



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT  
7400 LEAKE AVENUE  
NEW ORLEANS, LOUISIANA 70118

Regional Planning and  
Environmental Division South  
Environmental Compliance Branch

## PUBLIC NOTICE

### Mississippi River Ship Channel, Gulf to Baton Rouge, Louisiana Project, Phase III Deepening

**Introduction.** This 30 day Public Notice is issued in accordance with provisions of Title 33 CFR Parts 336.1(b)(1) and 337.1, which establish policy, practices, and procedures to be followed concerning federal actions involving the placement of dredged or fill material into waters of the United States.

This notice provided by the U.S. Army Corps of Engineers New Orleans District (CEMVN) is a revised public notice to one that was originally published March 14, 2017. This revised notice addresses project-related impacts to waters of the United States for the next phase of deepening the Mississippi River Ship Channel (MRSC) from Baton Rouge, Louisiana to the Gulf of Mexico. The MRSC would be deepened from 48 feet to a depth of 50 feet at Mean Lower Low Water (MLLW) in the lower Mississippi from River Mile (RM) 13.4 Above Head of Passes (AHP) to RM 0.0 at Head of Passes, and from Head of Passes to RM 22 Below Head of Passes (BHP) (i.e., Southwest Pass and Southwest Pass bar channel). The MRSC would also be deepened at 12 river crossings from 45 feet to a depth of 50 feet below the Low Water Reference Plane (LWRP), for ships to access the Port of Baton Rouge.

The difference between this public notice and the March 14, 2017 notice is the upstream limit of the proposed action. The original public notice discussed deepening the 3 southernmost crossings above New Orleans, Louisiana, in order to allow deep draft access to the Port of South Louisiana. However, on May 23, 2017, USACE made an agency decision to deepen all 12 deep draft crossings between New Orleans and Baton Rouge, Louisiana, expanding deep draft access to the Port of Baton Rouge. The expansion of scope was based on the encouraging results of a 2D hydraulic model which indicated that maintenance of the 12 crossings would be considerably less than previously estimated. This, in turn, decreased the costs of long-term maintenance of the plan and improved the economic benefits to the Nation.

The project is currently authorized to a depth of 55 feet, however, an integrated general reevaluation report and draft supplemental environmental impact statement (SEIS) were prepared to reevaluate changes in economics and environmental conditions that have occurred since the original 1981 Feasibility Report. This integrated report was released for public and agency comment on December 16, 2016 (<http://www.mvn.usace.army.mil/About/Mississippi-River-Ship-Channel>).

On May 23, 2017, USACE made an agency decision to select Alternative 3 from the SEIS as the agency's Recommended Plan, in lieu of Alternative 3d, described as the tentatively selected plan in the Draft SEIS. Of note, Alternative 3d was a scaled-down version of Alternative 3, and selected to deepen only the 3 southern most crossings allowing access to the Port of South Louisiana. The change in alternative selection was made based on encouraging results of a hydraulic 2D model which indicated maintenance of the 12 crossings would actually be significantly less than estimated, thus improving the Benefits/Cost ratio of Alternative 3.

**Project Authority.** A feasibility report entitled "Deep-Draft Access to the Ports of New Orleans and Baton Rouge, Louisiana" was prepared in 1981 recommending deepening the Mississippi River navigation channel to a 55 feet depth from Baton Rouge to the Gulf of Mexico. The final Chief of Engineers Report for the project was signed in 1983. The project was authorized for construction by the 1985 Supplemental Appropriations Act, and the Water Resources and Development Act of 1986 (PL 99-662). Section 2101(b) of the Water Resources Reform and Development Act 2014 (Pub. Law 113-121) effectively amended the project authorization pursuant to its amendment of Section 101(b)(1) of the Water Resources Development Act of 1986, (Pub. Law 99-662) regarding the requisite non-Federal cost share for the operation, maintenance, repair, rehabilitation and replacement of general navigation features of commercial navigation harbor projects.

During the pre-construction planning, a construction sequence was developed that would implement the authorized project in three construction phases, to obtain the fully authorized project. Phase I was completed in December of 1987 and provided a depth of 45 feet from Donaldsonville, Louisiana at RM 181.0 to the Gulf of Mexico. Construction of Phase II was completed in December 1994 and involved deepening of the MRSC to a depth of 45 feet between Donaldsonville and Baton Rouge and involved dredging of eight river crossings. Phase III was originally defined as deepening of the MRSC from the Gulf to Baton Rouge from a depth of 45 feet to a depth of 55 feet. However, the Louisiana Department of Transportation and Development (LDOTD), as the local sponsor, limited the scope for the third phase to a target depth of 50 feet. Dredging beyond 50 feet was not requested by LDOTD because a cost-share agreement would be required.



In order to proceed with the evaluation of alternatives for the third phase of construction, this effort was initiated with the issuance of Federal funds to initiate a General Reevaluation Report, following execution of the Feasibility and Cost Sharing Agreement (FCSA), signed on April 2, 2015 with LDOTD.

**Location.** Construction and maintenance activities would occur in multiple reaches in of the MRSC between New Orleans and Baton Rouge, Louisiana. Dredging and disposal activities would occur at 12 river crossings that are currently maintained between New Orleans and Baton Rouge, Louisiana, within currently maintained areas in the lower ship channel, as well as beneficial use disposal areas in lower Plaquemines Parish, Louisiana (Figures 1-3).

**Project Description.** CEMVN proposes to deepen and maintain multiple reaches of the Mississippi River ship channel from the Gulf of Mexico to the Port of Baton Rouge. This includes deepening 12 river crossings from 45 feet to 50 (LWRP, Table 1). This would also entail deepening and maintaining various shoals from 48 feet to 50 feet (MLLW), from RM 13.4 AHP to Head of Passes, and from Head of Passes to RM 22 BHP via Southwest Pass. Approximately 2/3 of all material dredged during construction would be used beneficially to create approximately 1460 acres of coastal wetland habitat in lower Plaquemines Parish, Louisiana. Deepening would only occur within previously disturbed reaches that are actively maintained by CEMVN for navigation purposes. As such, dredging quantities of the proposed action are summarized in Table 2 as the incremental quantities beyond existing operations and maintenance (O&M) practices, what the study defines as the No-Action Alternative.

<b>B.R. Front</b>	<b>River Mile 234-229 AHP</b>
<b>Redeye</b>	<b>River Mile 226-221 AHP</b>
<b>Sardine Point</b>	<b>River Mile 221-216 AHP</b>
<b>Medora</b>	<b>River Mile 214-208 AHP</b>
<b>Granada</b>	<b>River Mile 207-202 AHP</b>
<b>Bayou Goula</b>	<b>River Mile 199-196 AHP</b>
<b>Alhambra</b>	<b>River Mile 193-188 AHP</b>
<b>Philadelphia</b>	<b>River Mile 185-181 AHP</b>
<b>Smoke Bend</b>	<b>River Mile 179-172 AHP</b>
<b>Richbend</b>	<b>River Mile 160-155 AHP</b>
<b>Belmont</b>	<b>River Mile 156-151 AHP</b>
<b>Fairview</b>	<b>River Mile 117-111 AHP</b>

**Table 1. Names and reaches of the 12 deep draft crossings.**

	<b>Crossings Construction</b>	<b>Lower River Construction (RM 13.4 AHP-19 BHP)</b>	<b>Bar Channel Construction RM (19BHP-22BHP)</b>	<b>Annual O&amp;M- 12 Crossings</b>	<b>Annual O&amp;M- Lower River/Bar Channel</b>
<b>Proposed Action</b>	8,600,000 cy	19,900,000 cy	1,620,000 cy	1,600,000 cy	0 cy

**Table 2. Cubic yards (cy) of incremental dredging requirements beyond the No-action alternative.**

*Construction*

Approximately 8,600,600 cubic yards of material would be dredged by deepening the 12 crossings from 45 to 50 feet (LWRP). Assuming adequate funding, construction would occur over a 3-5 year period. Because of this phased approach to construction, it is anticipated that dustpan dredges will be readily available and it is unlikely that hopper dredges would be utilized for crossing construction. Dustpans are typically utilized at crossings during falling water and low water conditions. The suction head of the dustpan, approximately the width of the dredge, is lowered to the face of the material to be removed. High velocity water jets loosen the material which is then drawn by pump as slurry through the dredge pipe and floating pipeline where the material is deposited adjacent to the navigation channel. As the discharge pipe is limited on dustpans, this dictates that the material be deposited no farther than 1000 feet from the dredge. This type of disposal offers some environmental benefits by maintaining sediment within the channel to build sandbars, reduce erosion, and provide material to build or replenish island habitats and, eventually, coastal wetlands.

Future geotechnical analyses of the river crossings will be required during detailed design in order to determine if dredging the channel will negatively impact channel slopes. In order to ensure slope stability during detailed project design, bank grading and revetment (i.e., sub-aqueous rock and/or articulated concrete mattress) may be determined necessary for final design. Stabilization of the bank is essential to ensure that bank failure and land loss do not occur within these areas. Currently, it is anticipated that 9 of the 12 crossings (Fairview, Belmont, Rich Bend, Philadelphia, Alhambra, Grenada, Sardine Point, Red Eye and Baton Rouge Front) may warrant some level of stabilization measures. If determined necessary, vegetation would be temporarily cleared along the sections of riverbank proposed for revetment. Upon completion, each site will be left in a condition comparable to its current state. Vegetation will reclaim the cleared land and forested habitat is expected to return within a relatively short period of time.

The material dredged during construction in the vicinity of Southwest Pass (RM 13.4 AHP



– RM 19 BHP) would occur via cutterhead dredge, and would total approximately 19,900,000 cubic yards. For efficient cutterhead dredging, a continuous reach (miles in length) of the channel must shoal to depths that provide a cut of 4-6 feet. Cutterhead dredges are equipped with a rotating cutter apparatus surrounding the intake end of the suction pipe. Cutterheads can efficiently dig and pump up to a mile of all types of alluvial materials and compacted deposits, such as clay and hardpan. Using booster pumps, cutterhead dredges have the capability of pumping dredged material longer distances, but can be cost-prohibitive and limited by available lengths of discharge pipe.

Material from Southwest Pass vicinity construction would typically be placed unconfined in targeted areas of open water within the 167,318 acres of designated beneficial use placement areas. The material would be deposited as uniformly as practicable to achieve an expected final elevation of about +2.0 feet NAVD88 to create approximately 1,460 acres of intertidal coastal wetland habitat, resulting in a net of approximately 575 average annualized habitat units (AAHUs) after 50 years.

CEMVN provides dredging contractors with a limited number of mandatory access corridors/staging areas for Southwest Pass cutterhead disposal operations. This is done to limit impacts to existing wetlands as well as to existing flowlines that lie on the ground surface all along Southwest Pass. Temporary access dredging may be required to allow construction equipment and pipeline to reach designated beneficial use placement areas. Excavation of flotation access channel material and access corridor material would be performed by a mechanical dredge only when there are no less damaging practicable access alternatives. The resulting unavoidable impacts to emergent marsh would be temporary in duration, minor in extent, and would be incidental to beneficial placement on a much larger scale. Flotation access channels would be limited to a maximum bottom width of about 80 feet and a maximum depth of about 8.0 feet (MLLW). These access corridors may be backfilled with dredged material to a maximum elevation of about three feet above adjacent marsh upon completion of dredging and placement activities to restore these corridors to pre-project marsh elevations after settlement.

In order to deepen the bar channel (RM 19 BHP-RM 22 BHP) from 48 feet to 50 feet (MLLW), approximately 1,620,000 cubic yards of material will be dredged using hopper dredges. Hopper dredges operate by storing dredged material onboard and transporting it to an open water disposal site downstream. Hopper dredges are typically operated in situations where dredged material must be moved greater distances. Hoppers would dredge-and-haul to the 2,975 acre EPA-designated ocean dredged material disposal site (ODMDS) located adjacent to, and west of, the bar channel. If river currents are sufficiently strong, hopper dredges working in the bar channel may also perform work in the agitation dredging mode. Agitation dredging in this case involves filling a hopper dredge to capacity and allowing it to overflow. Fine sediments released into surface waters are carried out of the mouth of river to the Gulf of Mexico. Coarser/heavier



sediments collect in the hopper and are ultimately hauled to the ODMDS for placement. Between 2009 through 2015, hopper dredges have only performed agitation dredging in this reach during 2015.

The ODMDS site is regulated under Section 103 of the Marine Protection Research and Sanctuaries Act of 1972. This disposal area will not be expanded as part of this plan. As part of CEMVN's annual coordination with the US Environmental Protection Agency (EPA) Region 6 regarding MVN use of the ODMDS, CEMVN provides EPA Region 6 with a determination on the acceptability of Southwest Pass dredged material for placement into the ODMDS. The following information, required for evaluation of dredged materials proposed for ocean disposal, is provided to EPA Region 6 by CEMVN: 1) dredging project information; 2) dredged material characterization/evaluation; and 3) regulatory compliance evaluation. EPA Region 6 reviews the MVN determination to evaluate the environmental effects of dredged material disposal and to ensure that compliance with the ocean dumping criteria at 40 CFR 220-228 has been demonstrated. EPA Region 6 then informs the MVN whether or not it concurs with MVN's determination. The most recent Section 103 EPA Concurrence decision for placement of shoal material from Southwest Pass in the Southwest ODMDS was received on 06 February 2017.

### *Maintenance*

Once constructed to 50 feet, the annual O&M of the project would only increase in the area of the crossings. The average annual O&M of the 12 crossings would increase by approximately 1,600,000 cubic yards (approximately 10%), from 16,400,000 cubic yards to 18,000,000 cubic yards. As with current practice, shoal material would be released adjacent to the channel and/or in deeper open water areas downstream of the crossings. Current practice dictates that hopper dredges are only utilized at crossings if dustpan dredges are unavailable, or if shoaling is greater than what the available dustpans can handle. When activated, hopper dredges operate at crossings by storing dredged material onboard and transporting it to a disposal site downstream that is greater than 50 feet (LWRP). Hopper dredges are more costly than dustpan dredges and are typically operated in situations where dredged material must be moved greater distances (e.g. Southwest Pass). Because dustpans are usually available and are more economical to operate, hoppers are used sparingly and not utilized at crossings every year. Over the last 20 years hopper dredges have accounted for less than 10% of all material handled in the crossings.

Annual maintenance of the lower river (RM 13.4 AHP to RM 22 BHP) is not anticipated to increase beyond existing O&M after construction. O&M in this reach currently averages 22,250,000 cubic yards. Maintenance would continue to include a combination of cutterhead and hopper dredges for shoals that occur. On average, approximately 6,600,000 cubic yards of shoal material would be dredged via cutterhead to create



approximately 530 acres of coastal marsh each year, resulting in a net of approximately 6,160 AAHUs after 50 years. Additional shallow mud flats and emergent vegetation are expected to accumulate after material placement thereby creating suitable habitat for wetland vegetation and wildlife species that could occur within the proposed disposal area. As evidenced with previous CEMVN beneficial use-placement areas in the delta, placement areas would naturally vegetate through colonization of species from adjacent vegetated areas. The loss of ubiquitous shallow open water habitat would be offset by the creation of (increasingly scarce) coastal wetland habitat. The remainder of the shoal material would not be used beneficially because either shoaling patterns do not justify the costs of utilizing cutterheads under the Federal Standard or because cutterheads would pose hazards to navigation, as in the bar channel. The remaining material from O&M will be disposed of in the Hopper Dredged Disposal Area at the Head of Passes (to be used beneficially at a later date) or in the EPA-designated ODMS in the Gulf of Mexico.

**Sediment Analysis.** In order to better assess the potential impacts of deepening on water quality and biota within the river crossings, dredge slurry was collected directly from the discharge lines of dustpan dredges performing maintenance on 11 deep draft crossings during Fiscal Year 2016 in order to better assess the potential impacts of deepening on water quality within the river. The solid and liquid fractions of the slurry were analyzed individually for the presence of priority pollutants including metals, pesticides, polychlorinated biphenyls, and semi-volatile organic compounds. Metals were common to both fractions, and were detected at or below background levels in the Mississippi River. Chlordane pesticides and hydrocarbon exhaust products were detected infrequently in the solid samples, but at levels generally at or below 1 part per billion. All detected contaminants were below regulatory water quality criteria and ecological screening values, and dredging of the crossings is not expected to have a negative impact on human health or the environment.

**Status of Supplemental Environmental Impact Statement (SEIS) and Other Environmental Documents.** The 30-day public review of this notice is associated with SEIS #15-1 that was prepared to comply with the National Environmental Policy Act. That SEIS completed its 45-day review/comment period on January 30, 2017. Environmental compliance for the proposed action would be achieved upon: coordination of the draft and final version of SEIS with appropriate agencies, organizations, and individuals for their review and comments; public review of the Section 404(b)(1) Public Notice; signing of the Section 404(b)(1) Evaluation; receipt and acceptance or resolution of all U.S. Fish and Wildlife Service and National Marine Fisheries Service's comments and recommendations provided under the Fish and Wildlife Coordination Act; National Marine Fisheries Service's concurrence that the project is compliant with the Magnuson-Stevens Fishery Conservation Act; Louisiana Department of Natural Resources' concurrence with the determination that the proposed action is consistent with the Louisiana Coastal Zone

program to the maximum extent practicable; resolution of any Louisiana Department of Environmental Quality (LDEQ) comments on the air quality impact analysis documented in the SEIS; receipt of a Clean Water Act Section 401 water quality certification from LDEQ; and concurrence from the Louisiana State Historic Preservation Officer with the CEMVN determination that the proposed action would not affect known historical properties and is compliant with Section 106 of the National Historic Preservation Act on December 7, 2016. The Record of Decision will not be signed until the proposed action achieves environmental compliance with applicable laws and regulations, as described above.

**Coordination.** The following is a partial list of agencies to which a copy of this notice is being sent:

- U.S. Environmental Protection Agency, Region VI
- U.S. Fish and Wildlife Service
- National Marine Fisheries Service
- U.S. Coast Guard, Eighth District
- Louisiana Department of Environmental Quality
- Louisiana Department of Wildlife and Fisheries
- Louisiana Department of Natural Resources
- Louisiana Department of Wildlife and Fisheries
- Louisiana Department of Transportation and Development
- Louisiana State Historic Preservation Officer

This notice is being distributed to these and appropriate Congressional, Federal, Tribal, state, and local interests, environmental organizations, and other interested parties.

**Evaluation Factors.** Evaluation includes application of the Section 404(b)(1) guidelines promulgated by the Administrator of EPA, through 40 CFR 230.

**Public Involvement.** Interested parties may express their views on the placement of material associated with the proposed action or suggest modifications. All comments postmarked on or before the expiration of the comment period for this notice will be considered. Any person who has an interest that may be affected by deposition of excavated or dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within the comment period of this notice and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by the proposed action. You are requested to communicate the information contained in this notice to any parties who may have an interest in the





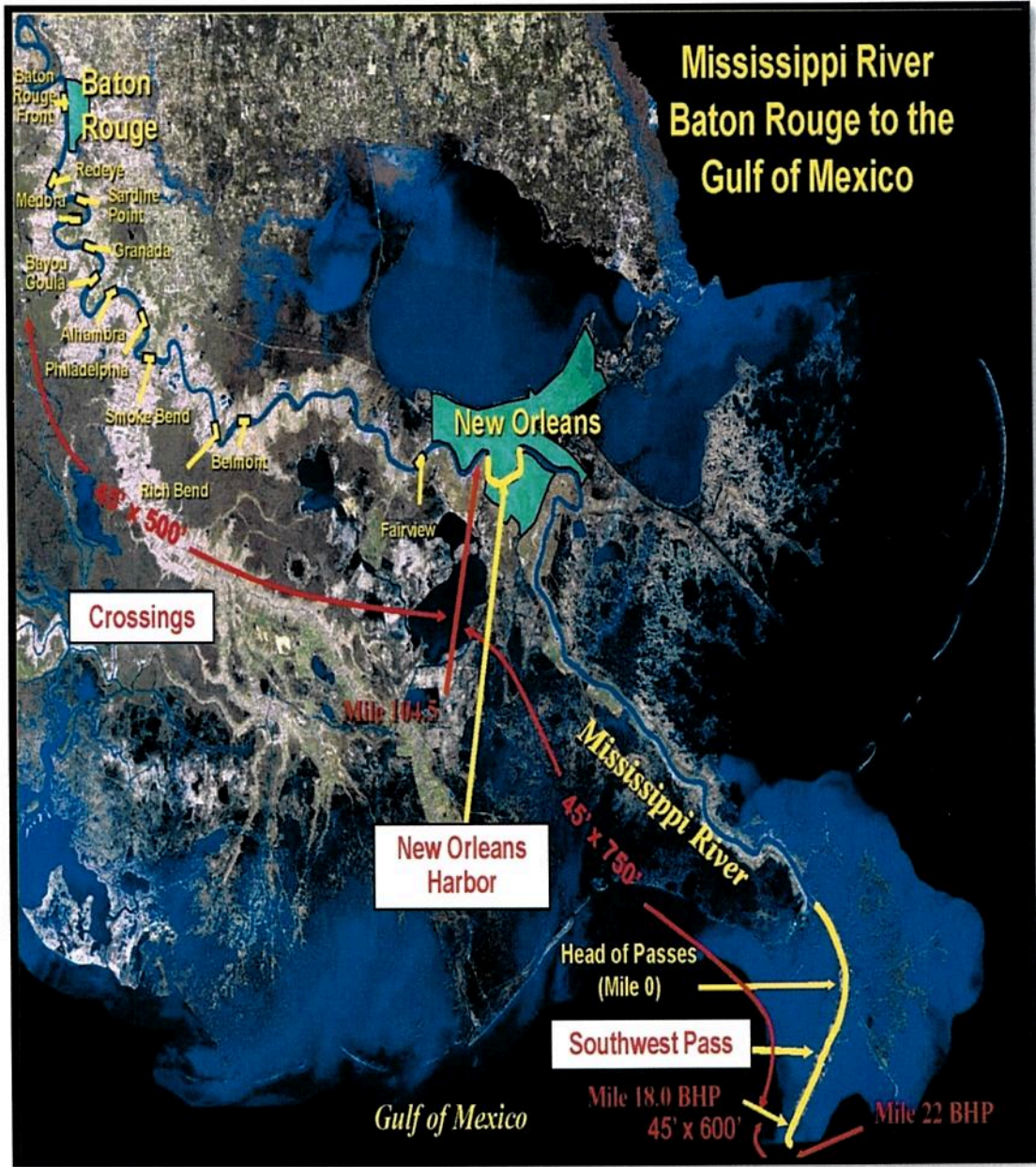


Figure 1. Prominent features of the Mississippi River Ship Channel, Gulf to Baton Rouge, Louisiana project extend from the Port of Baton Rouge, Louisiana to RM 22 Below Head of Passes.



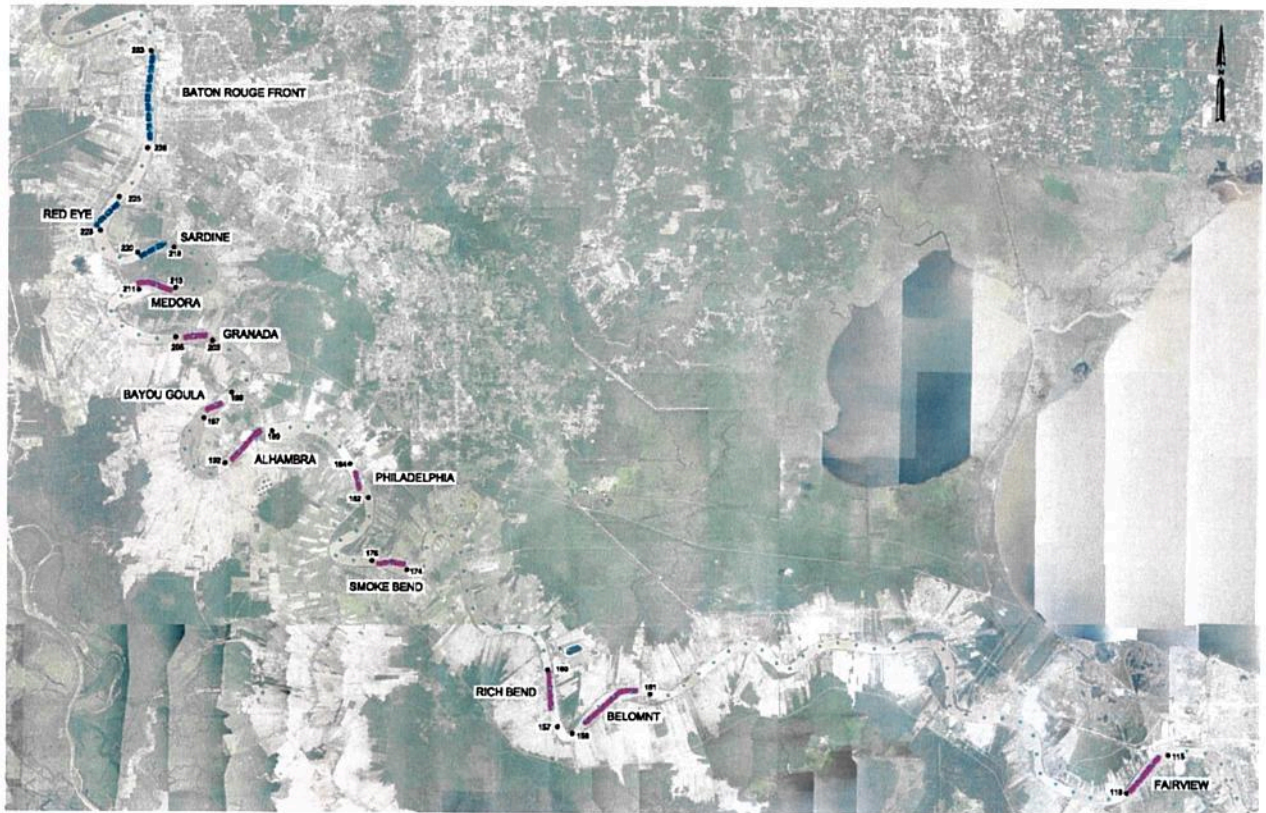


Figure 2. There are 12 actively maintained crossings that are maintained at 45 feet (LWRP) between New Orleans and Baton Rouge, Louisiana. The proposed plan includes deepening 12 crossings that would allow deep draft access to the Port of Baton Rouge.



Figure 3. The long term plan includes 143,264 acres that were previously cleared under the National Environmental Policy Act (red), and 24,054 acres of additional beneficial use area (black).