Colonel Christopher Klein District Commander U.S. Army Corps of Engineers, CEMVK-PMP 4155 Clay Street Vicksburg, MS 39183-3435

Via email comment portal: PearlRiverFRM@usace.army.mil

June 27th, 2023

RE: 2023 Scoping for Pearl River Basin MS, Federal Flood Risk Management Project, Rankin and Hinds Counties, MS

#### Dear Colonel Klein:

I am writing to you to provide scoping comments for the Pearl River FRM project on behalf of Healthy Gulf, an environmental advocacy non-profit group active in the five Gulf States and founded in 1996 as Gulf Restoration Network.

Healthy Gulf submits comment letters in the hope that we will be responsive to the needs of the communities we serve, respecting the interests of marginalized and oppressed people in them. We acknowledge that many Gulf South residents are confronted every day with the legacy of historical injustices as well as current environmental issues that threaten their health and well-being. We believe that the experiences, perspectives, and leadership of low-income communities and communities of color must inform our collaborative service.

Representing Healthy Gulf, I attended the May 23<sup>rd</sup> Slidell and Jackson, MS May 24<sup>th</sup> public engagement meetings for scoping of the new 2023 Draft Environmental Impact Statement (DEIS) being prepared for the Pearl River Basin federal Flood Risk Management project in Hinds and Rankin Counties, MS. I spoke to the Army Corps and ASACW staff hosting the meeting and gave verbal comments for the record along with others from Mississippi and Louisiana who represent the interests of communities along the Pearl River. I have raised objections about Alternative "C" advanced by the non-federal sponsors for Pearl River flood management since 2018 when the Rankin Hinds Drainage District published the first draft of the EIS. I personally visited the Pentagon in February of 2020 and 2023 along with elected officials from Louisiana and Mississippi to voice my concerns about Alt. "C" to Deputy Secretary Leach, Ms. Andrea Walker, Deputy Secretary Pinkham and others.

A concern we voiced in 2018 that remains is the extent of the statutorily prescribed study area for the project. It is limited to Rankin and Hinds Counties in Mississippi. The study area does not include lower sections of the river as it must to fulfill the WRDA points of analysis on "environmental acceptability" (WRDA 2007 Sec 3104) and "economic justification" (WRDA 2018 Sec 1176).

We understand that the historic flooding problems in the Jackson Metro area are the focus of the 2023 DEIS and array of alternatives shared at the Slidell and Jackson meetings. We empathize with the plight of the residents of Rankin and Hinds Counties who have endured serious floods in 1979, 1983, 2020 and 2022. We understand that they need a project that provides relief. However, as the "Pearl River Basin" appears in the title of the current project and in the project's name in the 2018 DEIS, we expect that the

needs and concerns of the whole of the Pearl River Basin will be taken into consideration in any alternatives that are formulated, published, and supported by the Army Secretary. The last study under section 211 WRDA 1986 was authorized by Congress, with the expectation that the entire basin be taken into consideration. Louisiana's Congressional delegation left no doubt about this Congressional intent when Senator Bill Cassidy and Representative Steve Scalise inserted Section 1176 in WRDA 2018, requiring the Army Corps to take a hard look at downstream impacts from an additional dam and lake on the Pearl River in Mississippi.

The Army Corps of Engineers is in a difficult position as it has taken over authorship of the Draft EIS for this flood management project from the Rankin Hinds Pearl River Flood and Drainage Control District. The entire federal cost share, \$221 million, has been appropriated in the bipartisan infrastructure act (IIJA) and placed in the budget of the Corps for Pearl River flood risk reduction. The Corps leadership and the Assistant Secretary both know that the United States Senators from Mississippi and the elected officials, religious community leaders, chambers of commerce, state legislators representing the Metro Jackson area, and even the Mississippi Children's Museum director support Alternative "C", yet this project is the most destructive to the environment, has the most potential to impact the physical and biological health of the Pearl River and is opposed by downstream towns, industries, commercial fishermen, swamp tour businesses, and by resolutions against Alt. "C" by the Louisiana Legislature (2018) and the Louisiana Senate (2023).

# **Scoping Elements:**

## Flood Risk Reduction

Hinds and Rankin County Issues

There were three alternatives provided at the Army's public engagement meetings of May 23-24, 2023: C, A, and A1 and a combination of the three, and the Corps welcomed other alternatives. One alternative from 2018 was left out, a levees only comprehensive plan. This 2023 reformulation by the Army included the lake plan that downstream counties and parishes objected to in 2018. We at Healthy Gulf would like to see flood risk reduced for Jackson but prefer a plan that carries no risk of altering river flow or temperature from more water impoundment, especially in the months of July-October when historic low flows on the Pearl River occur. We prefer setting levees back on one or both sides of the river to widen the Pearl River's floodplain through Rankin and Hinds Counties, combined with non-structural elements from alternative A or A1.

The flood risk reduction outlined in Alternative "C" is tied to location benefits derived from developing land that is now unoccupied floodplain on the unprotected (batture) side of the Pearl River which seems to be in clear violation of Executive Order 11988 (1977). This EO is cited in the Engineering Notebook that guides the economic benefit (NED) analysis for this project. This Army Corps notebook ER-1105-2-100 (2000) cites E.O. 11988 and its presumption against developing floodplains that are currently undeveloped batture land- the exact type of wetland filling contemplated by Alternative C. Building structures on top of federal levees as Alternative "C" contemplates is something the Corps and Army Secretary should not encourage. I grew up along the federal levees that protect New Orleans and have never seen buildings deliberately constructed on top of levees. Such a practice flaunts the intent of E.O.

11988 and actually places more development in harm's way adjacent to a river. In Jackson development on the riverside levees would be less than 10 miles downstream of a 38,000-acre reservoir with a dam that has three feet of "freeboard" over which to raise water levels before the dam's design capabilities are exceeded – on an unruly river with a history of four major floods in the past 40 years. Adding more development to the floodplain in Rankin and Hinds Counties in the form of bed and bank dredging and wetland filling contemplated in Alternative "C" doesn't solve flooding problems that have been created by the cumulative impact of 60 years of post-reservoir floodplain development in both counties. Solving flooding in the developed floodplain of the Pearl River in Hinds and Rankin Counties by approving a project that will encourage more development on raised lands (that are now batture) is regressive thinking that looks back to the time before the Clean Water Act.

## Lower Pearl River flood risk reduction issues

As the Army Secretary and the Vicksburg Corps staff heard in Slidell on May 23<sup>rd</sup>, the lower Pearl River has flooding issues too. Water releases from the Ross Barnett Reservoir happen throughout the year when the Pearl River Valley Water Supply District, in consultation with the National Weather Service, foresee modeled precipitation events in conjunction with winter and spring cold front passage or summer and autumn low pressure systems, including tropical storms and hurricanes or other heavy rainfall during the year. Typically, water releases happen 3-5 days before a large rain event – cold front or storm- is predicted for the upper Pearl River watershed. Downstream cities and towns see quick and steep increases in river stages in these pre-storm periods and by the time the water releases reach St. Tammany Parish and Hancock County there can be coastal flooding happening in addition to a headwater flood. Many speakers at the Slidell meeting led the Army Corps through the scenario of a coastal storm surge happening when the Pearl River is already flooding due to a water release from the Ross Barnett Reservoir.

In the past two Pearl River floods for Rankin and Hinds Counties, 2020 and 2022, the Ross Barnett floodgates were used to raise the level of the Ross Barnett Reservoir as much as safely possible- to nearly 300 feet above sea level - and prevent the maximum amount of water from being released to the tailwater section of the Pearl River to prevent some tributary flooding in the dam's tailwater. This operation method slightly moderated the effects of both recent floods for Rankin and Hinds Counties, so the use of the dam and floodgates (not designed or legally authorized for the flood control purpose) to nevertheless control the timing and volume of water releases has been a successful strategy.

#### Water Supply

#### **Hinds and Rankin Counties**

There were comments at the public engagement meetings of May 23-24 proposing that Alternative "C", lake dredging would somehow solve Jackson's water drinking water treatment deficiencies. This is not true. Jackson's August 2022 drinking water crisis began when the O.B. Curtis treatment plant in Ridgeland, Mississippi adjacent to the Ross Barnett Reservoir was unable to treat the reservoir water due to turbidity and water chemistry changes cause by heavy rains and a heavier than usual sediment load in the reservoir. The Curtis facility is **ten miles upriver** from the "study area" that Alternative "C" would occupy and where Alternative "C" would dredge, widen and further dam the Pearl River. Having the One

Lake plan (Alt. "C") in place would not have prevented Jackson's water crisis. Jackson also had a drinking water crisis during the cold weather that caused the "Texas freeze" and power outages of 2021, totally unrelated to flooding when the intake structures at the O.B. Curtis plant froze and the entire water system collapsed after water towers were drained and the system could not prime its water towers or keep up with demand.

Jackson's river/creek flooding and drinking water supply problems are related only in the sense that when it rains heavily in Jackson and its sewer mains overflow into the stormwater system, the city's urban tributaries send sewage to the Pearl River. Under these conditions, Jackson's other drinking water treatment plant (J.H. Fewell) has heavier bacteria loads to disinfect during water treatment. The entire urban section of the Pearl River has been under a Mississippi Department of Environmental Quality water contact advisory for fecal coliform bacteria for five years. The City is also under a federal court consent decree due to years of sewage permit limit violations. Until Jackson's sewage collection system is repaired the advisory and consent decree won't be lifted. The estimated cost of repairing Jackson's broken sewers and outdated Savanna Street sewage treatment plant is more than twice the \$355 million price tag of Alternative "C".



The only alternative among C, A, and A1 that has the capability and likelihood of harmful reductions in river flow (water quantity) downstream of Jackson is the lake dredging plan, Alternative "C". Evaporation from a wider, slower moving and warmer 10-mile section of the Pearl River especially in the seasonal low flow months of July-October will mean that river surface and tailwater conditions below the new weir will be warmer than current surface and tailwater conditions. A wider and warmer river will have a higher evaporative loss than the narrower, more shaded present condition of the Pearl River through Jackson. The square 15'x15' gate in the center of the Alt. C's new weir can release water during low flow conditions but will require cooperation from the Pearl River Valley Water Supply District (PRVWSD) that manages the Ross Barnett Reservoir floodgates upstream.

Eubanks Creek near Lakeland Drive became eutrophic and supported an algae bloom in September of 2021 after a large sewage pipe spilled into it. All of Jackson's Pearl River tributaries are sewage impaired and will contribute polluted water to the lake contemplated by Alternative "C".

The primary uses for the Ross Barnett Reservoir, built in 1960-1963, are water supply and recreation. If the PRVWSD is asked to increase reservoir discharge to accommodate Alternative "C" and its associated

increased evaporation and water temperature, or for any other reason, reservoir operational procedures will need alteration and statutory purposes of the PRVWSD will be more difficult to meet. The Rankin Hinds Pearl River Flood and Drainage Control District has not prioritized communication with the PRVWSD about how the Ross Barnett Reservoir operations would be combined with the Rankin Hinds District's locally preferred plan, Alternative "C". Conversations about this have been inexplicably delayed. The Army Secretary and Army Corps of Engineers should engage the PRVWSD about these subjects as it writes the next Draft Environmental Impact Statement. A discussion of how climate change would affect flood control on the Pearl River was left out of the 2018 DEIS as well, and the Army Corps of Engineers should address this deficiency.

## Lower Pearl River water supply issues

Downstream scoping issues on water supply include water withdrawal from the Pearl River for agricultural and industrial users. Fresh water from rivers is sometimes needed to irrigate crops in Mississippi, and riparian landowners may pump water out of rivers for agriculture without extensive regulation by the Mississippi Department of Environmental Quality. Permitted water use also needs to be summed up for all holders of industrial and municipal NPDES permits. The importance of developing a water budget for the whole Pearl River Basin is clear if Alternative "C" moves closer to being approved by the Army Secretary. There wasn't a water budget for the river in the 2018 Draft EIS published by the Rankin Hinds Drainage District. The Corps and Army Secretary need to correct this deficiency. Wells for drinking water in the coastal areas of Hancock County and St. Tammany Parish are vulnerable to saltwater intrusion and low flows on the Pearl River allow the salt wedge to migrate up the Pearl and West Pearl channels. St. Tammany Parish listed this threat for residential drinking water wells near the Pearl River, and several speakers at the May scoping meeting cited landward migration of the salt wedge killing freshwater marsh plants and trees as saltwater moves higher up the lower Pearl River from estuaries near its mouth. Changing plant ecology along with the northward migration of the boundary between freshwater swamp and brackish marsh are already apparent from the dead cypress trees on the lower river and anything the Army Corps or local non-federal sponsor do that reduces river discharge can accelerate this process.

The St. Tammany Parish Engineering Department wrote extensive and critical comments on the 2018 DEIS that included Alternative "C" in much the same form as now. Those comments were responsive to the issues cited above.

## **Water and Wastewater Treatment**

There are two minimum flow targets to consider on the Pearl River with respect to Alternative "C" or any structural alternative to address flooding. The "contract minimum" that must be released from the Ross Barnett Reservoir is 170 cubic feet per second (cfs). However, the practical minimum flow target is 227 cfs to meet the needs of the Savannah Street sewage treatment plant about 15 miles downriver from the Ross Barnett Reservoir on the Pearl River's west bank. The plant's Clean Water Act National Polluted Discharge Elimination System (NPDES) discharge permit requires this discharge as a bare minimum for adequate dilution of the effluent discharged into the Pearl River. The J.H. Fewell drinking water treatment plant withdraws 48 cfs from the river between the Ross Barnett Reservoir and the Savannah Street sewage treatment plant.

The St. Tammany Parish Engineering Department used United States Geological Survey (USGS) river gage statistics and daily readings over the period of record for river gages and analyzed minimum flow target (7Q10) measurements pre-reservoir and post-reservoir at several sites on the river: Jackson, Ms., Monticello Ms., the Strong River confluence and Bogalusa, La. The analysis focused on the number of days and percentages of occurrences below the minimum flow at a site, and the number of times and percentages that a minimum flow failed to meet the 10th percentile for flows over the daily flow readings. These analyses were made using USGS stream discharge records post-Ross Barnett Reservoir construction. Savannah Street had a minimum flow permit requirement of 290 cfs before 2017. From 1965 to 2017, flow at Jackson's Savannah Street was below the 290 cfs minimum there 3917 times or for 18% of readings. The Savannah Street plant's NPDES permit was changed to a lower minimum flow requirement of 227 cfs in 2017. For the post-Ross Barnett period, the river has fallen below 227 cfs on 1613 days or for 7.7% of daily readings. The St. Tammany report concluded "During the critically lowflow months of July-August, flows from the Ross Barnett are lower than pre-Ross Barnett construction (1965)"and further concluded on the basis of the 10% percentile analysis of Jackson's Savannah Street plant, "It is apparent that flow control at the Ross Barnett Reservoir is making the stream baseflow lower at least during July-August, summer critical months for NPDES dischargers, water quality, habitat, recreation, navigation and coastal interests."

Having a river discharge fail to meet minimum requirements on 7.7% of daily readings at the location where a sewage plant's effluent meets the receiving stream is something that the Army Corps should be concerned about because of anti-degradation rules and because of the 2015 Total Maximum Daily Load (TMDL) report for nutrients. The heated surface waters of a dredged lake (Alternative C) will generate more evaporation in the warm months of the year than the Pearl River currently experiences in the 10 mile "study area" reach. Warmed, nutrient-rich surface water from the lake will flow over the weir and meet the Savannah Street POTW plant's nutrient-laden effluent in what will likely be a very impaired location on the Pearl River. Mississippi already reports the water in the Ross Barnett Reservoir and the urban section of the Pearl as eutrophic (nutrient over-enriched) in the 303(d) and 305(b) water quality reports it sends to EPA and Congress.

Low flow problems on the regulated Pearl River begin with the amount of water discharged from the Ross Barnett Reservoir. Adding a second lake (Alternative "C") to the Pearl in Jackson causing further evaporative loss, particularly in July-October, will increase water quantity problems. A second lake on the river will compound existing compliance challenges with the Savannah Street NPDES permit and cause problems for downriver dischargers with permits subject to the limits governed by the 2015 nutrient TMDL. That document needs to be revisited to see if the location of the modeled "critical cell" for biological oxygen demand, dissolved oxygen and chlorophyll moves up or down the river because of the creation of a new lake that imposes new challenges for the river's physical and biological health. Downstream stakeholders, NPDES permit holders, agricultural and recreational users don't need any of these additional problems that lake construction brings with it.

Counties and Parishes downstream don't need the Pearl River's low flow problems to be any more complicated than they are now. A water budget has not been offered for the entire river so far in a DEIS. Downstream stakeholders need to see a water budget written with and without Alternative "C" developed and shared as part of the 2023 DEIS by the Army Corps. This must account for existing impairments, climate change, warmer water temperatures from a lake plan, evaporation and the 2015

MDEQ TMDL report's non-point source pollution Best Management Practices that were enumerated but have never been implemented.

# **Ecosystem/Environmental Impacts**

#### **Rankin and Hinds Counties**

The habitat damage that would happen in the Jackson reach of the Pearl River in Rankin and Hinds Counties includes a footprint of disturbance of 2500 acres. Up to 25 million cubic yards of riverbank and bed soils and alluvium along 10 miles of river will be dredged and moved to fill what are now all floodplain and batture – lands on the river side of existing levees. Wetlands make up 1860 acres of this total. Critical habitat for the Ringed sawback turtle would be destroyed in Jackson as basking logs and snags would be removed and sandbars used for nesting areas would be dredged or submerged in the project footprint as the river's bed and banks are cleared and excavated to widen and deepen the river.



Adult Ringed sawback turtles, with a juvenile on a Pearl River basking log in LeFleur's Bluff S.P. Credit: Wesley Shoop, Ph.D.

Also, we know the Gulf sturgeon migrates through the urban reach of the Pearl River described as the "study area" in Rankin and Hinds Counties – radio tagged sturgeon have been recorded since 2018 swimming past monitoring receivers in LeFleur's Bluff State Park, upstream of the weir at the JH Fewell drinking water treatment plant. Mitigation for the sturgeon in the form of a fish ladder or fish passage device has been proposed, but the environmental conditions in the lake itself may be unacceptable for the sturgeon.

Ten miles of the river will be changed from lotic habitat to lentic habitat which will affect the sturgeon and a suite of other river-dependent fish species – those that need flowing water for either their feeding or reproductive or life-cycle requirements. Because all the riparian vegetation that currently shades the Pearl River for parts of the day will be removed, the surface water temperature in the dredged section of the river can be expected to rise, compared to pre-project conditions. Lining the shores of the lake with limestone rock or concrete bulkhead will likely be required for soil stability during high flow events. Engineered shorelines like these absorb solar energy and radiate it into water, which will also make the temperature of lake water warmer than the river's current conditions.



The 1860 acres of wetlands that would be removed along the riparian areas in Jackson contain mature hardwood bottomland forest, which is very good habitat for wildlife, particularly for birds. LeFleur's Bluff State Park has been designated as an Important Bird Area by the National Audubon Society and its birdwatching checklist has 211 species with 75 that breed in the park. Beyond the 392-acre state park, the floodplain forests on both sides of the Pearl River on private and public land make a corridor through which birds and wildlife can move, feed, migrate and use for nesting.

The fish above were an incidental catch (released after photo) by commercial fishermen in 2018 near Monticello, MS. Gulf sturgeon navigate over sills, and have reached Jackson, Ms. in the past 3 years.

This habitat corridor has remained largely intact in the years since the building of the Ross Barnett Reservoir because it is a floodway. There is a lot to be said for cities that have mature forests with good wildlife habitat within them. Evapotranspiration by trees processes stormwater, and carbon is stored in tree trunks. Wetland soils allow percolation of water into shallow groundwater which provides a source

of flow to streams - these are ecological services provided in an urban space and their value can be quantified. Trees moderate climate and cycle moisture from the ground into the atmosphere during the growing season. Trading a portion of this green corridor through Jackson for a developed urban riverfront landscape with many acres of impervious concrete would mean the loss of well used habitat and environmental services for both wildlife and people.



Prothonotary warbler, LeFleur's Bluff State Park. Credit: Wesley Shoop Ph.D. The Jackson Audubon Society has maintained nest boxes for these birds in the park for 23 years and has monitored nesting success for the last 5 years.

## Downstream environmental/ecological issues

On river systems with decades-long reductions in flow, the health of floodplain forests has declined. This has happened in the Flint/Chattahoochee/Apalachicola system, and it can happen on the Pearl River system too. Dr. Helen Light, a USGS research scientist, documented a long-term decline in forest health correlated with declines in river discharge in that river system in Alabama, Georgia and Florida. Since Dr. Light's work was first published, a decline in the number of Tupelo gum trees in floodplain forests and a corresponding decrease in "Tupelo honey" production based on this tree species were reported as being

tied to long term reductions in the amount of fresh water. Apalachicola Bay's oyster population is so unhealthy now that this fishery was closed to commercial harvest. Mississippi's ambitions to create more dams and lakes on the Pearl River can lead it down this same path. The oyster harvest in both Louisiana and Mississippi is tied to the freshwater discharge of the Pearl River. The health of the hardwood forests of the Honey Island Swamp and Pearl River National Wildlife Refuge along the Lower Pearl River in Louisiana are also vulnerable to changing flow conditions.

The following landings and values of oysters predate the 2019-2020 extended opening of the Bonnet Carre Spillway that lowered salinities, created harmful algae blooms and low dissolved oxygen conditions that caused almost complete mortality to oyster reefs in affected areas of southeast Louisiana and the western Mississippi Sound. Oysters have been slowly recovering since 2020, but harvests could be reduced if the Pearl River's freshwater flow to coastal estuaries decreases causing unseasonably high salinities. Unstable salinities and high salinities cause oyster reef mortality.

12,481,594 (meat pounds) of oysters were landed during 2012-2017 in fishing areas of Southeast Louisiana influenced by the freshwater inflow from the Pearl River. An average of 2,080,594 meat lbs. per year were harvested over 6 years. The weight (meat pound) trend was stable and above 2,000,000 lbs. annually 2015-2017.

\$92,701,373 (dollar value) of oyster harvest 2012-2017 in fishing areas of Southeast Louisiana influenced by the freshwater inflow from the Pearl River. Average value of \$15,450,229 per year over 6 yrs. Harvest dollar value trend was above \$12,000,000 annually 2014-2017.

#### **Existing Waste Sites**

There are three toxic waste sites that will be disturbed if Alternative "C" is chosen: The Gulf States Creosote Plant site in Flowood, Rankin County would become part of the eastern bank/shore of the lake; The former LeFleur's Landing or Jefferson Street landfill is on the west bank, and the former Gallatin Street Dump site is on the west bank of the lake dredging and widening project. (Fig. 1 Alt. C and HTRW Site, from 2018 DEIS) Five more known toxic waste sites are close to the footprint of the lake but would be outside of the dredged floodplain wetlands.

Eight million dollars were allocated in the 2018 DEIS for remediation or cleanup of these toxic waste sites and listed as a budgeted item used in the calculation of project total cost and Benefit: Cost ratios. On March 20, 2023, a staff member from Environmental Management Services Inc., a Mississippi-based engineering consultant, met with Assistant Deputy Secretary of the Army Jaime Pinkham and expressed his professional opinion that this cost estimate was too low by an "order of magnitude." It is hard to understand why the cost estimate for toxic site remediation and cleanup was ten times too low in the Rankin Hinds Drainage District's 2018 DEIS report and appendices. Perhaps the writers of that document used low toxic site cleanup costs to maximize the benefit to cost ratio for Alternative "C". Secretary Pinkham remarked to us at our Pentagon visit that he wanted to know the "true costs" involved in the project and provide public engagement.

<sup>&</sup>lt;sup>1</sup> Source: Louisiana Dept. of Wildlife and Fisheries Trip Ticket Program. 2012-2017 statewide public and private oyster landings by area fished codes, 902,420-1,420-2,420,419,416,417,422. This area corresponds to Lake Borgne, Mississippi Sound, Lake Catherine and Breton Sound.

Choosing an alternative such as A, A1 or a combination that does not disturb toxic waste sites should be a priority for the Army Corps of Engineers. Disturbance of toxic sites like the old creosote plant upstream of the J.H. Fewell water treatment plant's intake pipe would put Jackson's drinking water at risk. The writers of the 2018 DEIS have already stated that lake construction will make the Pearl River so turbid that the J.H. Fewell plant would need to stop withdrawing water to protect its filtration and water purification equipment. In this situation the Drainage District stated that Jackson would need to find a temporary alternative source of water during construction - to replace the 30% of Jackson's drinking water provided by the Fewell facility. The representative of the Army Assistant Secretary for Civil Works, Ms. Robyn Colissimo, stated two different times at the Jackson meeting on May 24<sup>th</sup> that the Army Secretary would not support a project that interrupted Jackson's drinking water supply for any reason.

## Downstream effects of toxic waste site disturbance

The toxic chemicals and compounds suspended by dredging and disturbing three sites — a brownfield creosote plant and two city landfills - will also send polluted water downstream to the lower Pearl River counties and parishes. The massive sewage discharges, in the billions of gallons per year, from Jackson's failing Savannah Street POTW and its tributary creeks are bad enough, but downstream stakeholders would all like to avoid the addition of legacy toxic waste being mixed into the Pearl River's discharge. Letting toxic soil and sediments remain in place is a better choice than disturbing them.

## **Cultural Resources**

Because of the need for confidentiality of site locations, the cultural resources appendix created by the Rankin Hinds Drainage District has not been made public. However, using a Mississippi public records request, a redacted version was released by the Mississippi Department of Archives and History directly to Pearl Riverkeeper (PRK). When PRK published the redacted cultural resources report on its website, the Rankin Hinds Drainage District's board attorney sent a "cease and desist" letter the next day to PRK with threat of legal action if the report was not taken down immediately from the website. Pearl Riverkeeper complied.

There are many Native American sites listed in the Drainage District's cultural resources appendix and dredging and disturbing between 1800 -2400 acres of floodplain forest, including low ridges scattered in the floodplain, which could be Native American middens or mounds, will certainly disturb or destroy some of them. This seems to be a "sore spot" with the non-federal project sponsor — one that it would like to keep out of the public eye and public discussion. Healthy Gulf does not support any flood management plan that disturbs Native American cultural sites in the Pearl River floodplain.

## **Transportation**

The only flood control option that would cause disruptions to transportation during construction and implementation is Alternative "C", a plan to dredge the Pearl River deeper and wider over 10 miles. There are nine (9) road and rail bridges that cross the study area of Alternative "C". A letter from Director Melinda McGrath of the Mississippi Department of Transportation dated 9/5/2018 cited bridge failures on the nine bridges if sediments were dredged away from bridge support footings during project construction for Alternative "C". The cost of replacing or repairing bridges was omitted from the Drainage District's 2018 Draft EIS. Replacing just the prestressed concrete decks of nine bridges would

cost at least \$100 million dollars. It is hard to explain why such a major cost was left out of the budget for Alternative "C". Neither alternative A nor A1 contemplate de-stabilizing bridge infrastructure this way.

## **Downstream Impacts**

Downstream impacts are directly related to two of key points of analysis that the Army Secretary is statutorily required to perform by Congress, as discussed above: **environmental acceptability,** and **economic justification.** 

The downstream impacts of this flood risk management project must be environmentally acceptable and must not negatively impact the economies of downstream towns, counties, and parishes. The first town downstream of Jackson directly on the Pearl River is Monticello, Mississippi. Columbia, Mississippi, and Bogalusa, Louisiana are the other two cities directly on the Pearl River in its middle section. These three towns have sewage plants that discharge to the Pearl River, and Monticello and Bogalusa have paper mills that discharge to the Pearl River. Employment in them and their surrounding counties/parishes is largely tied to the paper mills and the industrial support services for the mills. The community of Varnado, Louisiana, is also on the river. Picayune, Mississippi is not on the Pearl River, but its sewage treatment plants discharge to the Pearl, so adequate effluent dilution in the Pearl River is an economic and public health matter to these cities.

There are many environmental and economic impacts to towns in the lower Pearl River Basin from a river dredging and lake construction project in Jackson. Recreational and commercial fishing are still important downstream of Jackson, and in all the counties and parishes downstream, people fish with hoop nets and slat traps for subsistence, sharing catches with family and community, and selling catch in local markets. The ability to navigate the river in small outboard powered skiffs is important to these users. Shoaling and extreme low water events in July-October make using the river very difficult. Land loss due to collapsing, sloughing banks and the associated sedimentation in the Pearl River's channel are effects on the local economy that come from the current operation of the Ross Barnett Reservoir. Landowners are losing land to the river, yet often are still paying property taxes when their land becomes part of a public navigable waterway. Different counties handle this taxation problem in different ways.

When an industrial accident happened on August 9<sup>th</sup>, 2011, during a typical summer low flow period on the Pearl River at the Temple Inland Corporation paper mill, there was a release of "black liquor" from treatment ponds into the Pearl River near Bogalusa, Louisiana. The resulting impact was catastrophic. There was a total fish kill and loss of invertebrate aquatic life in the river in Washington Parish and for dozens of miles downstream. Turtles were sickened by swimming in caustic water, and the small population of the ESA threatened Gulf sturgeon in the Pearl was significantly reduced in the space of two days. All vertebrate and invertebrate life was affected including mussels and aquatic insects. A project such as Alternative "C" that impounds water during critical low flow periods will only make ambient water quality conditions in the Pearl River worse in the face of an industrial accident or discharge of effluent in excess of NPDES permit limits for pH temperature, dissolved oxygen, biological oxygen demand, total solids, ammonia, and other permit limit parameters.

The Army Corps needs to be deliberate and clearly explain its work in responding to WRDA 2018 Section 1176 which requires that the agency take a hard look at likely adverse impacts downstream. Alternative "C" was named in the September 2018 comments of the US Fish and Wildlife Service as the

"most environmentally damaging" alternative of the four that were presented. It is still the most environmentally damaging of Alternatives A, A1 and C; the current NEPA alternatives array.

As Dr. Stanford Owen, a Levee Board commissioner from St. Tammany Parish related in his comments at the Slidell, La May 23<sup>rd</sup>, 2023, scoping meeting, the health of the estuaries, bays and marshes of both Mississippi and Louisiana need to be considered at the mouth of the Pearl and in the coastal waters that receive the Pearl river's freshwater discharge. St. Bernard Parish and Hancock County Mississippi have at least \$100 million dollars-worth of funded, completed, or ongoing BP Restore Act projects focused on oysters, marsh restoration, beneficial use of spoil to build land and shoreline protection. Any harmful changes in freshwater discharge volume or seasonality from an upstream freshwater depleting project like Alternative "C" need to be fully investigated and explained as required by Section 1176 of WRDA 2018. Decreasing the discharge of fresh water or changing its timing can undo the restoration efforts undertaken by both states if salinities increase in the estuary and marshes at the mouth of the Pearl River.

A Coastal Zone Consistency Review must be performed by Louisiana Department of Natural Resources, focused on the modeling and sampling done so far in the writing of the 2018 DEIS and subsequent work that has elevated Alternative "C" as the locally preferred alternative. The region that finds this alternative attractive only includes Hinds and Rankin Counties. Downstream counties and parishes would name it the least preferred alternative. Because the Pearl's flow affects salinities and the productivity of marshes and bays, a consistency review by the Coastal Zone Management Program in Louisiana is necessary.

During the 2023 Louisiana Legislative session, <u>Senate Resolution 189</u> was adopted by the Senate and was enrolled as an expression of the will of the Senate.

The State of Louisiana clearly has many concerns about the creation of another lake on the Pearl River and about the adequate flow of water downstream to the Honey Island Swamp and to the estuaries of St. Tammany and St. Bernard Parishes including important oyster growing areas in Lake Borgne and the Biloxi marsh complex. Senate Resolution 189 asks the Army Corps to perform a Coastal Zone Consistency Review.

## **Recreation Access and Opportunities**

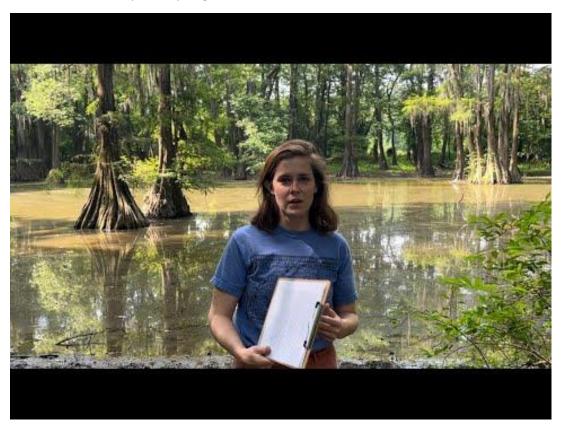
Speakers at the May 24<sup>th</sup> public engagement meeting in Jackson complained about the lack of public access to the Pearl River in urban Jackson. There is public access to the river in Jackson for canoes, kayaks and small boats. There is access on public land to trails along oxbow lakes and riverbanks in LeFleur's Bluff State Park on the Pearl River just downstream of the Hwy. 25/Lakeland Bridge over the river. A boat ramp at the Ross Barnett Reservoir spillway and a boat ramp at Lefleur's Bluff State Park have provided a launch and take-out point for 15 years.

LeFleur's Bluff State Park has the Mississippi Museum of Natural Science on its grounds, and the park and museum share a 2-mile trail system including the Museum's "purple" trail along the Pearl River that ends at the park's public boat ramp and parking lot at the river. Boy Scout canoe trips have used the section of the Pearl River between the reservoir and the park for 15 years. Sport and trot-line fishermen have launched in this section for the same amount of time. The Pearl Riverkeeper has planned and

hosted annual river cleanups since September 2017 on the urban section of the river, using the LeFleur's Bluff State Park boat ramp on the river as a starting point for river clean-up days.

There is public access to the Pearl River and there is demonstrated use of the river by the public. The Mississippi Museum of Natural Science focuses its science education program on the state park, using wetlands and floodplain forests along the Pearl River to teach thousands of students and to train hundreds of teachers at Project WET and Project Wild workshops. The Museum reached its first million visitor mark by 2010 and is one of Jackson's award-winning tourism and educational attractions. It moved from Jefferson Street downtown to LeFleur's Bluff State Park in 1999 specifically to be able to use the Pearl River's wetlands, floodplain forests and river habitats in its educational programs which serve a statewide audience. The Museum's indoor exhibits interpret the Pearl River swamp, including its largest freshwater exhibit – the Pearl River tank, and its swamp terrarium, built in a greenhouse, showcases animals and plants native to the Pearl River and its floodplain.

The Alternative "C" project will dredge away many acres of LeFleur's Bluff State Park along the Pearl River trail and would reduce the quality of the park experience. A riverbank lined with mature 90-year-old hardwood trees and a network of floodplain sloughs and oxbow lakes with mature cypress and tupelo gum trees in the park would be removed by dredging and replaced with banks devoid of trees and a shoreline stabilized by sheet piling, concrete or limestone rock.



This video was made at Museum of Natural Science Trail Stop 16, in LeFleur's Bluff State Park with a viewing deck built by an Eagle Scout. This location is also shown in center of the yellow square in the photograph below as a section of the park slated for dredging and submersion in the Alternative "C" (One Lake Project). YouTube title: "Protect LeFleur's Bluff"



Cypress Pond at Trail Stop 16 (yellow square) in lake dredging (blue) overlay from 2021 MDWFP presentation by the Rankin Hinds Pearl River Flood and Drainage Control District (non-federal sponsor of FRM project)

The dredging footprint of Alternative "C" was presented to the Mississippi Commission on Wildlife Fisheries and Parks in 2021 in a map which showed parts of LeFleur's Bluff State Park that would be dredged away and submerged by lake construction. The non-federal sponsors of the 2018 Pearl River DEIS told the Wildlife Commissioners that the park would lose some land and gain some land in the dredging operation.

#### Lower Pearl River recreational issues

The impact of Alternative "C" to recreational opportunities in downstream counties and parishes has been described above in the "downstream impacts" scoping section. Small boat access to the river is already a problem downstream of Jackson when the river is at low flow July-October. Landowners are

losing riverbank to erosion. The swamp tour business in St. Tammany Parish and in Hancock County Mississippi also needs to be considered. Low water reduces access to swamp areas from the river's main channel and causes tour boats to hit bottom with their outboard motor propellers. Even kayak tours in the Honey Island Swamp along the Pearl River are hampered by seasonal low water events. No tour guide on the lower Pearl has any confidence that low flow problems will improve if Alternative "C" is built.



Dr. Wagner's Honey Island Swamp Tour. In St. Tammany Parish, 122,400 people take boat tours annually on the lower Pearl River creating a \$5 million impact to the local Credit: Bob Warren, The New Orleans Advocate NOLA.com (2017.)

Before the COVID pandemic, the annual economic impact of Pearl River swamp tours was over five million dollars. This robust and popular nature-based tourism industry, featuring the Pearl River's Honey Island Swamp, exists in St. Tammany Parish, Louisiana generating approximately \$3.1 million

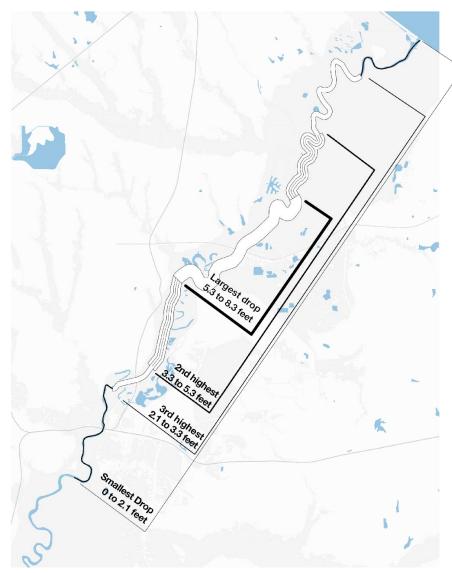
per year in tour fees alone. A total of 122,400 tourists per year at \$25 per person is a conservative estimate of the annual activity of the three largest swamp tour companies. The \$3.1 million does not include canoe and kayak tour company fees. Also, the Honey Island Swamp has many other recreational users: campers, hunters, fishermen and canoers whose activities aren't captured by this revenue estimate. The 2015-2019 Louisiana Tourism Forecast prepared by U.N.O. for the Louisiana Department of Culture, Recreation and Tourism reported 2015 induced tourism spending as 68% of direct tourism spending. This means that the 122,400 people who travel to St. Tammany Parish, paying \$3.1 million in tour fees to see the Honey Island Swamp would spend an additional \$2.1 million dollars a year in the local economy on fuel, food, lodging, and other travel related needs.

Recreation access and opportunities on the Pearl River are not limited to the 10 miles of the urban section of the river in Jackson, Mississippi. Any objective study of recreational uses of the Pearl River must contemplate recreation in the entire basin and include the swamp tour business in Louisiana.

## **Community Impacts**

Community cohesion, general happiness, and freedom from fear of flooding are as important along the Lower Pearl River as they are in any other community. Having a river with caving banks, and a channel that cannot move its sediment load in low flow conditions doesn't make riverside landowners and residents happy or support community cohesion. Landowners downstream of Jackson in several counties and parishes are being charged property tax on more land than they possess due to streambank failure and land loss because of reservoir operations upstream. Riparian landowners are accustomed to the loss of land and timber in the lower Pearl Basin. And when Jackson is releasing water from the Ross Barnett dam in anticipation of heavy rains from tropical storms and hurricanes two or three days away from a storm's impact in central Mississippi, Washington and St. Tammany Parish and Hancock County face storm surges from the Gulf combined with a rising Pearl River. The anxiety caused by a rising river and back-flooding along urban tributaries in Hinds and Rankin Counties is real, but residents along the lower Pearl River must face a storm surge on top of a river flooded by pre-storm water releases from the Ross Barnett 180 miles upstream — a situation out of their control and about which their parish and the State of Louisiana have no voice. This creates short term anxiety and long-term resentment as community impacts.

The decreases in flood elevation at different river mile points in the project area in Jackson were mapped using the data provided by the non-federal sponsor in the 2018 Draft EIS to give a visual depiction of the modeled flood height reductions. The most disadvantaged communities won't receive a meaningful benefit from this project. For instance, the modeled flood height reductions from the 2018 DEIS give an eight-foot flood height reduction to an area along the river that had three feet of flood water in the 1979 flood of record, while an area that received 8 feet of water in 1979 will receive a three-foot flood reduction from Alternative "C" according to the 2018 modeling.



If the Army Corps and **Army Assistant Secretary** for Civil Works are appending their recent work onto the DEIS work already done by the Rankin Hinds Pearl River Flood and Drainage Control District, then the 2023 document's authors inherit these inequities. Overall, the major benefits in flood height reduction go to higher income communities, while lower income communities may receive lower flood elevations, but their houses will still flood. This is a distinction that makes no difference to the people whose homes take on water when the river rises and backs water into creeks and neighborhoods – they still get wet, only with fewer feet of water in their houses.

Quantile map showing a graphic depiction of Alternative "C" modeled flood height reductions for a 100- year flood from Table 3-3 from 2018 DEIS for Federal Flood Risk Management Project Pearl River Basin, Rankin, Hinds Counties, MS. The greatest reductions in flood elevation occur in the highest income neighborhood. Affluent neighborhoods benefit more, and poor neighborhoods benefit less which should not be the result of a federally funded public works project in 2023. Credit: Mapping flood height reductions and CEJST burdens, Juan D. Fernandez.

Alternative "C" doesn't solve all the flooding, nor does it remedy inequities among the flooded communities. And Alternative "C" does next to nothing for the low-income communities along Eubanks Creek, Town Creek, Lynch Creek and others west of Interstate 55. Low income, majority black communities along most of Jackson's Pearl River tributaries (Eubanks Creek, Town Creek, Lynch Creek for instance) are considered burdened by multiple social, health, employment and educational problems according to the Climate, Social and Economic Justice Screening Tool (CEJST) developed by the White House Council on Environmental Quality. The Alternative "C" channel dredging on the main stem of the Pearl River is too far downstream from most of these burdened communities to make any difference at



Choctaw Road, Jackson MS: Dr. Scott Crawford's street, yard and neighbors' houses are inundated by flash flooding several times a year. The wheelchair ramp is under water.

all when flash floods happen in the upper and middle sections of creeks that function as drainage ditches. Flash floods due to inadequate gravity drainage in upstream areas of the tributary creek watersheds happen more frequently during most years than Pearl River headwater flooding caused by reservoir water releases. Both ends of the creeks have flooding problems, and Alternative "C" addresses only one end.

In 2017, the Mississippi Legislature passed and the Governor enacted House Bill 1585 which broadened the taxing authority for a flood control district operating anywhere in Mississippi. The law applies to all districts, but it will support the Rankin Hinds Pearl River Flood and Drainage Control District's taxing power and its ambitions to create a lake on the Pearl River. It allows a flood control district to tax a property owner who benefits "directly or indirectly" from a project. The passage of HB 1585 has the effect of widening the potential pool of property owners within a flood control district's jurisdiction or service area who can be taxed to service bond debt or to pay for construction, operation, and maintenance for a flood control project. There are issues of equity and fairness in letting a flood control district decide who the indirect beneficiaries might be for a flood control project. As described above on the quantile map, the affluent neighborhoods of northeast Jackson gain more flood protection than the less affluent neighborhoods downriver and upriver from them. There may be property owners paying for Alternative "C" who gain no flood protection at all from its construction but are deemed to be indirect beneficiaries. The effect of this expanded taxing authority turns equity on its head.

## **Economic Opportunities**

It was clear that economic opportunities were on the minds of many of the speakers at the Army Corps' May 24<sup>th</sup>, 2023, public engagement meeting at the Mississippi Agriculture and Forestry Museum auditorium. Socrates Garrett, a businessman, contractor, and Hinds County political veteran explained the need for an economic boost to Jackson's economy and was frank in his assessment that Jackson has nowhere to grow to the North, South or West, so the only place to grow is to the East **into** the Pearl River Flood Plain:

Garrett said: "The only potential for growth is in that footprint of the river - the only chance for Jackson to grow and get a new tax base - Develop this river - it's underutilized." This comment could not have

been clearer about what business interests in Jackson are seeking: economic opportunity through development in the footprint of the river - its floodplain.

Garrett reported that it took years to convince Hinds and Rankin Counties to work together on this lake project, and cited many trips to Washinton D.C. to persuade Senator Cochran, Senator Wicker, Leland Speed (Miss Devel. Authority) and other elected officials to support the lake. He cited the time and money contributions of many people who supported the effort.

It was a strange juxtaposition between speaker and listener considering that the Army Corps of Engineers, a federal agency that is acutely aware of the function of floodplains - was being lectured about growth by someone who has supported Alternative "C" for years with the message that the only hope for growth in Jackson is to put more development in the floodplain.

This message is squarely in conflict with Executive Order 11988 which contains a presumption against floodplain development.

Executive Order 11988 of 1977 is cited in the Engineer Notebook from 2000 that governs NED analysis for this project: "This floodplain management order, made during the Carter Presidency, has the intent of avoiding flood plain development, reducing hazards and risk associated with floods, and restoring and preserving natural flood plain values. In the event there is no alternative to construction in the flood plain, as is the case with (some) flood control projects, the Corps is required to minimize the adverse impacts induced by the construction of the project. In considering adverse impacts, the following should be addressed:

- (1) Induced new development in the flood plain or induced improvements to existing development in the floodplain that would increase potential flood damages; and,
- (2) The detrimental effect of induced activities on natural flood plain values."

Army Corps of Engineers notebook ER 1105-2-100 Section III paragraph (I) on Location Benefits outlines rules to follow that consider E.O. 11988.

Alternative "C" of this project finds a significant amount of its economic justification, in "location benefits" and "intensification benefits", both of which are derived from developing land that is currently in the flood plain on the river side (unprotected side or batture) of existing levees in both Hinds and Rankin Counties. These lands flood at least once each year. Table B-16 of the 2018 DEIS report's Appendix B lists \$10.2 million in benefits that are described as Location Benefits (Land New Use) for alternative C, lake dredging. The Drainage District, in fact, relies heavily in its calculation of project benefits upon the \$10.2 million derived from developing land that is currently active floodplain when it chooses Alternative "C" over Alternative "B" (levees only) based on benefit to cost ratio comparison.

The Executive Order above is meant to steer development out of floodplains, but if there is no alternative, the development's induced impacts to flood plain lands must be minimized.

The areas to be developed are downstream of the Ross Barnett Reservoir, and under current operating plans, the floodgate managers must have the ability to raise the Pearl River 10-12 feet in the urban reach of the river in 24 hours at any time to protect the structural integrity of the reservoir dam. The discharge of the Reservoir travels 7 miles and then goes through the project area of the lake dredging plan, so any development placed along the banks of the river in the ten miles of project area should be expected to

accommodate the river rising quickly by up to 10 feet. It is important to note that the Draft EIS predicts future development including the construction of an urban landscape along the raised, filled riverbanks in the project area.

Not allowing the construction of the lake alternative and thereby keeping people and property improvements out of the floodplain would be one way of "minimizing induced impacts". Setting levees back on the east side of the Pearl River could be a better approach and, in fact, Army Corps staff commenting in the "Plan Formulation" section of the 2020 Agency Technical Review (ATR) pointed out that the first incremental benefit to test was the levee setback component, as it held the greatest benefit. Other commenters pointed out that the lake design adds no floodwater storage to the 10-mile section of the Pearl River, unless the lake excavation is kept dry except during large flows.

The non-federal sponsors have so far claimed that deepening and widening the river in the ten-mile dredged area would reduce the 10-foot rise caused during reservoir water releases. To what degree this may occur has been modeled, but these models don't remove the basic problem of the large upstream reservoir water releases sent directly through the project area both during construction and afterwards. Allowing this project to be permitted by the Corps seems to be a predictable way to increase potential flood damage and to violate EO 11988. There isn't a more blatant way to contradict the intent of EO 11988 than the development contemplated by Alternative "C" for the Pearl River floodplain in Hinds and Rankin Counties.

The areas along the Pearl River under consideration for filling and development by the Drainage District are mostly now riparian wetland forest areas and are subject to annual flooding. They currently have natural flood plain values: attenuation of floods, interception of rainfall, soil storage of water, shallow groundwater contribution to river flow, settlement of suspended sediments, and evapotranspiration of water. These functions would all be lost if the wetlands were dredged and removed under Alternative "C".

Regarding the relationship between the Rankin Hinds District and the authority in charge of the floodgates at the Ross Barnett Reservoir; as recently as February of 2020, the Drainage District had not met with the Pearl River Valley Water Supply District that operates the dam flood gates to discuss how water releases would be cooperatively managed if a second lake was built on the Pearl River downstream of the Ross Barnett Reservoir. The scoping process began in 2013, ten years ago, and no dialogue has been publicly offered by the non-federal sponsors on how the two waterbodies would cooperate in releasing water through Metro Jackson. To allow the violation of this Executive Order in the absence of a clear understanding of lake operations (such as high and low flow plans) between the two agencies would seem to overlook concern about economic intensification from post-project floodplain development and openly mock the intent of EO 11988.

It is not economically justified to permit a project that violates EO 11988 by deliberately inviting induced development in a floodplain when there is no attempt to minimize obvious impacts or avoid hazards and risks associated with floods. Those hazards, risks and impacts to downstream communities have been explained in this comment letter.

The Army Corps of Engineers, which has taken over authorship of this DEIS, doesn't lack alternatives to floodplain development in solving the urban Jackson and Rankin and Hinds Counties flood management problems. Alternatives A, A1 and a combination have been offered in the current scoping period as

possible alternatives in addition to Alternative "C", lake dredging. The destruction, risk and impact of Alternative "C" should dictate that it is the **least preferred choice** on the list of alternatives for the Army Corps. Inducing development (as in (1) above) in the flood plain is clearly a motivation behind Alternative "C" according to Mr. Garrett above who has helped promote the One Lake plan. Other speakers on May 24<sup>th</sup> alluded to Alternative "C" as a spark for economic progress in Jackson but no speaker explained it as frankly as Mr. Garrett.

The Army Corps should follow its own rules and directives regarding E.O. 11988 and the language in WRDA 2007 and WRDA 2018 and find a flood management solution in 2023 that is economically justified, less environmentally disruptive and that is acceptable to all downstream interests.

The 2018 Draft Environmental Impact Statement written by the non-federal sponsor was an unabashed argument for Alternative "C" that lacked objectivity. As a document responsive to the intent of the National Environmental Policy Act (NEPA) it was an embarrassing failure and infuriating to read and examine. The taxpayers of Mississippi, including people living in the counties downstream of Jackson saw the state contribute a million dollars toward the writing of the 2018 DEIS. Environmental groups were not the only ones who noted the document's poor quality. Commenters from Battelle Institute (IEPR) and from the Army Corps of Engineers Agency Technical Review (ATR) teams in 2017 and 2020 were frank and incredulous about the poor quality of the Draft EIS and harshly critical of some of the basic features of Alternative "C" including the fact that it offers no additional flood water storage. One Army Corps employee -a manager of review teams – told me over the phone that the 2018 DEIS was "not a very well wrapped-up document". This was an understatement.

As described in the introductory paragraphs of this comment letter, the Army Corps of Engineers is in a difficult position, no doubt faced with pressure from Mississippi's Congressional delegation and others to approve the flood risk reduction alternative that does the most environmental and ecological damage to the river and its aquatic and riparian habitats and wildlife, and is the most objectionable plan according to downstream stakeholders who have made their displeasure about it known on multiple occasions. The pressure to approve Alternative "C" will also test the Army's allegiance to its own regulations, to E.O. 11988, to the Clean Water Act, and to the plain language of the WRDA statutes that authorize expenditures of public money for a flood risk reduction project for Jackson, MS. The next Draft EIS must be objective and do justice to the intent of NEPA and WRDA. We expect an honest and well considered analysis of environmental acceptability, economic justification, and technical feasibility. The Army Corps and the Assistant Secretary for Civil Works have much room for improvement as they review and write the 2023 Draft EIS for this WRDA Section 211 project.

## Conclusion

Coastal plain rivers in the Southeastern United States like the Pearl River have been losing bottomland forests and swamps to development since the late 1800s. The rivers bisecting these floodplains have been used as highways of commerce; the cypress trees from their swamps have been turned into lumber. Cities have grown up along rivers because of the natural resources present: fur, timber, fish, mussels, or because the rivers themselves were trade routes.

These rivers have been channelized, de-snagged, dammed, used for transportation, drinking water and recreation, and some cities like Jackson find them hard to live with because they flood. They will always

flood. Cities don't want to adapt to rivers, they want to tame them and bend them to society's purposes – which was historically the Army Corps of Engineers' mission.



There are not many animals as well adapted to life on a floodplain as a gar. Whether a river inundates its backwater wetlands or remains in its channel, gar find a way to feed, reproduce, and survive - persisting for 240 million years. Since the writing of E.O. 11988 in 1977, our society has learned more about floodplain functions, living with rivers, and about the values and ecological services floodplains provide. This knowledge informs Army Corps policy and projects.

Spotted gar. Pearl River, LeFleur's Bluff State Park. Credit: Wesley Shoop Ph.D.

Floodplains have their place and their functions. Scientists and engineers at the Army Corps understand rivers and floodplains. They know that there are better, less destructive ways to live with rivers and their floodplains than building projects like Alternative "C".

This is a complex DEIS process that began in 2013 with the non-federal sponsor fumbling the NEPA process, doing its best to suppress open speaking at public meetings, and providing the bare minimum of public information. With the Army Corps' assumption of the NEPA process, a promised 45-day comment period, in our opinion, doesn't allow enough time for USFWS to prepare a Biological Opinion and a Fish and Wildlife Coordination Act Report with new information available on the Gulf sturgeon and Pearl River map turtle. Since the Environmental Protection Agency could not comment on the 2018 Draft EIS, (The DEIS wasn't "federalized" by publication in the Federal Register) that agency is at a disadvantage and likely needs more than 45 days to prepare its comments. Accordingly, Healthy Gulf would like to ask for more than 45 days to prepare comments when a new DEIS is published in August or September of 2023.

Thank you for the opportunity to provide scoping comments.

Sincerely,

Andrew Whitehurst, M.S, J.D.

Inchew Whiteheart

Water Program Director, Healthy Gulf 3141 W. Tidewater Ln. Madison, MS

andrew@healthygulf.org