 320.4(b)(4). The purported benefits of short-term water quality improvement do not outweigh the significant detriments already witnessed as a result from the BCMU project. The Corps cannot authorize this project's Element 10 and comply with its own regulations, the 404(b)(1) Guidelines, the goals of the ABP, the Coastal Master Plan and the State Master Plan for the Atchafalaya Basin Floodway System.

b. THE NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act ("NEPA") provides "our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). It assures that environmental protection is considered in every federal agency action. 42 U.S.C. § 4332(1). NEPA requires agencies to disclose all potentially adverse environmental impacts of its decisions prior to determining whether to proceed. 42 U.S.C. § 4332(C). NEPA also mandates that agencies utilize high quality, accurate scientific information and requires scientific integrity of the analysis. 40 C.F.R. §§ 1500.1(b), 1502.24. Here, the Corps must conduct an "independent evaluation" of the information on the BCMU pilot project and its impacts on the surrounding area thus far to ensure its accuracy and reliability. 40 C.F.R. § 1506.5.

NEPA requires the Corps to consider the direct, indirect and cumulative effects of the proposed activity, in conjunction with the Guidelines required consideration of the secondary effects on waters of the U.S. 40 C.F.R. §§ 1502.16, 1508.7, 1508.8; 230.11(h). NEPA also requires the Corps to consider all reasonable alternatives to the proposed action. 40 C.F.R. § 1508.9. As discussed infra, the overlap of these requirements under NEPA and the CWA and the corresponding

responsibility of the Corps in considering the effects of the proposed activity is important to the Corps' overall environmental review of the project.

i. The Environmental Assessment is Substantially Flawed

In connection with the public notice released for review and comment on the BCMU project – Element 10, the Corps also released via mail to select, interested parties copy of its draft environmental assessment (EA #441) for the Atchafalaya Basin Floodway System, BCMU, Logjam Circulation Improvements. The notice letter sent with the draft EA #441 indicates that the Corps will not sign the Finding of No Significant Impact (FONSI) "will not be signed until all environmental review and compliance requirements have been completed." *See* Letter "To Interested Parties" accompanying draft EA #441. In addition to the many aforementioned reasons the proposed action and the BCMU project path in general fails to comply with applicable laws and regulations, there are many troubling flaws in the draft EA #441 which necessitate additional environmental review and on-the-ground monitoring of the project area prior to authorizing the proposed action. As proposed, the Corps cannot sign the FONSI because there are a multitude of significant impacts the project will continue to have, and the proposed element will contribute to, in the project area.

The following discussion considers select portions of the draft EA #441, offering comments in response to reflect the current on-the-ground status of the project area and need for additional considerations by the Corps before any additional elements can be authorized for implementation.

> The Atchafalaya Basin is a large, shallow depression lying within the deltaic plain of the Mississippi River in south central Louisiana. The Atchafalaya River is the largest distributary of the Mississippi River, and a series of connected lakes (Lake Fausse Point, Grand Lake, Six Mile Lake and Flat Lake) historically transported water from north to south. Since the mid-nineteenth century levee construction and diversion of Mississippi and Red River waters to the Atchafalaya River has forced these lakes to act as sediment traps, leaving smaller remnants of the original lakes and bayous. Further, oil and gas exploration and production have created numerous east to west canals whose spoil banks act as hydrologic barriers to the historic circulation patterns. These trends include high sedimentation rates, hydrologic changes, and changes in vegetation composition which have considerably altered the character of the Basin's fish and wildlife habitats.
>
> The first hydrologic barrier south of Buffalo Cove Lake (10A) currently restricts flow and fish passage throughout most of the year due to a large accumulation of detritus (i.e., logs, floating aquatic vegetation, etc.) along a spoil bank on the south end of Buffalo Cove Lake. Two additional areas (10B and 10C) constrict and restrict north-south flow downstream of Buffalo Cove Lake and accumulate similar material. Cuts are proposed across the three areas in order to flush the material downstream of Buffalo Cove Lake, and into the Atchafalaya River. Combined, these cuts would improve and extend hydrologic flow during mid to low water stages, improve the function and increase the benefits of management units upstream, and improve local water quality, thereby improving fisheries.

> Flow and hydrologic connectivity occurs approximately two months each year during high water events. However, after construction, flow would occur after water elevation rises and exceeds the adjacent lake bed. On average, southerly flow would occur 7 to 8 months per year and would naturally remain static for 4 to 5 months per year during low water. The proposed work would also result in a permanent hydrologic connection between the adjacent lakes and allow for fish passage during low water periods.
>
> *EA #441*, at 2-3.

To someone unfamiliar with the project area, undoubtedly the draft EA appears very thorough and logical. However, it simply does not accurately reflect the current state of the project area. There is no remaining deep-water habitat in the area for fish to go to. *See* Report attached as Exhibit A. Unfortunately, Buffalo Cove Lake as natives to the area used to know no longer exists, and all the main bayous are likewise no more as a result of poorly managed sediment disposal in the area. The Corps cannot sign a FONSI based on misrepresentations of the status of the project area in its draft EA or on utopian goals that are no longer feasible. The Corps must consider alternative options to improving the area and restoring portions already negatively impacted by its own short-sighted actions.

The EA continues by identifying the objectives of the BCMU elements, which include to "[r]educe and/or redirect sediment deposition." *EA #441*, at 3. However, the Corps fails to indicate how it will reduce sediment deposition and whether those sediments will be redirected. The sedimentation trends indicate that the Corps has not yet ascertained how to effectively manage these sediments. As such, it cannot expect to observe any anticipated "improvements" in the area before it addresses this substantial threat to the sustainability and longevity of this area. It is incumbent upon the Corps and coordinating agencies to implement measures to address this ongoing harm that is causing irreparable harm to the surrounding swamps.

> Consistent with the original objectives #2 and #3, the purpose of Element 10 is to remove existing hydrologic barriers in lower BCMU improve circulation. The proposed action would improve southerly flow between the Buffalo Cove Lake to the Icebox, and from the Icebox to Chico Pass and ultimately the Atchafalaya River during lower river stages. The proposed action would improve existing flow in lower BCMU as well as prolong the hydrologic circulation during low river stages from approximately 2 months per year to 7-8 months per year on average.
>
> Element 10 is the southern-most management element for improved circulation, and monitoring data indicate that improving north-south flow via Element 10 would also compliment BCMU elements upstream. Water would flow from Buffalo Cove Lake during lower water stages southward to the Chico Pass and ultimately reconnect with the Atchafalaya River. Completing this series of project features would create a north-south flow corridor approximately 2 miles in length that would improve circulation and considerably reduce hypoxic stagnation during low water stages.

> The primary goal of the proposed Element 10 project is to improve water quality, improve habitat quality, and improve fishery production to approximately 2,300 acres in the lower BCMU. A secondary goal is to prolong the existence of open water within Buffalo Cove Lake by reducing sedimentation and aquatic vegetation within the lake. Stagnant water conditions prevalent during much of the year in the southern part of BCMU would be reduced through the improvements to north-south flow and increased velocity and water circulation. Dissolved oxygen would be improved in the lake and the adjacent swamp habitat. By facilitating natural flow patterns, the high rate of sedimentation and plant material accumulation (e.g. logs, hyacinth, etc.) would also be reduced at the south end of Buffalo Cove Lake by reducing low flow and stagnation.
>
> *EA #441,* at 3-4.

Again, Buffalo Cove Lake is no longer deep-water habitat. The project will increase water currents and eventually fill in the Icebox with sediments. Also, it is counterintuitive to presume that bringing in more sediment-laden river water will reduce sedimentation in Buffalo Cove Lake. The Corps has not shown what open water is left in Buffalo Cove Lake or where these redirected sediments will be deposited.

In consideration of the "Authority" under which the project is proposed, it is clear that the project does not protect the environmental and, in light of the exacerbated sediment observed in the area (again, *see* Report attached), the project is actually a threat to flood protection. There is another substantial inaccuracy in the "Authority" section of the EA, wherein the Corps articulates that:

> The Management Unit feature of the ABFS project authorizes the construction of two pilot Management Units. The first of the pilot units is the BCMU. The second pilot unit is the Henderson Lake Management Unit. Three other management units that are conditionally authorized are Beau Bayou, Flat Lake, and Cocodrie Swamp. Construction of these latter management units, under the authorization, is held in abeyance until such time as the pilot units are constructed, operated, monitored and evaluated to determine the operational success of each of the pilot units in the restoration of historic overflow conditions to benefit the aquatic ecosystem. After an appropriate period of evaluation and analysis, a recommendation is to be made to the Chief of Engineers requesting a decision regarding the implementation of the three conditionally authorized management units.
>
> *EA #441*, at 4-5.

However, unfortunately this proposed sequence of project implementation is not accurate. Prior to completing implementation of the BCMU pilot project, the Corps authorized St. Martin Parish to construct the "latter management unit" at Beau Bayou. The unfortunate result shows similar consequences as those shown in the BCMU area with massive sedimentation destroying valuable wetlands.

With respect to the "Monitoring Efforts" discussed by the Corps in the draft EA, it asserts that it has undertaken an "extensive pre-construction and post-construction monitoring program to evaluate the performance of constructed elements within the BCMU." *Id.* at 8. Despite assurances that the "project's *effectiveness* will continue to be monitored for a 5-year period after the final element is constructed," it is incomprehensible that the Corps has been collecting extensive data in this area since 1997 and yet it continues to make the same mistakes that cause damaging and irreparable harm to these deep-water habitats and surrounding wetlands. *Id.* at 8. (emphasis added). The sediment trap at Bayou Eugene was built in 2001, and sadly by 2003 it was completely filled in with sediment. Similarly, Buffalo Cove Lake has filled in rapidly, and Jackass Bay and Bayou Gravenburg is nearly lost, and the large tracks of cypress-tupelo wetlands among them are filling in.

Moreover, the EA provides "measurable goals" for its monitoring program, which includes to "[l]imit sediment accretion to less than 1 inch per year in the areas of influenced by water inlet projects." *Id.* However, in many of these areas, you can measure the sediment accretion in *feet*. *See* Report attached as Exhibit A.

In the "Adaptive Management" discussion of the EA, the Corps describes adaptive management to be:

> a flexible approach to long-term management of biotic resources that is directed over time by the results of ongoing monitoring activities and other information. More specifically, adaptive management is a process by which projects are implemented within a framework of scientifically driven experiments to test the predictions and assumptions outlined within a plan. To apply adaptive management, specific goals, surveying, inventorying, and monitoring protocols are adopted.
>
> Adaptive management consists of experimentation, combined with scientific monitoring and analysis. Consequently, designs and features that work are proven, while designs and features that do not work are modified or no longer used. In order to address the technical uncertainties associated with implementation of the water management feature for the BCMU**,** pilot management features were initially established for Bayou Eugene prior to embarking on full-scale development of the entire water management program for the BCMU. Since then, the feasibility and optimum design of the elements necessary to attain the feature's authorized goal and purpose of benefiting and enhancing the aquatic environment of the Lower Atchafalaya Basin Floodway System have been adaptively managed, including approaches in design and monitoring.
>
> *EA #441,* at 9.

While this method provides a plethora of opportunities for modification, of which we proposed viable alternatives for the Corps to consider in response to the state of management results observed on the ground and the need for modification to adequately address the ongoing harms resulting from prior project failures, unfortunately this method is proving to be more rigid and ill-

fated as the Corps apparently intends to continue with its original concept despite the conflicting results observed on the ground. The amount of sand moving into wetlands from Element 12 can be measured in feet. Element 16 has filled in so fast with sediment that within a few months of implementation much of it was already filled in, and within one-year willows were growing on much of the cut. *See* Report. For the Corps to truly adhere to its own proposal of adaptive management methodology for implementing these pilot projects, it should halt its current trajectory and reassess its options to employ more successful elements to combat ongoing harms and restore impacted areas.

In the section "Public Concerns and Agency Coordination" the Corps identifies the legitimate concerns centered on "the probability of increased sedimentation and insufficient circulation, which may lead to hypoxic conditions and further reduce or eliminate viable habitat." *EA #441,* at _. These articulated concerns have proven accurate and substantial. However, neither the Corps nor coordinating agencies and monitoring partners at LSU seem to acknowledge this concern which has become an ongoing, harmful reality on the ground. Furthermore, the coordination and planning processes describe present yet another project in which the proponents either fail to consider the reality of its consequences or perhaps desire as much. Powerful landowners have been advocating for similar projects in the Basin for years, and this is a pattern we have observed with other projects such as East Grand Lake and Beau Bayou. It is unethical to authorize and continue to implement a project when the observed results are causing irreparable harm to wetlands and irreplaceable swamps and deep-water habitat, in contravention of applicable environmental laws the agency is charged to uphold.

The "Environmental Justice" discussion not only fails to identify the legally recognized minority Cajun population, but it also fails to recognize that, although there are no permanent residents in the BCMU area, the surrounding swampland in the Atchafalaya Basin provides the last bastion of the swamp-based Cajun culture and that many of these Cajun families still rely on the Basin's swamps for sustenance and employment. The loss of the swamps of the Atchafalaya Basin disproportionately impacts this Cajun minority, its culture and ecological inheritance. Despite its claim that the BCMU will not impact population demographics, the more fisheries and deep-water habitat lost as a result of these Corps projects, the greater the impact on the Basin's minority Cajun fishing community.

The EA contains may additional discrepancies that do not accurately reflect the environmental consequences of the Corps' management of the Basin through these types of projects. The remainder of the critique of the EA, the "Environmental Consequences" portion, is incorporated throughout this Comment in sections infra discussing environmental considerations under the Clean Water Act and other applicable laws.

However, under NEPA, the Corps must conduct further assessment of the impacts this project will continue to have on the BCMU project area. The substantial flaws identified in the draft environmental assessment, coupled with recent observations at the project area, necessitate, at a minimum, that the Corps prepare a full environmental impact statement to address the ongoing harms of sedimentation as a result of the prior implemented elements of the projects, the Corps' alternative options to respond to the sedimentation trends observed and to development an adequate plan to monitor and restore areas already negatively impacted by the project.

ii. The Corps should, at a minimum, prepare an EIS to ascertain the totality of impacts and availability of alternatives to the BCMU project

If, after careful evaluation and assessment of the impacts of the project, the Corps determines that the adverse effects will be significant, it *must* prepare a full environmental impact statement ("EIS") to analyze the effects. 40 C.F.R. § 1501.4 (emphasis added). In determining whether the environmental impacts of an activity are significant, the Corps will consider both the context and intensity of the proposed action. 40 C.F.R. § 1508.27. In terms of context, the Corps must consider an array of contexts including the region affected by the conduct. *Id.* With regard to intensity, there are several factors the Corps must consider, including impact of the proposed activity on public health and safety, unique ecologically critical areas, unknown risks and cumulatively significant impacts. *Id.*

Here, because the direct, indirect and cumulative environmental effects of the BCMU project are already significant, the Corps must prepare a full EIS for the remaining proposed actions pursuant to the BCMU pilot project. As noted, the long-term impacts of this project are staggering and crippling to the overall health and longevity of the surrounding swamps and waterbodies.

iii. Deficiencies in Public Notice and Process

The procedures under NEPA require "that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. § 1500.1(b). The Act provides further that "(a)ccurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." *Id.* Pursuant to Act's policy statement, NEPA requires federal agencies to encourage and facilitate public involvement in decisions affecting the human environment, identify and assess reasonable alternatives, and to work to restore and enhance the quality of the human environment. *Id.* at § 1500.2.

Neither the Public Notice for the BCMU – Element 10 management unit feature nor the accompanying, updated Environmental Assessment (EA #441) were posted on the public notice tab on the New Orleans District of the Corps' webpage. Rather, it is our understanding that these were shared via regular mail to interested parties, agencies and stakeholders. Neither Atchafalaya Basinkeeper nor the Louisiana Crawfish Producers Association-West were notified via mail of these two opportunities for public comment. We only received notice of this opportunity for comment when a colleague who did receive the Public Notice by mail shared it with us. We followed up with the Corps, and the project manager, to inquire about the project to receive all applicable public documents, which were sent by email on July 5, 2018, less than two weeks from the date comments are due.

Thereafter, on July 9, 2018, Atchafalaya Basinkeeper sent an email seeking clarification regarding how best to receive notification of this and similar authorizations by the Corps, and requesting an extension of time in which to comment on the Buffalo Cove Water Management Unit Element 10 Corps project and accompanying EA #441 to the extent allowed under law. To date, we have yet to receive a response from the Corps with respect to either request. Furthermore, the nature of the Corps review and approval of this project is unclear. Nowhere in the Public Notice does the Corps

discuss permitting or how it will otherwise authorize the project. Whether the Corps must issue a § 404 permit for the project, another type of permit approval or even a less-formal internal authorization, it must disclose such to the public for reasonable opportunity to comment on the requisite procedure and substantive considerations. We presume some manner of § 404 authorization based on the proposed dredge and fill activities, and therefore provide substantive comments specific to that type of permitting authorization.

In sum, the requirements under NEPA necessitate that the Corps take a hard look at the proposed BCMU pilot project and all of its elements and conduct its own independent evaluation of the information offered in support of this project. We question how this "independent evaluation" can be achieved when the project proponent is also the assessor of the project under the law; when all stakeholders, agencies and interested parties were not adequately notified of the proposed activity or the supporting environmental assessment with sufficient time or information to adequately comment; and when the nature of the activity's authorization by the Corps is unclear in the public notice document. Because of the significant impact this project will have on the acres of swamps, lakes, rivers and bayous in the Buffalo Cove Management Unit project area, the Corps should refuse to authorize the element 10 activity as proposed. At a minimum, the Corps must prepare an EIS to adequately assess the totality of impacts and review all reasonable alternatives, particularly based on the failure and harm caused by the implementation of the project's preceding elements.

c. CONSISTENCY WITH STATE AND FEDERAL LAW AND POLICY

The Corps' regulations require the agency to ensure consistency with other applicable laws. 33 C.F.R. 320.3. According to the State Master Plan, "[t]he State's principal interest is to restore, where possible, and to preserve, where feasible, the natural habitat that has made the Atchafalaya Basin a national treasure." *State Master Plan*, at 6-1. Moreover, the Master Plan states that "the goal of the management units is to prolong the expected life of some habitats that may become scarce through time (primarily aquatic and cypress/tupelo habitats) by managing sediments, while at the same time achieving a healthy water circulation pattern that will maintain or restore water quality. Sediment laden water would be directed to areas that would naturally be undergoing accretion (e.g. natural levees, overbank areas) or to maintained areas designed to trap sediments, thus prolonging the existence of swamp and aquatic habitats." *State Master Plan,* at 6-1. Ultimately, the State Master Plan envisioned the employment of "careful coordination" between the state and federal agencies "to achieve optimum results in the public interest." *Id.* It is evident from the stated purpose of the Plan and the articulated interest in restoring the Atchafalaya Basin, that this mission must underscore the Corps' evaluation and consideration of the BCMU project with respect to its own regulations as well as other applicable laws.

The anticipated effects on the surrounding wetlands will have impacts felt at the coast as the deposition of sediments in the BCMU area will deprive the coast of needed sediments. The Coastal Zone Management Act, whose goal is to preserve, protect, develop and restore the resources of our coastal zone, requires federal agencies whose activities will affect a state's coastal zone to comply with the state-approved coastal zone management program. 16 U.S.C. §§ 1456(c), 1451. DNR's Office of Coastal Management implements the Louisiana Coastal Resources Program (LCRP). La. R.S. 49:214.21 *et seq*. Federal permitting activities within or outside the coastal zone that have reasonably foreseeable effects on any coastal use (land or water) or natural resource of the coastal zone must be fully consistent with the state's coastal management program. 16 U.S.C.

§1456(a)(1)(A). The BCMU project must be subject to a consistency determination to ensure that the proposed project is consistent with the state coastal plan. This includes the state approved program, the Coastal Restoration and Protection Authority's Master Plan for a Sustainable Coast, applicable Parish guidelines and other applicable coastal protection authority. In light of the anticipated impacts, this project cannot meet consistency standards and should not be proceed.

The Corps must also ensure that the BCMU project is consistent with The Fish and Wildlife Act of 1956 (16 U.S.C. 742a, *et seq*.), the Migratory Marine Game-Fish Act (16 U.S.C. 760c-760g) and the Fish and Wildlife Coordinate Act (16 U.S.C. 661-666c) which express Congressional intent "to protect the quality of the aquatic environment as it affects the conservation, improvement and enjoyment of fish and wildlife resources." 33 C.F.R. 320.3(e). As previously noted, this project could have grave consequences on the sustainability and longevity of fish, bird and other wildlife habitat. The Migratory Bird Treaty Act of 1918 protects migratory bird populations from takings. *See* 16 U.S.C. §§ 703-712. Migratory bird species protected under the Act that migrate annually through the Atchafalaya Basin, and use the BCMU project area, include, but are not limited to: Roseate Spoonbill, White Ibis, Anhinga, Snowy Egret, Great Egret, Wood Stork, Yellow and Black-crowned Night-Herons, Little Blue Heron, Wood Duck and Cormorant. *See* 50 C.F.R. 10.13 (list of protected species). One of the greatest threats to birds is the loss and degradation of habitat from development or disturbance. *See Threats to Birds*, U.S. Fish & Wildlife Service, updated Mar. 12, 2018, *available at* https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php. Bird habitat restoration and protection can mitigate against the accelerated decline in bird populations. *Id.* This can be accomplished through coordination and consultation with the U.S. Fish & Wildlife Service. Before authorizing a project whose impacts will degrade irreplaceable migratory bird habitat, the Corps must consider these impacts and consult with the Service.

Following a necessarily comprehensive environmental review of the project, assessing its inconsistencies with applicable laws, the Corps must ultimately find that this project is not only inconsistent with state and federal law and policy, but also that it is detrimental to the restoration efforts underlying the ABP and the State Master Plan.

III. CONCLUSION

The Public Notice is devoid of information necessary to adequately consider the totality of impacts that will result from the proposed activity in the Buffalo Cove Unit of the Atchafalaya Basin. The draft Environmental Assessment #441 is substantially flawed and does not reflect the realities on the ground. In addition to failing to meet EPA's 404(b)(1) Guideline requirements under the Clean Water Act, the proposed activity does not satisfy the Corps' regulations for permitting dredge and fill activities. In consideration of the significance of proposed project and its adverse impacts to wetlands, the Corps should adequately assess alternatives and the totality of project's impacts and modify the project to restore the deep-water habitat destroyed by the project and to create a plan to keep river sand in the Atchafalaya River away from the BCMU project area. At a minimum, pursuant to NEPA, the Corps should halt the project all together. The BCMU project is contrary to the public interests of protecting wetlands, floodplain functionality, water quality and wildlife and fishery habitat.

Despite the articulated goals, purpose and need for the BCMU project, this project presents a significant threat to the health of the ecosystems, habitats, fisheries, communities and wildlife of

the Atchafalaya Basin and to the ability of the Atchafalaya Basin to handle Mississippi River floods. For the many reasons discussed herein, in the interest of the public and in accordance with applicable federal and state law, Atchafalaya Basinkeeper, Gulf Restoration Network, the Louisiana Crawfish Producers Association-West and the Delta Chapter of Sierra Club respectfully request that the Corps halt and modify the project to restore deep-water habitat and keep sediments away from the area. At a minimum, the Corps should prepare a full environmental impact statement to assess and address these substantial consequences, consider viable alternatives and prevent continued damage to the project area, its valuable wetlands and irreplaceable swamps. Finally, we formally request that the Corps hold a public hearing to allow for additional opportunities for the public not otherwise informed of the draft environmental assessment and proposed activity to provide comment thereon.

Thank you for your time and consideration of our comment.

Respectfully submitted by,

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EXHIBIT A

BUFFALO COVE MANAGEMENT UNIT PROJECT

Friday, July 13, 2018

Trip Report

On Friday July 13th Atchafalaya Basinkeeper and LCPA-West visited elements 12 and 16. Water levels were high for the season, the stage at Butte LaRose was 9.2.

Element 12

Element 12 has almost completely filled in with river sand within a few months after it was built. Today, half of the area has willows growing on it. The other half was only about one foot deep and impassible with an outboard motor despite high water levels. Approximate coordinates: 30°03'55.75" N 91°35'31.69" W

Element 16

Element 16 is bringing huge amount of sand and silt, filling swamps and what is left of Bayou Eugene an at alarming rate. Approximate coordinates: 30°03’14.45” N 91°34’19.18” W

The first picture depicts the swamps closer to Bayou Eugene holding water. The following pictures depict swamps filled by sand. The pictures are in order, coming from Bayou Eugene toward the canal that is the sediment source created by the Corps. Notice how the amount of sand increases as we move toward the sediment source. Notice bushes and willows taking over as the cypress swamp fill with sand and silt.

Small willows growing on newly accreted swamp:

This is a slough full of sand. Another waterway lost forever:

The first picture shows water full of sand and silt moving from the cut into Bayou Eugene. Despite the higher than normal water levels, Bayou Eugene was very shallow and will go almost completely dry during the dry season. Hardly a deep-water habitat for fish.


MERCURY
90

Notice the river sand mixed with organic material.