APPENDIX C
CED PUBLIC COMMENT AND RESPONSE SUMMARY

Comment - Response Matrix on the Draft Hurricane and Storm Damage Risk Reduction System (HSDRRS) Comprehensive Environmental Document (CED) Phase I						
#	Location			Comment	Reviewer	Preparer's Response
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1	ES-5			The discussion of the National Flood Insurance Program (NFIP) could be clarified by explaining whether the NFIP certification is not typically afforded to a project incorporating interim protection measures or whether FEMA maintains some concerns about the integrity of the interim closure structures that were in place as of June 2011. According to the Corps, those interim measures were providing the same level of flood protection as expected by the completed project. In other words, could those communities served by the 80% of the HSDRRS work completed in June 2011 be eligible for NFIP now? Without further explanation, this discussion could be interpreted several ways.	U.S. Environmental Protection Agency (EPA)	NFIP certification is provided by the Federal Emergency Management Agency (FEMA) and at the cutoff time for project inclusion into the draft CED, FEMA had not completed NFIP certification. However, the complete process for future NFIP certification by FEMA is described in the draft CED and future supplements will provide a description of the NFIP certification outcome.
2	ES-36			The discussion of the Louisiana Coastal Area (LCA) Ecosystem Restoration Plan here and elsewhere in the draft CED should inform the reader that the State of Louisiana has terminated the cost-share agreements for a number of authorized LCA projects.	EPA	Concur; the change was made as recommended.
3	ES-45 and ES-46			Suggest changing the orientation of the basins by 180°.	Louisiana Coastal Protection and Restoration Authority (CPRA)	Concur; orientation of the text was changed by 180 degrees.

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4	ES-48	1st Paragraph		This paragraph references an Appendix S which should contain the current guidelines for assessing impacts to open water habitats and submerged aquatic vegetation during the implementation of the proposed projects. We were unable to locate Appendix S, nor the subject guidelines, in the CED; we recommend that this appendix be included. This same comment applies to the last paragraph on page 2-30.	U.S. Fish and Wildlife Service (USFWS)	Concur; appendix S was inadvertently left out of the draft CED and has been included in the final CED.
5	ES-56			The value for wetland impact appears to be incorrect and should be revised to include 1,483 acres of wetlands and 3,644.81 acres of non-jurisdictional bottomland hardwood habitat to coincide with the rest of the document. Other pages where impact acreage discrepancies occur are 9-5, and Volume 3, Appendix N, Table 1.	USFWS	Concur.
6	ES-56	Paragraph 2		According to this section of the CED, 1,637 acres of wetlands and 3,565 acres of non-jurisdictional bottomland hardwoods were directly impacted by HSDRRS construction. These numbers do not match the figures provided in Table 4-6 of the CED or Table 1 in Appendix N. Given the importance of the quantification of impacts to wetlands, essential fish habitat (EFH), and bottomland hardwoods, NMFS recommends all sections of the CED be revised to consistently and accurately provide the most up-to-date numbers possible.	National Marine Fisheries Service (NMFS)	Concur; this total refers to the estimated cumulative impacts on wetlands through the planning period for the HSDRRS (2057). The CED is up to date based on the cutoff date for information to be included, which is November 15, 2010 for all Individual Environmental Reports (IER) and July 2011 for project construction. The mitigation Programmatic IERs (PIERs) will have the most up to date wetland impact and mitigation information, and will also be included in the future supplement(s) to the CED.

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7	ES-57			The last paragraph explains the difference between the number of environmentally cleared borrow sites and those that were utilized for HSDRRS construction as of July 2011. It would be instructive to add a discussion as to whether it is now expected that most of those sites will ultimately be required for completion of the HSDRRS project and, if not, whether they will be eligible for use on future coastal restoration and protection projects. The return on the public's investment in this endeavor may well be better than presented in this short summary.	EPA	Do not concur. The Executive Summary provides a brief description of the area and number of cleared borrow sites and their use for HSDRRS construction as of July 2011. However, section 2.3 provides all of the requested details associated with the future use of cleared borrow sites.
8	Chapter 1			"It's proposed to supplement the CED as construction activities beyond July 2011 are completed." Will the CED be supplemented ad infinitum in a piecemeal fashion? Will there be a supplement in 2057?	CPRA	No; it is anticipated that after the completion of all HSDRRS construction a final supplement to the CED will be prepared and will fully estimate all direct, indirect, and cumulative impacts of the HSDRRS including predicted 2057 construction impacts.
9	Chapter 1			The CED is written as a snapshot in time (2010) rather than an evaluation/analysis of the cumulative impacts from constructing/upgrading the Hurricane and Storm Damage Risk Reduction System.	CPRA	Do not concur. The draft CED is written as a description of the past, present, and reasonably foreseeable impacts of the HSDRRS as of November 2010. The draft CED fully evaluates known future HSDRRS construction efforts, and the cumulative impacts of the HSDRRS and other projects proposed in southeast Louisiana.

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10	1-1			*The HSDRRS effectively achieved the 100-year level of hurricane and storm damage risk reduction by June 2011.* If this is the case, why is the cut off for projects included for analysis in the CED November 2010? The IERs have been supplemented multiple times for each project within LPV and WBV and design changes have increased or decreased the overall project impacts disclosed in the original IERs. Why is this not documented within the CED?	CPRA	When the preparation of the draft CED began it was not anticipated that the HSDRRS construction activities would extend substantially beyond 2010. However, unforeseen circumstances have caused construction activities to likely extend into late 2014 or early 2015. Due to the scale of the draft CED and the uniqueness of the document format and projects it describes, a cutoff date had to be picked in order to complete a draft version for public review in a timely manner. Section 2 describes the IERs evaluated and not evaluated in the CED. Tables 2-2 and 2-5 summarize the LPV and WBV HSDRRS components by IER number.
11	1-2	2nd paragraph, 4th sentence		Change "HSDRSS" to HSDRRS	CPRA	Concur
12	1-23		Table 1-3	The row in the table pertaining to IER 12 could use some editing. First, the word "hydrological" in the second column should be replaced with "ecological". Second, column three should references sections 5.3.2.2 and should correct the net one to 5.3.6.1.	EPA	Concur

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13	1-26			We agree that conservation easements be included in the mitigation for enclosing wetlands that the Corps acknowledge are under development pressure. The building of the HSDRRS should not be a stimulus for development of wetlands behind a hurricane protection levee. Wetlands do not need flood protection and impoundment may accelerate the loss of these enclosed wetlands.	Louisiana Audubon Council (LAC)	Only when the U.S. Army Corps of Engineers (USACE) concludes that development will be an unavoidable direct impact of a USACE project, will the USACE implement appropriate mitigation measures, which measures could include conservation easements. The USACE specifically studied the potential for induced development attributable to the planned construction of the West Bank and Vicinity (WBV) Project in conjunction with its environmental impacts analyses and found that such development was not probable (see St. Charles Parish Development Projection Study, appendix E to Draft IER #16). Within the HSDRRS, the USACE considers potential development in wetlands areas to be merely speculative. Although the USACE maintains regulatory authority over the discharge of dredge or fill material in wetlands pursuant to its Clean Water Act Section 404 permitting authority (including determining mitigation required for individual permits), the primary responsibility for determining zoning and land use matters rests with the state and local governments. Those entities may choose to allow development in a wetlands area, and if so, they would be responsible for defining the appropriate mitigation measures.
14	Chapter 2			This chapter includes a discussion of IERs not included or analyzed. If the cut-off date for inclusion was November 2010, why are the incomplete projects included and discussed?	CPRA	The IER and IER Supplements that are not included or analyzed in the draft CED are only listed on page 2-3 for reference purposes. These documents are not included because they were prepared after November 2010.
15	2-29 to 2-30			The reader is left with the impression that IERs 36 and 37 are only for the borrow sites rather than mitigation.	CPRA	Do not concur. It is stated on page 2-30 that "IERs #36 and #37 are being prepared to describe mitigation for HSDRRS impacts on wetlands and non-jurisdictional BLH." This section also describes how borrow sites avoided impacts to jurisdictional wetlands and have fully mitigated for impacts to non-jurisdictional bottomland hardwoods (BLH).

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16	2-30			HSDRRS Mitigation Components, last paragraph - This paragraph mentions guidelines that will be used in assessing impacts to open water habitats and submerged aquatic vegetation during the implementation of the proposed mitigation projects. It is our understanding that those guidelines have not been officially accepted by the involved natural resource agencies, and many variable-specific and site-specific assumptions related to these habitats are currently under development by our office. We recommend that this paragraph be removed, with the exception of the first sentence, and that the following statement be added: "Those guidelines are nearing completion, but are undergoing further refinement. We anticipate their completion prior to the release of any supplemental CEOs, and a full description will be included as appropriate in forthcoming NEPA documents."	USFWS	The subject paragraph was not removed since it remains relevant and summarizes the guidelines in appendix S. However, this paragraph was revised to include the statement, "Those guidelines are undergoing further refinement. The USACE anticipates completion of the guidelines prior to the release of any supplement(s) to the CED, and the final version of these guidelines will be included, as appropriate, in forthcoming NEPA documents." Also note that the introduction section and the title of appendix S have been revised to help clarify the draft status of these guidelines.
17	2-30			Leaves the reader with the impression that mitigation projects are still in development when this is not the case. The TSPs have been selected for LPV and WBV.	CPRA	Do not concur. The tentatively selected mitigation plans have not been selected as of November 2010, the cut-off for inclusion in the draft CED. Further, until the NEPA process has concluded with a signed decision record, those plans are only tentative. The PIERs and tiered IERs (TIERS) describing the mitigation components for LPV and WBV must be prepared and decision records signed before NEPA compliance is complete and a decision made on HSDRRS wetland mitigation.
18	3-21		Figure 3-7	The boundaries of the HSDRRS project areas on the larger map (not the inset) would be helpful.	CPRA	Concur. Boundaries of the HSDRRS were added to the figure as requested.

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19	Chapter 4			Much of the information included in this chapter is pulled directly from the IERs for the individual projects. Rather than pull large blocks of text from those IERs, summarize the information within tables and direct readers to NOLA Environmental for the IER documents.	CPRA	Do not concur. The draft CED was prepared to be a stand-alone report that fully described the HSDRRS. Supplement(s) to the CED will further document the entire project and impacts. Because of the size of the HSDRRS and the scale of its impacts, the USACE summarized information and incorporated information from the IERs by reference to the greatest extent practicable.
20	Chapter 4			It should be clear to readers that the IERS completed by November 2010 were for all of the risk reduction projects. The IERs not completed were for supplemental IERs for the risk reduction projects as well as borrow and both LPV and WBV mitigation.	CPRA	The details concerning the IERs and IER Supplementals included in the evaluation of impacts in the CED are described in section 2, and the Lake Pontchartrain and Vicinity (LPV) and WBV HSDRRS components are summarized by IER in tables 2-2 and 2-5, respectively.
21	Chapter 4			Development (residential and commercial) continues within the HSDRRS system and is not necessarily tied to post-Katrina redevelopment. In the CED, it is stated that development is not a cumulative effect of HSDRRS. If not for the protection the levees, floodwalls, and floodgates and other features provide from storm events, would development be occurring inside the system?	CPRA	Redevelopment takes into account all private projects that were proposed in southeast Louisiana by November 2010. It is unknown whether residential and commercial development would have occurred in absence of the HSDDRS. The 100-year level of risk reduction improves confidence of residents and businesses, but current and future development and redevelopment due to the HSDRRS cannot be quantified.
22	Chapter 4			No discussion of cumulative effects of HSDRRS on induced development reducing wetlands inside and/or outside of the system is included within the CED. No discussion of forced drainage requirements to keep system de-watered or altering tidal connections.	CPRA	Do not concur. There is no indication that HSDRRS improvements would lead to induced development reducing wetlands inside the system. It is highly unlikely that any induced development would occur outside the system due to the HSDRRS improvements. Further, the 933 standard permits issued by the New Orleans District (CEMVN) from 2007 to 2011 were analyzed for wetland impacts and mitigation, and were described on page 4-55. Also, see response to comment 13.

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23	Chapter 4		Sect 4.2.3.1	Certain wetland and land loss references appear outdated. Please provide more recent sources for example Dahl 1991, Boesch 1994, USGS 2003. Are more recent and accurate sources available to address current rates of wetland loss?	(National Park Service) NPS	Concur; Couvillion et al. 2011 included as a land area change reference in the final CED.
24	4-2	4th paragraph		Is the discussion of proposed levee lifts limited to those projects for which IERs were completed by November 2010?	CPRA	Yes, the discussion of future levee lifts is limited to the proposed actions described by IERs completed by November 2010. Future supplement(s) to the CED will include information on additional levee lifts, as necessary.
25	4-2			On what date does the Alternative arrangement for the emergency building of HSDRRS sunset? When does the emergency terminate? When do the normal NEPA procedures takeover?	LAC	The Emergency Alternative Arrangements are only implemented for the LPV and WBV hurricane and storm damage risk reduction authorizations of Public Law 109-234, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006 (4th Supplemental), as supplemented. This includes the 4th Supplemental authorizations of LPV and/or WBV 100-year level of risk reduction features for levees and floodwalls, selective armoring, IHNC closure structures, and the outfall canal closure structures and pump stations. The Emergency Alternative Arrangements will only remain in effect until the final CED completes the analyses of the actions outlined in the descriptions of IERs contained within the Emergency Alternative Arrangements. See the Emergency Alternative Arrangements at nolaenvironmental.com for more information.
26	4-3 to 4-5		Table 4-1	For the purpose of discussion of analyzed impacts, it would be helpful for the reader if the date of completion were included for each IER.	CPRA	Concur. The dates that the Decision Record was signed for each of the IERs and IER Supplementals will be included in section 2.

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27	4-7 (sic) 4-71			New Orleans East Sub-basin, fourth paragraph - We recommend removing/revising the last sentence which states that "A probable positive impact...resulted from the concentration of numerous prey items at the cofferdam and the attraction of larger fish and predators to the area." This concentration may be a temporary benefit to predatory organisms or activities (e.g., recreational fishing) but it could also prove to be a negative impact to prey species.	USFWS	Text changed to: "A probable positive impact on recreational fishing, depending on water quality, resulted from the concentration of numerous prey items at the cofferdam and the attraction of larger fish and predators to the area. However, additional predator species concentrating in the area could have an adverse impact on prey species."
28	4-17			Induced development as a result of HSDRRS would potentially remove prime farmland soils as fill is brought in. How is induced development as a result of HSDRRS a minor impact? The TSP for the WBV mitigation removes prime farmland soils to create marsh and swamp. Although not analyzed in this CED (but will be in a future supplemental CED), USACE's actions impact soils.	CPRA	The majority of prime farmland soils occur at the borrow sites because the soils that are most appropriate for levee construction are often clay soils that are classified as prime farmland soils. Based on the analysis of proposed projects, only small losses of prime farmlands are anticipated due to future development within the area bounded by the HSDRRS. It is clearly described that the HSDRRS directly and cumulatively impacted soils and is described as a major impact of the HSDRRS. Also see the response to comment 13.
29	4-18		Water Quality	USACE levee construction responsibilities date from the nineteenth century. Hydro-modification has been in place for over 100 years in the New Orleans region.	CPRA	Concur. On page 4-18 the CED states "In the 20th century, the region faced a number of other water quality concerns that demanded attention, such as hydro-modification (i.e., alteration of natural drainage features by human activity, such as the construction of levees)…"
30	4-21			Discussion of impacts to the 404(c) area. Water quality: The IERs are supposed to be incorporated by reference. Rather than include the detailed discussion on individual IERs, summarize and incorporate by reference.	CPRA	Do not concur. The CED was prepared as a stand-alone document that would not require the reader to have stacks of IERs in hand in order to gain an understanding of the affected environment and impacts from the entire HSDRRS.

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31	4-33	2nd paragraph	Seabrook	Since data collection will continue into 2013, will there be further analysis in future supplemental CEDs?	CPRA	Yes, additional analysis will be described in future supplement(s) to the CED.
32	4-40			Suggest using the Water Quality summary instead of the pages of detailed, in-depth information from the IERs.	CPRA	See response to comment number 30.
33	4-41			Suggest removal of "In the last 100 years, a large portion of historical BLH habitat has been logged and converted into agricultural and urban lands (Dahl et al. 1991). Approximately 200 years ago, 30 million acres of BLH covered the southeastern U.S., but it is estimated that loss rates were as high as 431,000 acres per year from 1965 to 1975. As a result, very little original BLH habitat exists in the southeastern U.S. (USEPA 2009a). These sentences appear to have been randomly tossed into a discussion of BLH within the HSDRRS system.	CPRA	Do not concur. NEPA documents such as the CED need to be written for both subject matter experts and laypeople. As such, these three sentences provide some historical setting for the high rate of loss of BLH regionally and its importance as a sensitive habitat type. This setting for the affected environment provides context for the reader that is not familiar with BLH.
34	4-48			Consider spelling out entire name of WVA with the first use.	NPS	Concur; the first occurrence is on page 2-30.
35	4-49			Consider spelling out name for AAHU with the first use. We found this section vague which made it difficult to understand direct wetland impacts to the preserve.	NPS	Concur; the first occurrence is in section 2, but the abbreviation is not described.
36	4-49		Tables 4-6 and 9-1	These sections of the draft CED state that the HSDRRS resulted in direct impacts to approximately 1,483 acres of wetlands. These numbers need to be reconciled.	EPA	Concur.

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37	4-49	Paragraph 1		This paragraph provides a good summary of how impacts to open water habitats, with and without submerged aquatic vegetation (SAV) would be evaluated and what impacts would be compensated. However, no section of the document, including Table 4-6 or the U. S. Fish and Wildlife's draft Coordination Act Report, quantifies impacts to open water habitats but does not specifically identify if any included SAV. If HSDRRS implementation did not impact open water having SAV, such should be stated in this section of the CED. Alternatively, Appendix N should be revised to quantify impacts to open water with, and without, SAV. In addition, this paragraph (and paragraph 1, page 5-4) references an Appendix S as having open water impact assessment guidelines. There is no Appendix S in the CED.	NMFS	No impacts on SAV occurred during construction activities completed by July 2011. Flotation channels dredged in Lake Pontchartrain were located in areas that would avoid SAV (IERs #2 and #3). Some future construction activities involving foreshore protection (as described by IERs #6 and #7) could potentially impact SAV, and those potential future impacts are described in the CED. Open water impacts were not quantified for the actions included in the draft CED unless those impacts involved Essential Fish Habitat (EFH) and SAV. Appendix S was inadvertently left out of the draft CED but is included in the final CED.
38	4-50 to 4-52		Table 4-6	The table reflects the wetland impacts documented in the Fish and Wildlife Coordination Act Report, not the actual impacts for which mitigation was developed. The calculated impacts to be mitigated should be included in the CED, not out-of-date estimates.	CPRA	Do not concur. The wetland impacts are based on Wetland Value Assessment (WVA) models prepared by USFWS and CEMVN, and described in each Coordination Act Report (CAR). The most up-to-date CARs, as of November 15, 2010, were utilized to estimate impacts on wetlands. All mitigation for jurisdictional wetlands and non-jursidictional BLH are derived from the results of the final CARs.

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39	4-50 to 4-52		Table 4-6	This table quantifies impacts of each IER to wetlands and non-jurisdictional bottomland hardwoods. There is no quantification of wetland impacts by habitat type in the CED, other than in the draft CAR. Given mitigation for impacts will be in-kind (e.g. brackish marsh mitigation for brackish marsh impacts), future CEDs should provide a quantification of impacts by habitat type. NMFS acknowledges, as is stated in the CED, we are allowing fresh and intermediate marsh impacts to be combined to allow one project to compensate for both habitat types.	NMFS	Impacts on wetlands and non-jurisdictional BLH were quantified in the CARs. The CARs are inconsistent in classifying impacts by wetland habitat type. However, the mitigation PIERs and TIERs will have details of impacts and proposed mitigation by wetland habitat type. Further, the additional mitigation information will be described in future supplement(s) to the CED.
40	4-51		Table 4-6	Wetlands and Non-Jurisdictional BLH Impacts - Impacts for IER 13 are incorrectly listed. Approximately 58 acres (38.86 AAHUs) of wetlands were impacted, and 13 acres (7.80 AAHUs) of non-jurisdictional BLH were impacted.	USFWS	Concur; an error was made in including tidal BLH impacts (19 acres) as non-jurisdictional BLH.

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41	4-52	Paragraph 1		This paragraph discusses indirect wetland impacts which could result from HSDRRS construction. Specifically, it indicates some features were modeled and found to increase inundation depth, frequency and duration on adjacent or enclosed wetlands. Such impacts were not evaluated using the Wetland Value Assessment methodology, although such an evaluation is possible. A supplemental CED should discuss potential wetland impacts which could result from modeled hydrologic impacts and quantify compensatory mitigation needs to offset such impacts.	NMFS	Do not concur. The WVA methodology can quantify indirect impacts on wetlands from HSDRRS and to the extent that impacts were more than simply negligible, those impacts were quantified in the WVAs. The WVA methodology was used during the evaluation of impacts from each of these HSDRRS features, and the impacts were described in the final CARs. Impacts on wetlands will also be discussed in the mitigation PIERs and TIERs. The majority of the HSDRRS was constructed in the same alignment as LPV and WBV Hurricane Protection System. The only new HSDRRS features with the potential to alter hydrology on the protected side were described by IERs #11 and #16. Indirect impacts on wetlands as described in IERs #11 and #16 were determined to be negligible. It is not anticipated that the HSDRRS would have any hydrologic impacts on wetlands located on the protected side of structures because gated openings were constructed or maintained to ensure a continuous hydrologic connections. Water Control Plans for all gated structures describing the operations of gates will be provided in future supplement(s) to the CED.

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42	4-52			It is stated that 5,128 acres of wetlands and BLH habitats were lost by the construction of the HSDRRS. The mitigation of those wetland losses will have a basic cost. How much has the Corps estimated for mitigation of impacts? Is this money set aside to be available when the Corps purchases mitigation lands to compensate for wetlands impacts? What is the timeframe to institute the mitigation features? We support the USFWS's recommendation that money for purchase of mitigation should be allocated as first cost of the project. There have been many occasions where the money for a public works project "ran out" and the low priority mitigation requirements were forgotten. The Audubon Council is also concerned about lack of availability of funds to carry out the mitigation program for HSDRRS. We request that the Final CED answer the questions above and assure the public that the mitigation program will be carried out to its conclusion.	LAC	The impacts documented in the IERs were based on a worst case scenario footprint as these documents were being completed concurrent with the HSDRRS design. Current impact estimates based off of the 95 to 100% design plans have now cut these impacts almost in half. As the actual impacts from construction of the HSDRRS are refined those impact estimates will be released in subsequent mitigation IERs and future phases of the CED. The USACE has budgeted $250 million to complete mitigation for HSDRRS impacts, which will be sufficient to fully cover mitigation costs. The details of these projects will be addressed in forthcoming mitigation IERs.

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43	4-54			"To minimize the impacts on 2,485 acres of wetlands located north of US 90, the combined cross section at the perimeter of the project was sized to equal the combined cross-section of the openings through US 90 prior to HSDRRS construction. The approximately 265 acres of wetlands located south of US 90 will continue to have hydrologic connections, but with a reduced cross-sectional area (IER #16)." (p. 5-23). "As noted in IER #16, the USFWS recommends that the previous induced development study examine potential development over the period of analysis (i.e., 50 years) to be consistent with the planning process. Information about potential development of the area in question derived from this analysis was used to determine wetlands and non-jurisdictional BLH mitigation requirements. The St. Charles Parish Development Study demonstrates the likely development that will occur within the study area, and the period of analysis for the induced development is appropriate. However, the USACE does not mitigate for indirect impacts such as induced development, where local and state entities regulate zoning and land use are able to assign mitigation requirements directly to the developer. The USFWS recommendation was not adopted as a mitigation measure." "Changes in floodgate operations or more frequent closures due to increased storm frequencies at any gated structure in the HSDRRS could be required in the future due to sea-level rise or changes in climate patterns. These changes cannot be predicted at this time, and may never be severe enough to force an operational change. However, any increase in the duration of HSDRRS floodgate closures would increase in depth and duration of flooding of the marsh, adversely impacting plant health and causing wetland loss." We agree that increased duration of flooding caused by the closure of the sector gates will adversely affect the wetlands. Computer modeling of the future RSLR is within the realm of predictability. The estimates of RSLR for southeastern Louisiana have been estimated by climate scientists and the range of rise can be plotted for future years. These predictions should be modeled and included in the Final CED. The increased inundation of wetlands and the adverse impacts must be included in the Final CED as indirect impacts of the project.	LAC	Do not concur. All HSDRRS structures were designed with the consideration of relative sea level rise through the year 2057. Gated structures will be closed only in response to real threats from severe storm events as described by their Water Control Plans, and will not be closed as a result of higher water levels solely due to eustacy. As a result, the duration of closures are directly related to storm frequency and intensity, which is very difficult to predict. As of November 2010, there were neither predicted schedules for gate closures nor Water Control Plans that would provide guidance as to the thresholds for closure. The WBV-74 (Highway 90) (IER #16) Standing Instructions specify that gates be closed 2 days before a tropical storm arrival, which based on historical data will result in a closure of the gates with water level at +2 feet or less. Future mean sea level rise may cause future stages to be higher when the gates are closed, and could result in a longer duration of inundation (as sector gates are not supposed to be opened until the stage decreases to +2 feet); however, the sluice gates could also be opened earlier if the flood side stage is lower. Also, see responses to comments number 13 and number 41.

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44	4-55 to 4-56			This section identifies wetlands restoration projects which could benefit the HSDRRS area, including Bonnet Carré diversion, Violet Canal freshwater diversion, and Caernarvon Outfall Management projects. Wording should be added to those projects giving the current status of project implementation and their likelihood of implementation.	NMFS	Additional text was added providing the current status of these projects. However, it is not possible to determine the likelihood of their implementation since so many variables that are not in the control of the USACE determine implementation likelihood.
45	4-55 to 4-56			Summarize within a table, if possible.	CPRA	Do not concur. There is a substantial amount of detail concerning restoration and flood risk reduction projects on these two pages that would be lost in tabular format.
46	4-56		NOV	Are the impact numbers accurate? A different alternative was selected as the preferred after the public release of the Draft EIS for NOV. Recommend the impact numbers be double-checked.	CPRA	Yes, the estimates of impacts on wetlands and waters of the U.S. are accurate and are derived from table 6-1 of the Final Supplemental Environmental Impact Statement (EIS) for the New Orleans to Venice Federal Hurricane Protection Levee project.
47	4-57		Transportation	Consider a table.	CPRA	See response to comment number 45.
48	4-63		Fisheries	Is it relevant to discuss the history of fishing from prehistory to the mention of the gas engine?	CPRA	Commercial and recreational fishing are, and historically have been, important resources for coastal Louisiana. As a comprehensive document, two paragraphs describing the setting for fisheries and its importance to the community and the economy is reasonable.
49	4-64	Paragraph 2		This paragraph provides a listing of estuarine finfish species likely to be in the project area, including Atlantic menhaden. Gulf menhaden is the appropriate species to be listed here, not Atlantic menhaden.	NMFS	Concur. Change made as recommended.
50	4-64			Why are 2005 data used for shrimp and crab landings? More recent data should be used. Annual data 1998-2000 is over a decade out of date.	CPRA	Landings data have been updated. However, utilizing more recent commercial fisheries landing data does not alter the impacts analysis of the HSDRRS on fisheries nor alter any recommended mitigation measures.

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51	4-66			Update Table 4-9.	CPRA	Do not concur. See response to comment number 50.
52	4-68 to 4-78			Much of this information can be easily summarized within a table.	CPRA	Do not concur. A substantial amount of detail concerning impacts on fisheries by sub-basin would be lost in a tabular format.
53	4-72	Paragraph 1		The last sentence indicates the reduction of salinities caused by closure of the Mississippi River-Gulf Outlet would have a long term beneficial impact on fisheries in the Lake Pontchartrain basin. We recommend this statement be deleted or clarification be provided indicating the closure of the Mississippi River-Gulf Outlet would likely benefit only those fishery species which utilize fresh to low salinity wetlands as nursery and foraging habitats.	NMFS	Concur. Change made as recommended.
54	4-74			Specific Impacts of the HSDRRS, Gretna-Algiers Sub-basin - To prevent any further impacts that could result from operation of the pump station, (i.e., scouring, banks erosion, etc.) due to its discharge of 20,000 cubic foot per second (cfs), foreshore protection would be constructed within the channel adjacent to the western Gulf Intracoastal Waterway (GIWW) shoreline. We recommend revising the last sentence to state that "rock foreshore protection," rather than "rock placement" on the shoreline could improve edge habitat.	USFWS	Concur. Change made as recommended.

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55	4-77		4.2.5.2.2	HSDRRS 2057 Impacts - In regards to the "Improved Protection on the Inner Harbor Navigation" Canal project, the Corps has previously disclosed that the impact of sea level rise in conjunction with marsh loss on the operational scenario of the water control structures is unknown and could result in increased frequency and duration of closures. This could translate into impacts to aquatic resources and fisheries by disrupting migration patterns and ingress and egress into interior marshes. Because these impacts could result in a change in frequency and/or duration of gate closure the Corps intends to incorporate adaptive management to address such changes. As it relates to cumulative impacts to fisheries and wetland habitats the uncertainty of future operational scenarios should be addressed.	USFWS	Concur. Change made as recommended.
56	4-79			"It is anticipated that a report will be prepared detailing the final results of the DO and salinity data collection efforts in 2013. Those data and interpretation of changes in DO and salinity will be used by CEMVN to evaluate alternatives for providing rectification or mitigation." Will these alternatives be evaluated in a supplemental CED?	CPRA	Yes; any alternatives recommended or evaluated will be described in supplement(s) to the CED.
57	4-82			"Long-term effects of flood risk reduction infrastructure would slow the erosion of valuable fish habitat by reducing the potential of more fragmentation due to high energy storm surge."	CPRA	Thank you for your comment. Structures such as the Borgne Barrier and the levees surround Bayou Sauvage National Wildlife Refuge would reduce marsh fragmentation from storm surge on the protected side of the barrier and levee.

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58	4-84		Wildlife	Why isn't the section on wildlife tailored to the WMA within the HSDRRS system?	CPRA	Wildlife use numerous habitats within and in the vicinity of the HSDRRS. Limiting this resource discussion to just the Wildlife Management Area would leave out the potential impacts on wildlife and their habitats at other locations.
59	4-91	1st paragraph	New Orleans East Sub-basin	"The new floodwall (IER Supplemental #6) eliminated the existing terrestrial wildlife access to Lake Pontchartrain along the reaches, which potentially impacted species such as nutria (Myocastor coypus), red fox (Vulpes vulpes), raccoon, Virginia opossum, and nine-banded armadillo." Nutria and nine-banded armadillo are invasive species. Would access to the lake promote the destructive activities of these species?	CPRA	The new floodwall eliminated access to the lake for these two species. The elimination of access would not promote destructive activities by the eliminated species.
60	4-104 to 4-105		Tables 4-12 and 4-13	These tables list federally managed fishery species in the vicinity of the HSDRRS project area, including Gulf stone crab and gray snapper. Those two species should be deleted from these tables and any discussion pertaining to essential fish habitat.	NMFS	Concur. Change made as recommended.
61	4-114	Paragraph 2		This paragraph indicates construction activities associated with IER 10 resulted in a loss of 42 acres of open water categorized as EFH. Table 1 in Appendix N quantifies the impacts to open water for IER 10 as 50 acres. The correct acreage of impacts to all categories of EFH should be determined and all appropriate sections of the CED should be revised to consistently cite the same numbers.	NMFS	Concur; Appendix N is incorrect. A loss of 42 acres of open water categorized as Essential Fish Habitat (EFH) is the correct impact estimate.

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62	Chapter 5			Mitigation for the HSDRRS wetland impacts is not discussed within the CED and, instead, it's stated that programmatic IERs will be prepared. Will a supplemental CED be prepared to discuss the cumulative effects of HSDRRS on wetlands?	CPRA	The draft CED discusses cumulative impacts on wetlands from IERs completed by November 2010 and from projects constructed by July 2011. The supplement(s) to the CED will further describe these cumulative impacts from additional completed projects.
63	Chapter 5			What was the methodology for calculation of wetland mitigation for contractor-furnished borrow areas? Were borrow impacts tracked to determine overall impacts and were credits purchased from an approved bank at the time of impact or were all wetland impacts mitigated through an approved bank at one time? Were wetland impacts on contractor furnished borrow areas calculated using WVA or MCM?	CPRA	There were no impacts on wetlands at borrow sites because all wetlands were delineated and avoided during borrow material removal. Credits from mitigation banks were purchased to offset impacts on non-jurisdictional BLH at borrow sites. WVAs were used for quantification of all impacts.
64	Chapter 5			WVA is not an appropriate evaluation tool to assess the impacts of HSDRRS construction to wetland habitats.	CPRA	Do not concur. USACE Planning Guidelines for civil works projects require the use USACE-certified models when analyzing habitat impacts and mitigation of these impacts. The WVA methodology is the only model certified for use in evaluating HSDRRS impacts and mitigation. Additionally, WVA models were approved for use for quantifying impacts on wetland habitats by other resource agencies (e.g., USFWS).

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65	Chapter 5			Mitigation is being developed in coordination with the natural resource agencies and will be addressed in a separate IER. It has been our understanding sufficient funds have been set aside to fund mitigation to offset impacts to wetlands and associated EFH. NMFS is concerned there may be a funding shortfall to accomplish the necessary mitigation given increasing delays to construct and/or acquire mitigation while cost of constructing flood protection measures increase. NMFS recommends supplemental CEDs address the subject of mitigation commitments made to date and discuss the adequacy of the funds set aside to purchase or construct mitigation, as well as maintain the mitigation project(s) until initial success criteria are reached and the project(s) are turned over to the non-federal sponsor.	NMFS	Please refer to the response to comment #42 as regards anticipated mitigation costs and funding. The final supplement(s) to the CED would not be issued until after the mitigation IERs are completed. The supplement(s) to the CED will update implementation of the HSDRRS mitigation program. HSDRRS compensatory mitigation will be addressed in mitigation IERs or in supplement(s) to the IERs. The compensatory mitigation requirement would not be satisfied until the success criteria for the mitigation projects are adequately met.
66	Chapter 5		Sect 5.2.2.2	The use of AAHU's is not acceptable by the NPS to determine compensation. Please refer to the Procedural Manual #77-1 for NPS compensation policies. This remains true for all following compensation discussion. Methodology indicates that there will be two Programmatic Mitigation IERs that will be prepared.	NPS	USACE Planning Guidelines for civil works projects require the use of USACE-certified models when analyzing habitat impacts and mitigation of these impacts. The WVA methodology is the only model certified for use in evaluating HSDRRS impacts and mitigation, and WVA models generate results expressed in AAHUs. CEMVN is fully aware of NPS Procedural Manual #77-1, which requires that wetland impacts on NPS lands be mitigated at a minimum 1:1 ratio (e.g. minimum 1 acre of mitigation for each acre impacted). The analyses thus far indicate that use of WVA models to determine the mitigation required generally would result in mitigation that exceeds the NPS 1:1 ratio requirement.
67	Chapter 5		Sect 5.3.1.5	Wetlands. This section discusses acreage to be mitigated, but does not offer plan details. We look forward to mitigation plan preparation.	NPS	Thank you for your comment. Programmatic mitigation IERs will be prepared and will be distributed for public review and comment.

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68	5-4		Sect 5.2.2	"Any fill or excavation in open water habitat that is designated by oyster seed grounds by LDWF." Is this applicable to HSDRRS?	CPRA	Yes; compensatory mitigation planning for wetlands must take this into consideration.
69	5-4 to 5-6		Sect 5.2.2.1 and 5.2.2.2	Sections read as if mitigation is still in the development process when that's not the case. The TSPs have been selected for LPV and WBV.	CPRA	The CED was prepared with a cutoff date of November 2010 for IERs and July 2011 for construction projects. At the time of these evaluations the TSPs had not been selected for wetland mitigation. Further, all plans remain tentative until the environmental compliance (PIERs and TIERs) for the mitigation is completed.
70	5-6			"Anticipated date for completion of programmatic mitigation IERs (IERs #36 and #37) is October 2012." Should "2012" be 2013?	CPRA	Concur; change made to "December 2013" as recommended.

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71	5-6			*All compensatory mitigation activities will be consistent with standards and policies established in the CWA Section 404 regulatory program and the appropriate USACE policies and regulations governing compensatory mitigation*. The USACE New Orleans District's HSDRRS mitigation is inconsistent with the CWA Section 404 regulatory program as well as USACE policies and regulations. Throughout the mitigation project selection process, District personnel consistently put more emphasis on mitigating in-kind than being consistent with a watershed approach. The actions taken appear to be contrary to USACE's implementation guidance for WRDA '07 – "*the mitigation planning process includes…compensating for lost non-negligible resources through in-kind mitigation to the extent incrementally justified employing a watershed approach in mitigation planning; and, identifying the features of the mitigation plan and how it will be implemented in the project decision document.*"	CPRA	Do not concur. The proposed mitigation for impacts on wetlands and non-jurisdictional BLH is consistent with the Clean Water Act Section 404 regulatory program and USACE policies and regulations governing compensatory mitigation. The mitigation planning has utilized a watershed approach. Two mitigation PIERs are being prepared to describe the details of the mitigation planning process and the proposed compensatory mitigation sites for LPV and WBV.
72	5-6	Second -to-last paragr aph		This paragraph states that the anticipated date for completion of the programmatic mitigation IERs (IER #36 and 37) is October 2012. We recommend that this be updated to reflect the current anticipated schedule.	USFWS	Concur. Date was changed to December 2013.

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73	5-7		Figure 5-1	Figure 5-7 is titled HSDRRS Wetland Compensatory Mitigation Sites Being Evaluated. USACE selected the TSPs for the mitigation sites in 2011. It is misleading to imply the project sites on the figure are currently under evaluation for use as mitigation when the decision to utilize specific sites has been made.	CPRA	Do not concur. See response to comment number 69.
74	5-9			FWS Coordination. Please advise us if there was NPS consultation.	NPS	Coordination was conducted with the NPS for all impacts and required mitigation at Jean Lafitte National Historical Park and Preserve (JLNHPP).
75	5-10 to 5-18			Detail mitigation measures and BMPs discussed within the IERs to be implemented during construction. The text does not clarify if these measures and BMPs were in fact implemented during construction activities nor does the text state if additional wetland impacts occurred. Rather than copy/paste this text directly from the IERs, the CED should discuss the cumulative effects of HSDRRS construction activities on wetlands.	CPRA	These detailed mitigation measures and best management practices (BMPs) were included in the IERs and provided to the design team and implemented on a case-by-case basis. Where any design changes deviated from the original IERs, IER Supplementals and Addendums were prepared to address these changes. Cumulative impacts on wetlands from the HSDRRS are described in section 4.2.3.2.
76	5-14			Mitigation - According to the CED, to avoid the movement of sediments into Lake Pontchartrain the Service recommended that the coffer dam be used only during a slack tide. We recommend that the word "used" be replaced with "constructed" to accurately reflect our comment.	USFWS	Concur; change made as recommended.

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77	5-16			The description under the first paragraph of Section 5.3.1.3.7 seems to refer to the West Closure Complex, though it is not named. This narrative assumes that the structure was not constructed as of the cutoff date for this draft CED. However because this is such a large and significant feature of the overall project, there would be less opportunity for confusion if these few sentences were updated.	EPA	Do not concur. The cutoff date for the CED was established to ensure consistency in the assessment of impacts for all projects and resources. Additional details concerning the modifications to design and construction of the West Closure Complex, including mitigation measures implemented will be addressed in the supplement(s) to the CED.
78	5-21		Sect 5.3.1.5.6, bullet three	Edit to read: "… should be constructed within a 100 ft. wide corridor from the GIWW into the 404(c) area, impacting as little of the wetland habitat as feasible.	EPA	Concur; change made as recommended.
79	5-45			"Work that was originally proposed for foreshore protection as described in IERs #6 and #7 was not needed to meet the current 100 year level of risk reduction and therefore was performed." Add not before "performed" if this was the case.	CPRA	Concur; change made as recommended.
80	5-45 to 5-46		Monitorin g	Isn't monitoring underway for the Bayou Aux Carpes 404(c) area?	CPRA	Yes, monitoring is currently underway. However, information in the CED is restricted to the cutoff date of November 2010 and July 2011 for construction activities. The status of monitoring activities for the Bayou Aux Carpes 404(c) area will be reported in the future supplement(s) to the CED.
81	5-48		Last sentence	Note that, as it currently looks, the long-term monitoring plan may well be developed after the augmentation features are constructed, but that sequencing was not stipulated.	EPA	Do not concur. Please see the last two sentences of the first paragraph on page 5-49 of the draft CED. They state that: "Long-term monitoring would be performed in conjunction with augmentation adaptive management. Since the water quality and hydrologic modeling were delayed, the development and implementation of the long-term monitoring began prior to the construction of any augmentation feature."

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82	5-49			Specific Monitoring Measures, Gretna-Algiers Sub-basin - The National Park Service has indicated that amphibian surveys will not be conducted within the Bayou aux Carpes area. This section should be revised accordingly.	USFWS	Concur; change made as recommended.

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83	6-8			"USFWS Recommendation 24: Acquisition, habitat development, and maintenance and management of mitigation lands should be allocated as first-cost expenses of the project, and the local project-sponsor should be responsible for operational costs. If the local project-sponsor is unable to fulfill the financial mitigation requirements for operation, then the CEMVN shall provide the necessary funding to ensure that mitigation obligations are met on behalf of the public interest". CEMVN Response 24: Construction of the project features is cost-shared between the Federal Government and non-Federal sponsor. However, costs for operation, maintenance, repair, replacement, and rehabilitation will be the responsibility of the non-federal sponsor.	LAC	In the case of USACE-constructed mitigation projects, mitigation actions will include construction activities, with the non-Federal sponsor responsible for operation and maintenance of functional portions of work as they are completed. On a cost shared basis, USACE will monitor completed mitigation to determine whether additional construction, invasive/nuisance plant species control, and/or plantings are necessary to achieve mitigation success. USACE will undertake additional actions necessary to achieve mitigation success in accordance with cost sharing applicable to the specific mitigation project and subject to the availability of funds. Once USACE determines that the mitigation has achieved initial success criteria, monitoring will be performed by the non-Federal sponsor as part of its operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) obligations. If, after meeting initial success criteria, the mitigation fails to meet its intermediate and/or long-term ecological success criteria, USACE will consult with other agencies and the non-Federal sponsor to determine whether operational changes would be sufficient to achieve ecological success criteria. If, instead, structural changes are deemed necessary to achieve ecological success, USACE will implement appropriate adaptive management measures in accordance with the contingency plan and subject to cost sharing requirements, availability of funding, and current budgetary and other guidance. The LPV HSDRRS and WBV HSDRRS Project Partnership Agreements between the CPRA of Louisiana (the non-Federal sponsor) and the Federal Government provide the required financial assurance for the anticipated mitigation projects. In the event that the non-Federal sponsor fails to perform, the CEMVN has the right to complete, operate, maintain, repair, rehabilitate or replace any project feature, including mitigation features, but such action would not relieve CPRA of its responsibility to meet its obligations and would not preclude the U.S. from pursuing any remedy at law or equity to ensure CPRA's performance.

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84	6-15			CEMVN Response 15, last paragraph - The Service requests that all natural resource agencies involved in mitigation be coordinated with to determine what certain mitigation activities will be necessary to meet the projects initial success criteria.	USFWS	Concur; change made as recommended.
85	7-2		Table 7-1	Add Clean Water Act Section 404(c) as a relevant law and regulation providing guidance in the development of the HSDRRS.	EPA	Concur; change made as recommended.
86	8-11		8.7	Other Non-Federal Sponsor Responsibilities - This section should indicate that the local sponsors will be aware of the need to coordinate changes with the natural resource agencies to ensure such changes do not result in additional unmitigated impacts or result in possible impacts to any threatened or endangered species.	USFWS	Concur; addition made as recommended.
87	9-3		Table 9-1	What is the basis of the finding of that wetland impacts from the HSDRRS were "moderate" when reviewed at the sub-basin level? Certainly, the cumulative direct loss of either 1,637 or 1,483 acres of wetlands could be considered significant or major (see below comment regarding discrepancy in direct wetland impacts). Is there a technical basis to support the finding of moderate wetland impacts in each sub-basin?	EPA	Do not concur. The classification for the magnitude of impacts is provided on page 4-1 of the draft CED. All impacts on wetlands and non-jurisdictional BLH are being fully mitigated through the restoration of wetlands and BLH in the same basin where impacts occurred. Therefore, impacts on wetlands and non-jurisdictional BLH were readily detectable, long-term, localized, and measurable (i.e., moderate). Because all impacts on wetlands and non-jurisdictional BLH will be fully mitigated, the impacts will not be long-term nor will they have substantial consequences on a regional scale (i.e., major).

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88	9-5			Fisheries - The second paragraph states, "the installation of rock shoreline, fronting protection, and breakwaters would provide more productive habitat for fisheries by improving edge habitat along shorelines." Natural shorelines provide the most suitable habitat for fisheries; this statement should be revised to acknowledge that while productive and possibly diverse, rock shorelines may not provide a more productive habitat for fisheries.	USFWS	The sentence was re-written for clarification. The following change was made: "The installation of rock shoreline, fronting protection, and breakwater would provide more productive habitat for fisheries by improving edge habitat along shorelines that previously were comprised of the unvegetated toe of a levee or floodwall."
89	9-5		Wetlands	Add mention of the impacts to the Bayou aux Carpes Clean Water Act Section 404(c) wetlands.	EPA	Concur; change made as recommended.
90	Appendix G			This presentation of monitoring data collected is not instructive without further explanation, including the purpose for the data collection, the implications of the data collected, and possibly maps of where the data was collected.	EPA	Appendix G is referenced throughout Volume I of the draft CED (e.g., table 1-3, pages 4-33, 4-72, 4-79, 4-112, and 5-45) and its purpose is to provide support to the information concerning proposed and ongoing monitoring efforts. Future monitoring reports and supplement(s) to the CED will provide additional information on the purpose, location, methods, and results of monitoring activities.

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91	General Comment			I believe that it is impossible to keep New Orleans from being destroyed by inundation therefore it is counterproductive to do anything other than relocate the people to higher ground. The money spent on temporary measures such as levees, floodwalls, gates, and pump stations would be better spent building a new city north of Lake Pontchartrain. That could be done in phases if the area to be protected were much smaller, limited to the financial district, the port, and the tourist quarter. However, I know that only the final catastrophe will get people to admit that such a strategy would have been the wise, prudent approach.	Michael Tritico, RESTORE	Thank you for your comment.

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92	General Comment			It concerns me that I could not find, among all the places where sea level rise is finally being talked about, any documentation of the actual projection which is being utilized, nor the source of that number, whatever it might be. What I have observed through the years is a reluctance, not just on the part of the Corps of Engineers, but also among all coastal restoration planners, to pick a number that fits with "doable" engineering projects instead of using a number that is more likely, or, as I would myself choose, the "worst case" number that would make the planning most robust. Since the projections for sea level rise keep shifting that "worst case" number upward, what I would have chosen as a limit a few years ago would now seem to be in the "more likely" range. The trend toward acceleration in the rate and the expected degree of rise in sea level should guide you toward the more prudent choice of a number that, although disturbing, will likely be the wiser choice.	Michael Tritico, RESTORE	The effects of relative sea level rise on HSDRRS designs are discussed in the section 2.8.2 in the 1% HSDRRS Design Report. Any hard structure (e.g., floodwall) is designed and built in light of future hydraulic boundary conditions. The implications of sea level rise for engineering and design is described in 2011 Engineer Circular titled "Sea-Level Change Considerations For Civil Works Programs". The Engineer Circular (EC 1165-2-212) is available online here: planning.usace.army.mil/toolbox/library/ECs/EC11652212Nov2011.pdf The new USACE EC states that three different sea level rise rates must be considered in planning and design. When USACE designed HSDRRS, before publication of the new EC, a relative sea level rise value of 1.0 foot was used which amplifies future 1% surge values by 1.5 to 2.0 feet. A relative sea level rise rate of 1.0 foot was chosen based on historic sea level rise rates at gages near the HSDRRS system. The effect of three different sea level rise rates on the level of risk reduction for the HSDRRS will be addressed in an upcoming report titled "Hurricane and Storm Damage Risk Reduction System Design Elevation Report."

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93	General Comment			I am not an engineer and so I do not know the seriousness of a couple of things I have picked out as an example of what would appear to be situations akin to what happened in Braithwaite during Hurricane Isaac. As I perceived that situation, there was something of a "funneling" effect. A lot of sea water moved into a smaller and smaller place and had no escape router so it flooded the community. That funnel effect looks likely for the area of St. Claude/Jourdan/Japonica streets at the head of the Inner Harbor Navigation Canal, where, on Map 6 I see no preventive measure. Similarly, although there is a Sector Gate near the mouth of Bayou St. John near Killdeer Street, it looks to me like there is also the likelihood that, during a storm surge situation, lake water velocities would be amplified at that location, just as they are in a hydraulic jack. Having such apparently vulnerable elements in a plan would seem to undermine its overall reliability, just as the failure of a few short stretches of levee during Katrina led to massive flooding.	Michael Tritico, RESTORE	The geometry described along Lake Pontchartrain is much too localized to cause the "funneling effect". The levee alignments along Lake Pontchartrain form a pocket at the mouth of Bayou St. John. This pocket is approximately 0.9 miles wide and 0.3 miles deep. The size of this pocket is much too small to amplify surge values. When strong north winds push surge to the south shore, surge piles up against the lakefront levees and into the pocket. Velocities are actually very low near the levee because the water has nowhere to go except up. A 1% surge is approximately 9.0 feet NAVD88 at the exterior of the pocket, and is approximately 9.1 feet NAVD88 at the lakefront levee. This is a 0.1 foot amplification due to the levee alignment and slightly longer fetch length. Bayou St. John is protected at this point at its confluence with the lake by a gated structure sufficient to provide the 100-year level of risk reduction. The HSDRRS was designed to account for potential amplification of storm surge where area geography would make that a concern. The Borgne surge barrier is an example of a structure constructed in response to a substantial "funneling effect". There is a large constrained area formed at the intersection of the GIWW levee, the IHNC surge barrier, and the St Bernard Floodwall, which has been characterized by some as "the funnel". In that area, the constrained alignment is nearly 8 miles wide and 5 miles deep. On the exterior of the Borgne surge barrier, there is a relatively high 1% surge, when compared to other areas of the system. At the eastern end of Lake Borgne, the 1% surge is approximately 15.2 feet NAVD88, while at the Borgne surge barrier the 1% surge is approximately 17.7 feet NAVD88. The effect is more significant because the constrained alignment is relatively large, but the Borgne surge barrier has been designed and constructed to reduce the risk of overtopping by a 100-year level (1%) storm surge. The area of St. Claude/Jourdan/Japonica streets at the Inner Harbor Navigation Canal (IHNC) is the location of the IHNC Lock that allows vessels to move from the higher water levels of the Mississippi River to the lower water levels of Lake Pontchartrain. During storm events the entire IHNC is closed from storm surge by the combination of gates at the Borgne barrier and Seabrook gated complex. The two structures provide the entire IHNC with the 100-year level of risk reduction.

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94	General Comment			My primary concern is the ongoing false hope caused by a system that cannot really protect people completely and indefinitely. That false hope is certain to lead to more drowning.	Michael Tritico, RESTORE	Thank you for your comment.
95	General Comment			I also have concerns hope about the ecological impacts. Keeping a major human presence in the area not fit for human inhabitation is not good for the people nor is it good stewardship of our natural resources. The longer people stay where they do not belong, the more telling will be the adverse impacts upon the coastal and oceanic ecosystems and the harder it will be to restore the proper dynamic equilibrium to those systems once people are removed.	Michael Tritico, RESTORE	Thank you for your comment.
96	General Comment			The extensive discussions in Chapter 4 show that the Corps does understand the many adverse impacts of its former and future work on ecosystems. The fact that public pressure has led to the "Emergency" declaration way of getting around the legal framework meant to diminish those impacts is no surprise to me. However, as I have said in the past, more than once, I would hope that someday the Corps might gather the courage to tell Congress things that are hard to hear such as: the cost of permanently ruining a coastal ecosystem is not offset by the half-century benefits to a regional economy.	Michael Tritico, RESTORE	The USACE complied with all laws and regulations in its design and implementation of the HSDRRS, including the National Environmental Policy Act (NEPA), through its compliance with the Emergency Alternative Arrangements.

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97	General Comment			The token "wildlife crossings" shown in the maps seem hardly sufficient since they are far apart. That is the kind of "mitigation" that seems so transparent and such an afterthought that is almost heartbreaking to think of what will really be happening to the wild lives	Michael Tritico, RESTORE	The wildlife crossings were designed through coordination with state and Federal resource agencies.
98	General Comment			The alternative arrangements pursuant to 40 CFR 1506.11 have resulted in further delays to assessment of impacts and to mitigation of the loss of ecosystem functions.	Scott Eustis, Gulf Restoration Network	Do not concur. The Emergency Alternative Arrangements were implemented to expedite design and construction of the HSDRRS. No delays to either the assessment of impacts or to mitigation have occurred due to the Alternative Arrangements.
99	General Comment			There remains a major question of when the emergency circumstances come to an end.	Scott Eustis, Gulf Restoration Network	The alternative NEPA arrangements only apply to the HSDRRS features, and only apply to the USACE's NEPA-compliance evaluation of these features. See response to comment number 25.
100	General Comment			The CED document is incomplete, especially pertaining to indirect impacts of the HSDRRS system upon wetlands and federal projects, including newly impounded wetland forests in Lake Catahouachie sub-basin, as well as federal lands and federal restoration projects enclosed by the system in New Orleans East and Chalmette Loop sub-basins.	Scott Eustis, Gulf Restoration Network	Do not concur. All mitigation and design measures implemented during construction to avoid indirect impacts on wetlands were described in the CED. Additionally, please see the response to comment number 41.
101	General Comment			Because of the impact assessment remains incomplete, mitigation plans lag behind. Construction of wetland features is a critical component of flood risk reduction in the New Orleans District, and their funding must be assured.	Scott Eustis, Gulf Restoration Network	The USACE is committed to mitigating all HSDDRS impacts on wetlands and non-jurisdictional BLH. As was described in the draft CED, two mitigation PIERs will be released for public review describing the proposed mitigation for these impacts on wetlands. Sufficient funds have been budgeted and set aside to complete mitigation for HSDRRS impacts.

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102	General Comment			Given the failure of this process to take a hard look at the impacts and evaluate alternatives for risk reduction that synthesize natural and built risk reduction features, we protest the use of such alternative arrangements in the future.	Scott Eustis, Gulf Restoration Network	Thank you for your comment.
103	General Comment			What are the anticipated completion dates of the mitigation IERs, IER 36, and IER 37?	Jason Smith, Jefferson Parish Department of Environmental Affairs	It is currently anticipated that the PIERs will be completed by December 2013.
104	General Comment			Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.	Louisiana Department of Environmental Quality (LDEQ)	The cutoff date for information to be included in the CED is November 15, 2010 for completed IERs and July 2011 for completed construction. All approvals and environmental permits associated with these projects have been included in the draft CED. Future supplement(s) to the CED will include any necessary approvals and environmental permits acquired after these cutoff dates.
105	General Comment			If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.	LDEQ	An LPDES stormwater general permit for construction activity was applied for prior to all construction.
106	General Comment			If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.	LDEQ	The HSDRRS projects would not result in a discharge to an existing wastewater treatment system.

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107	General Comment			All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has storm water general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-9371 to determine if your proposed project requires a permit.	LDEQ	See response to comment number 105.
108	General Comment			If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit application or Notice of Intent must be submitted no later than January 1, 2013. Additional information may be obtained on the LDEQ website at http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx <http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx> or by contacting the LDEQ Water Permits Division at (225) 219- 9371.	LDEQ	The HSDRRS projects would not include sanitary wastewater treatment facilities.
109	General Comment			If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly regarding permitting issues. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.	LDEQ	Concur. All wetland impacts have been evaluated by USACE and water quality certifications have been obtained from LDEQ.
110	General Comment			All precautions should be observed to protect the groundwater of the region.	LDEQ	No effects on groundwater would occur from the HSDRRS construction.

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111	General Comment			Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.	LDEQ	No water system improvements, including water softeners, are included in the HSDRRS projects.
112	General Comment			Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions.	LDEQ	No such renovations or remodeling are included in the HSDRRS projects.
113	General Comment			If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.	LDEQ	If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered, the contractor(s) will provide appropriate notification to the LDEQ and other agencies, as required. Construction contractors would be required to implement all applicable necessary best management practices to protect the environment and a Health and Safety Plan to protect the health and safety of employees. Additionally, CEMVN would have construction site inspectors at construction locations at all times to ensure compliance with all applicable rules, regulations, and contract specifications.

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114	General Comment			The USFWS submitted recommendations in Nov. 26, 2007 for minimizing adverse impacts on the natural environment from the entire HSDRRS project. A few of the significant recommendations follow with the Corps concurrence: "Recommendation 11: In general, larger and more numerous openings in a risk reduction levee better maintain estuarine-dependent fishery migration. Therefore, as many openings as practicable, in number, size, and diversity of locations should be incorporated into project levees." CEMVN Response 11: Concur." "Recommendation 13: Flood protection water control structures should remain completely open except during storm events. Management of those structures should be developed in coordination with the USFWS, NMFS, LDWF, and LDNR." CEMVN Response 13: Concur." "Recommendation 15: The number and siting of openings in flood protection levees should be optimized to minimize the migratory distance from the opening to enclosed wetland habitats.\ CEMVN Response 15: Concur." (from DCED p. 6-6). We request that the Final CED include tables listing the number of acres enclosed by the HSDRRS project for each IER segment, the status of those wetlands, and how the Corps plans to maintain the productivity of those wetlands over the life of the project. Any deterioration of the wetlands over the life of the project must be included as indirect impacts and stated as such in the Final CED.	LAC	Do not concur. Where wetlands were enclosed by HSDRRS features, they were quantified and described in the draft CED (e.g., Caernarvon floodwalls – page 4-34). Descriptions of how additional wetland enclosure avoidance during design were also provided (e.g., Lake Cataouatche levee - page 5-23). Further, nearly all wetlands within the HSDRRS were previously enclosed within the (pre-Hurricane Katrina) Hurricane Protection System and water control structures were either maintained or replaced to provide a similar hydroperiod (e.g., Bayou Sauvage National Wildlife Refuge). Additionally, see the response to comment number 41.

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115	General Comment			According to the Federal Register (USACE, 2007), the external engineering peer review was supposed to be made available to the public no later than the publication of the draft CED. According to the Draft CED, "The estimated completion date of Independent External Peer Review (IEPR) for all HSDRRS features, products, and activities is 2014." (p. ES-54-55). This process includes the completion of individual reviews, completion of summary reports, approval of peer review package, and posting for public release by Mississippi Valley Division. Based on this time schedule, the IEPR will come more than a year after the CED is completed. The intention of the External Peer Review was to provide the public with some certainty that the levees and structures were being built to avoid engineering. What happens if the project is built and later there are changes recommended by the outside expert? The IEPRs should be completed in a timely manner and the reports should have a positive impact on future projects.	LAC	Recommendations made by the IEPR will be considered by the USACE, and changes or remediation made to designs and constructed structures, as appropriate.

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116	General Comment			Several areas (IER-16, Lake Cataouatche) and (IER-10, Chalmette Loop) include significant wetlands on the protected side of the HSDRRS project. According to the DCED, these wetlands will remain in contact with the tidal influences and will only be closed off "during storms and high tides." The question is what happens during the 57 year life of the project when RSLR forces increased frequency of closure of gates and culverts to avoid inundation during periods of high water?	LAC	Structural operations as described by Water Control Plans were not defined by the cutoff date for the draft CED. Water Control Plans will define gate operations and these will be described in future supplement(s) to the CED. Continued sea level change and local subsidence will affect water levels in the protected side and flood side of the system. The magnitude of the change will also depend on factors such as vegetation changes in the marsh area, urbanization, and drainage system changes. As additional projects and sea level change affect the project area hydrology, the operation of the structures, as documented in the Water Control plans, may need to be revisited. Water Control Plans will be critical references in the levee system evaluation report prepared by USACE for levee accreditation. The Water Control Plans must be reviewed and updated periodically to ensure they are current and complete when levee accreditation is renewed. See response to comment number 43 for information on the standing instructions for IER-16.

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117	General Comment			This issue is especially significant for the Chalmette Levee, IER-10. What is the "trigger" used to close the structures? How many days per year will the interior wetlands be isolated from the GOM influence because of RSL rise? The closure should be addressed for each IER segment which has interior wetlands based on Corps' computer modeling. EPA (2013) expressed concern that the Central Wetlands, which are enclosed by the Chalmette Loop, are controlled by Bayou Bienvenue and Bayou Dupre sector gates. These sector gates would remain open "except during storms and high tides." (p. 5-43). EPA states that, "water elevation, which currently constitutes a high tide would be met with increasing frequency due to relative sea level rise." This is a similar situation to Morganza to the Gulf project. The Corps should include in the Final CED the criteria used to close the gates, and the future frequency of closure based on projected RSL rise for the life of the project.	LAC	Concur; Water Control Plans for gated structures are not available to be included in this version of the CED. See response to comment number 116 for information on Water Control Plans. Future supplement(s) to the CED will describe the proposed operations for the Bayou Bienvenue and Bayou Dupre sector gates.
118	General Comment			Violet Canal: Fresh water discharge through the Violet Diversion will be adversely impacted by increased closure frequency of the sector gates. How will the project affect proposed coastal restoration efforts? This should be included in the Final CED.	LAC	Design and operation of a future Mississippi River diversion at the Violet Canal will consider potential changes needed in the operations of the Bayou Dupre sector gate. Additionally, the design of a Mississippi River diversion at the Violet Canal could require further modifications to the Violet Canal and the sector gate and additional NEPA compliance.

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119	General Comment			It is stated that 5,128 acres of wetlands and BLH habitats (DCED p. 4-52) were lost by the construction of the HSDRRS. The mitigation of those wetlands losses will have a basic cost. How much has the Corps estimated for mitigation of impacts? Is this money set aside - to be available when the Corps purchases mitigation lands to compensate for wetlands impacts? What is the timeframe to institute the mitigation features? We support the USFWS's recommendation that money for purchase of mitigation should be allocated as first cost of the project. There have been many occasions where the money for a public works project "ran out" and the low priority mitigation requirements were forgotten.	LAC	Thank you for your comment. The details associated with the mitigation alternative development and selection will be provided in the mitigation PIERs. USACE has allocated sufficient funding for the appropriate mitigation of wetlands and non-jurisdictional BLH impacted by the HSDRRS. The non-Federal sponsor is responsible for the operation and maintenance of the constructed mitigation projects.

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120	General Comment			Morganza to the Gulf: The impacts to enclosed wetlands over the life of the project area are not included in the draft CED. For example, in the Morganza to Gulf PEIS it was recognized that relative sea level rise (RSLR) would change the future closure of openings to interior wetlands: "Under future conditions, closure frequency could increase if the closure trigger is not adjusted to account for sea level rise. For example, under existing conditions, HNC floodgate closure (based on a 2.5-ft closure stage only, not the salinity triggers) would occur approximately 1.5 days per year. If the trigger remained the same through 2085, low RSLR would require closure 5 days per year by 2035 and 168 days per year by 2085 (refer to RSLR rates in table 3-1). Intermediate RSLR would require closure for 15 days per year by 2035 and 354 days per year by 2085. High RSLR would require closure for 24 days per year in 2035 and 365 days per year in 2085. To prevent frequent structure closings, operation plans will need to be re-evaluated periodically and closure trigger elevations may need to be increased if significant sea level rise occurs." USACE (2013b, p. 81 in LAC, 2013).	LAC	The Morganza to the Gulf EIS was not complete prior to the November 2010 cut-off for inclusion in the CED. Furthermore, because it is not a HSDRRS project, evaluation of impacts of that project are more appropriately contained in the NEPA evaluations related to that project. See response to comments number 43 and number 116 for details of the Water Control Plans describing operations for the gated structures within the HSDRRS.

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121	General Comment			We attended most of the early public meetings on the HSDRRS project. Of continued concern to us, has been the reluctance by the NOD to provide technical information on issues raised at public meetings. In most cases when we asked for technical data (that the Corps used to support its statement at the meeting), we were told that a FOIA request was required to receive the information. This is contrary to the position that CEQ and the Corps took, in support of a free flow of information between the agencies and the public. We attended these meetings in 2006 with the USACE, EPA, CEQ and NGOs to develop the Alternative Arrangements. We have found a continued reluctance on the part of the NOD to provide information requested. In some cases, information requested under FOIA was provided only after a 90 day period. This is an unacceptable policy. In fact, the omission of critical information in IER-18, 19 stimulated a letter requesting a meeting with CEQ and NOD to discuss the deficiencies (LAC, 2007). It was the LAC that brought to the attention of the Corps that the Bayou aux Carpes 404(c) area was being designated as a borrow "staging" area. The Corps' maps continued to show that designation at subsequent public meetings for several weeks.	LAC	Public comment and involvement in the HSDRRS planning process is encouraged. The USACE endeavors to timely respond to all requests for information. These requests should be processed through the Freedom of Information Act process to meet USACE guidelines and regulations, and the USACE does recognize it requires additional effort from the public and additional time to honor those requests.

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122	General Comment			Kesel 1987, is also an outdated reference for sediment load reductions in the Mississippi River. We offer Mead Allison's as an appropriate reference. For example: Allison, M.A., Demas, C.R., Ebersole, B.A., Kleiss, B.A., Little C.D., Meselhe, E.A., Powell, N.J., Pratt, T.C., and Vosburg, B.M., 2012. A water and sediment budget for the lower Mississippi-Atchafalaya River in flood years 2008-2010: implications for sediment discharge to the oceans and coastal restoration in Louisiana. *Journal of Hydrology* 432/3:84-97. Ehab Mesehle also may have some appropriate publications on sediment budgets.	NPS	Concur. Reference modified as suggested.
123	General Comment			A Wetland Statement of Findings, per PM 77-1, will be required for compensation activities on National Park Service federal lands.	NPS	Concur
124	General Comment			A concern for this Mississippi Gulf Coast is that the La State Master Plan of protecting Lake Pontchartrain will flood South Mississippi more now than in the past.	Mike Smith, City of Waveland	Thank you for your comment. The State of Louisiana would be the appropriate party to study potential results of project proposed under the State's Coastal Master Plan.
125	General Comment			Status of MRL height in St. Bernard and East Plaquemines. Particular at Caernarvon Junction of HSDRRS and MRL.	Ray Garofalo, State Rep 103	The WBV project ties into the west bank Mississippi River Levee (MRL) at river miles 70 and 118.5 and the MRL elevations were raised from river miles 70 to 85.5 to meet the 1-percent HSDRRS requirements (IER #33). The LPV project ties into the MRL at the Caernarvon floodwall (river mile 81.5) and extends up river to river mile 87. No changes in MRL heights have occurred in that reach of the MRL on the east bank of the MRL within the HSDRRS area. The height of this levee meets the requirements for levee certification.

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126	General Comment			Seek clarification of vegetation policy	Roy Arrigo,17th St. Canal Coalition	The USACE's vegetation management policy for levees is found in Engineering Technical Letter (ETL) 1110-2-571 *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures* date 10 April 2009.
127	General Comment			Does any Corps policy require local sponsors to increase existing real estate interest in order to attain minimum toe plus 15 feet inspection zones?	Roy Arrigo,17th St. Canal Coalition	In accordance with USACE guidance (ETL 1110-2-571), the vegetation-free zone (VFZ) is a minimum of 15 feet from a levee. For an existing project, if the existing real estate interest is less than 15 feet, then the vegetation free zone shall be the maximum attainable within the existing real estate interest.
128	General Comment			Did the Corps request Louisiana to increase levee inspection zones from toe plus 6 feet real estate interest to toe plus 15 feet real estate interest statewide?	Roy Arrigo,17th St. Canal Coalition	The USACE is aware of a Louisiana statute that authorized levee districts to remove obstructions from within 6 feet of a levee. That law was amended in 2011 to authorize removals within 15 feet of a levee. However, the USACE did not request this change to the state law.
129	General Comment			In cases where the existing real estate interest was levee toe plus 6 feet, does this circumstance threaten the certification of those levees?	Roy Arrigo,17th St. Canal Coalition	In addition to the VFZ that is described in response to comment number 127, the ETL identifies a "Vegetation Management Zone" (VMZ) which extends beyond the VFZ. The ETL provides for evaluation and the potential removal of vegetation from within the VMZ as needed to address concerns about impacts to a project. The USACE communicates risk associated with the VFZ and the VMZ to local sponsors, parish officials and the public through various means, including the Continuing Eligibility Inspection Reports. Such risks may also be noted in reports that evaluate a levee system for accreditation in the NFIP. The USACE was asked to prepare the 2013 Levee System Evaluation Report (LSER) for the evaluation of the HSDRRS, including the outfall canals. In that report, the USACE considered the trees that had been removed in the 2007 to 2009 timeframe and it identified only one tree, near the intersection of Veterans Highway and 17th Street Canal that would require removal. A plan has been developed for the removal. As of April 2013, the HSDRRS is accredited in FEMA's NFIP.

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130	General Comment			Did the Corps notify Louisiana that 6 foot inspection zones were a threat to levee certification statewide?	Roy Arrigo,17th St. Canal Coalition	The USACE was aware of the state law that authorized removals within 6 feet of a levee, but the USACE did not notify the State that it would threaten levee certification statewide. As noted in response to comment number 127, the ETL acknowledges that the width of the VFZ for an existing project may be less than 15 ft, depending on the extent of the real estate interests. As noted in response to comment number 129, the HSDRRS is accredited in FEMA's NFIP.
131	General Comment			Have Louisiana levees with toe plus 6 foot inspection zones actually met certification?	Roy Arrigo,17th St. Canal Coalition	A levee in Louisiana may qualify for certification, even if the width of the existing real estate interest is less than 15 feet. As noted in response to comment number 129, the HSDRRS has been accredited in FEMA's NFIP.

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132	General Comment			In cases where levees with toe plus 6 foot inspection zones have been certified, provided that these inspection zones are maintained as they were when certified, can this levee certification be rescinded for reasons of inadequate inspection zones sizes?	Roy Arrigo,17th St. Canal Coalition	The current LSER that will be provided to FEMA for the HSDRRS' accreditation in the NFIP was based on the existing condition of the entire HSDRRS with respect to the local sponsor's and CEMVN's ability to operate, maintain, inspect, and flood fight the levee system, irrespective of any perceived "toe plus 6-foot" inspection zone. As long as the current condition of the levee system (i.e., with respect to encroachments, vegetation, etc.) is maintained in its current state, it is unlikely that existing item(s) around the levee system would result in the USACE recommending de-accreditation in the NFIP, as long as those item(s) do not cause inability to operate, maintain, inspect, or flood fight the levee or that the item(s) will not threaten the integrity of the levee system. Performance of the levee system during future high water events will be evaluated. If any existing item(s) indicate concern for levee performance or inability to operate, maintain, inspect, or flood fight the levee for future events during those evaluations, that risk will be communicated to the local sponsor and FEMA and could impact accreditation in the NFIP. The USACE was authorized to fund the LSER for HSDRRS accreditation in the NFIP based on recent construction and improvements to the system. That report will expire no later than 10 years from the date signed. Future evaluations of the HSDRRS for accreditation in the NFIP will be the responsibility of the local sponsor, who will have the ability to select a private engineering firm to conduct that evaluation since they will fund the effort. Therefore, the USACE cannot comment on the future evaluations done by a private engineering firm with respect to existing encroachments, vegetation, etc., and whether or not those items would have to be removed to result in continued accreditation in the NFIP.
133	General Comment			My question is on the Corps' policy. Does Corps policy call on the local sponsor, the state in this case, to increase their real estate interest in order to attain the 15-foot vegetative free zone described by the policies?	Roy Arrigo,17th St. Canal Coalition	As noted in response to comment number 127, if the width of the real estate interests for an existing project is less than 15 feet, then the vegetation free zone shall be the maximum attainable within the existing real estate interest.

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134	General Comment			You mentioned that 1,637 acres of wetlands were impacted by some of your levee projects, maybe other projects as well. I'm wondering if there are any counter-actions going on to address that loss of wetland?	Bethany Garfield (Public Meeting Summary)	All jurisdictional wetlands and non-jurisdictional BLH impacted by the HSDRRS will be mitigated. Please see the response for comment number 42.
135	General Comment			What does the Corps have planned for the MS Gulf Coast region because we are already receiving the thanks from all the hurricanes? One of the evacuation route out on Highway 603 floods with a tropical storm now, which has never, ever happened in the past. That highway has been raised four or five feet over the years but it was four lanes in the beginning so what is the Corp's plan in the MS region or we just going to be left with all this water?	David Garcia, Mayor, City of Waveland, Mississippi	See response to comment numbers 139 through 142 for information about future modeling. The HSDRRS project is limited to the Greater New Orleans area, primarily located south of Lake Pontchartrain. The USACE Mobile District provides assistance in evaluating potential flood risk reduction measures in the Mississippi Gulf Coast. As summarized in the Preface of the CED, models do not indicate that any increased flooding has occurred along the Mississippi Gulf Coast as a result of HSDRRS construction.

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136	General Comment			What is being done to protect all the parishes that boarder on Lake Pontchartrain on the north and western shore? Is anything going to be done to help these people? We had a little storm called Isaac come in and flooded some 60 miles away from the Gulf of Mexico with a storm surge that traveled up in there and flooded areas that had never been flooded before. I think it's about time for the Corps, if they have any input or whatever, to try and find out what project would best serve all of the people in the Lake Pontchartrain Basin. We have spent tons of money on Jefferson, Orleans, Plaquemines, but nothing has been done for the people on the on the north and western shores of Lake Pontchartrain and it's about time for someone to come up with the plan that something can be done and will be done. So far, it looks like this is not going to happen. I also have some kind of funny question. Is the Corps of Engineers having basically the same kind of problem that the federal government has; the Corps with Lake Pontchartrain, the federal government with illegal immigrants? The federal government says we will let them come across the border and we will handle them after they get here, well don't look at the water that way. Let's handle the water before it gets into Lake Pontchartrain because now we have the proof that what we have at the present time as far as protection does not protect everybody.	Rudy Newbeck (Public Meeting Summary)	The HSDRRS is limited to the Greater New Orleans area, primarily located south of Lake Pontchartrain. No USACE hurricane and storm risk reduction projects are proposed on the north shore of Lake Pontchartrain at this time. However, the Southeastern Louisiana Flood Control Project has proposed drainage projects for the north shore. Additionally, the USACE is studying potential risk reduction projects for West Shore-Lake Pontchartrain in St. Charles, St. James, and St. John the Baptist Parishes in the West Shore Lake Pontchartrain Hurricane and Flood Damage Risk Reduction Feasibility Study.

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137	General Comment			Where the HSDRRS meets the Mississippi River Levee in Caernarvon, there is a drop off to the Mississippi River Levee and we've been told in other public meetings that the Mississippi River Levee on the West Bank is a foot higher than the levee on the East Bank. We are concerned that if we have a strong storm surge that comes up the river, we are going to be flooding on the East Bank even though we have the nice 31-32 foot wall now, we will flood from the Mississippi River. I have many constituents in that area who are concerned about this issue so we would like to have some input from the Corps of the possibility of that occurring number one, and number two, to find out if there are any plans to address this in the future.	Ray Garofalo (Public Meeting Summary)	Levee heights throughout the HSDRRS vary according to modeled storm surge. No two locations along the HSDRRS corridor would experience wave run-up from storm surge in the same way. Therefore, the differences in levee height between the East and West banks of the MRL tie-in is due to the modeled 100-year storm surge that would be experienced independently at those two locations. Also see response to comment number 125.

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138	General Comment			I have a question about Seabrook or the Industrial Canal and the gate that was placed there. I guess it's a multi-question regarding who determines when that gate is closed, when it's opened? My concern is that, because I'm a boater, and being a boater I've learned quite a lot about the waterways within Lake Pontchartrain and the Rigolets and Chef Pass and the lake is majorly filled by ingress of water of the Rigolets, Chef Pass and the Seabrook or the Industrial Canal, which is water coming up from the Gulf up the Mississippi River to Lake Borgne and into the Lake. By putting a gate between Seabrook and the MRGO, you have blocked off one of three ingresses of water into Lake Pontchartrain, which leaves water coming through Chef Pass and the Rigolets in the Lake, as well as all the rivers that dump into the lake. One of my concerns is that by controlling the gate at Seabrook, you are controlling and not allowing further water to get into the lake from that point. Once a storm has passed and the gates are still locked, you have not allowed water to egress out of the Lake as you've taken out one of three pathways for the water to leave the lake, which means water is being retained more in the lake, duration wise. I guess my concern is what time do you close the gate, whose closing the gate and when does it reopen to figure out that time?	Margaret Longstreet (Public Meeting Summary)	Currently gates close in response to storm threats. After the threat of storm surge has completely passed, gates are re-opened. Water Control Plans for the gates will be prepared that further defines how all gates operated in response to storm events, as well as gate operations in response to maintenance procedures. Water Control Plans for gated structures will be described in future supplement(s) to the CED.

Comment - Response Matrix on the Draft Hurricane and Storm Damage Risk Reduction System (HSDRRS) Comprehensive Environmental Document (CED) Phase I						
#	Location			Comment	Reviewer	Preparer's Response
	Page	Line	Section			
139	General Comment			"The flood impact of the levees and structures built on the east side of the Mississippi since 1965 to areas outside of the flood protection system as part of the HSDRRS has not been fully evaluated."	Dennis Strecker	The draft CED incorporates information from IERs completed through November 15, 2010 and provides a cumulative impact assessment of the initial construction components for 217 miles of the HSDRRS implemented before July 2011. The preface of the CED (P-1 to P-4) provides a summary of the hydrologic analysis that is currently available regarding impact of pre- and post100-year HSDRRS, specifically for Hurricane Isaac's impact outside the system. In the future, when all information is available, supplement(s) to the CED will be released that will describe the cumulative impacts for all the HSDRRS construction, including a hydrologic assessment, transportation analysis, mitigation and monitoring as well as an Independent External Peer Review of specific features. Only after all supplements to the CED have been released for public review, comments received and considered will the CEMVN District Commander approve the proposed recommended action and sign a Decision Record for the Final CED.
140	General Comment			"… until a storm such as Hurricane Betsy with and without the HSDRRS and compared for accuracy with known storm surge water levels from Betsy, there is no certainty of the impact of the HSDRRS has on areas outside the system."	Dennis Strecker	A "Cumulative storm surge comparison of the Historical Lake Pontchartrain and Vicinity and West Bank and Vicinity and the 2012 100-year Hurricane and Storm Damage Risk Reduction System hydrologic modeling assessment" is in progress to evaluate impacts outside the system. This hydrologic assessment proposes to develop 1965, 2005, and 2012 versions of the SL16 mesh, representing the levee system in the years 1965, 2005, and 2012, and run simulations with ADCIRC+SWAN, of the following storms: Betsy, Camille, Juan, Katrina, Rita, Gustav, Ike, and Isaac with the best available data. Once complete, a hydrologic report would be released by November 2013 that would describe and evaluate the historical as well as the present cumulative storm surge impact of the completed HSDRRS and the surrounding area. This report and its findings would be incorporated into future supplement(s) to the CED.

Comment - Response Matrix on the Draft Hurricane and Storm Damage Risk Reduction System (HSDRRS) Comprehensive Environmental Document (CED) Phase I						
#	Location			Comment	Reviewer	Preparer's Response
	Page	Line	Section			
141	General Comment			"The Corps must revise all of their models and studies to include 100% of the HSDRRS before any CED of the system can be considered a valid and accurate representation of the environmental impact it has on the greater New Orleans area."	Thomas Thompson	A "Cumulative storm surge comparison of the Historical Lake Pontchartrain and Vicinity and West Bank and Vicinity and the 2012 100-year Hurricane and Storm Damage Risk Reduction System hydrologic modeling assessment" is in progress to evaluate impacts outside the system. This hydrologic assessment proposes to develop 1965, 2005, and 2012 versions of the SL16 mesh, representing the levee system in the years 1965, 2005, and 2012, and run simulations with ADCIRC+SWAN, of the following storms: Betsy, Camille, Juan, Katrina, Rita, Gustav, Ike, and Isaac with the best available data. Once complete, a hydrologic report would be released by November 2013 that would describe and evaluate the historical as well as the present cumulative storm surge impact of the completed HSDRRS and the surrounding area. This report and its findings would be incorporated into future supplement(s) to the CED.
142	General Comment			"The CED must not be approved until the full impact of the HSDRRS on the Lake Pontchartrain basin is known."	Thomas Thompson	The draft CED Phase I incorporates information from IERs completed through November 15, 2010 and provides a cumulative impact assessment of the initial construction components for 217 miles of the HSDRRS implemented before July 2011. The preface of the CED (P-1 to P-4) provides a summary of the hydrologic analysis that is currently available regarding impact of pre- and post100-year HSDRRS, specifically for Hurricane Isaac's impact outside the system. In the future, when all information is available, supplement(s) to the CED will be released that will describe the cumulative impacts for all the HSDRRS construction, including a hydrologic assessment, transportation analysis, mitigation and monitoring as well as an Independent External Peer Review of specific features. Only after all supplements to the CED have been released for public review, comments received and considered will the CEMVN Commander sign a CED decision record signaling completion of the cumulative impact analysis for the HSDRRS.

Comment - Response Matrix on the Draft Hurricane and Storm Damage Risk Reduction System (HSDRRS) Comprehensive Environmental Document (CED) Phase I						
#	Location			Comment	Reviewer	Preparer's Response
	Page	Line	Section			
143	CED Volume II			Appendix D Site Location Maps - Several borrow sites, listed below; appear to have boundaries that do not reflect those shown in the IER. Some may have been modified post-IER, but that should be noted somewhere in the CED and/or appendix: • Westbank D • Westbank E Phase 1 • Riverbirch Phase 2 • Contreras Dirt • Acosta 2	USFWS	Concur; changes made as recommended.
144	CED Volume II			Additional maps needing other revision include: • Churchill Farms – only shows planned excavation , not the entire environmentally cleared area, which could all potentially be excavated • Stumf 1 and 2 – boundaries are incorrectly mixed together. • Tac Carre appears to be misplaced to the south • Idlewilde Stage 1 and 2 boundaries reversed in the CED • Tabony and Brad Buras labels are reversed in the CED • Willowbend Phase 1 shows only about half of the site	USFWS	Concur; changes made as recommended.
145	CED Volume III			Appendix G, Page 1 – A Title and legends need to be added to this table for clarification.	USFWS	Concur; change made as recommended.

Comment - Response Matrix on the Draft Hurricane and Storm Damage Risk Reduction System (HSDRRS) Comprehensive Environmental Document (CED) Phase I						
#	Location			Comment	Reviewer	Preparer's Response
	Page	Line	Section			
146	General Comment			Several of us planned to come to the meeting Tuesday at the Greek Church but at the last minute we were not able. We would like to see more options here because of the importance of the undertaking. We would like to have more practical opportunity to learn what you have done. So, yes, we would like to have additional public presentation, and hopefully a little closer to Lower Ninth Ward where your work is of vital concern.	John Koeferl for Holy Cross Neighborhood Association New Orleans	A public meeting was held on 26 March 2013 at CEMVN as requested.
147	General Comment			Per the Notice of Intent published in the Federal Register in 2007: • The CED will incorporate by reference and address the work completed and the work remaining to be completed on a systemwide scale and a final mitigation plan. The IERs are not incorporated by reference; instead large chunks were copied/pasted into the CED. A final mitigation plan is not included. • The CED will include a discussion of how the individual IERs are integrated into a systematic planning effort. This is not captured in the CED.	CPRA	Do not concur. The information from the IERs were summarized in the CED for ease of reference by the reader. All information from IERs were referenced to the appropriate IER or IER Supplemental so additional information could be obtained by the reader. The CED describes the HSDRRS as a system and provides the reader the background as to how the separate projects described independently by IERs are connected to provide an entire system for providing the 100-year level of risk reduction for the Greater New Orleans area.

Comment - Response Matrix on the Draft Hurricane and Storm Damage Risk Reduction System (HSDRRS) Comprehensive Environmental Document (CED) Phase I						
#	Location			Comment	Reviewer	Preparer's Response
	Page	Line	Section			
148	General Comment			The HSDRRS CED should at a minimum qualitatively assess such potential adverse impacts in the Central Wetlands and other aquatic areas that could be affected by the HSDRRS gates and water control structures. To address uncertainties regarding the future rate of relative sea level rise, this assessment should consider a range of potential changes in water elevations. In the case of the Chalmette Loop and Central Wetlands, this assessment should include consideration of the potential effects of increased closure frequency on proposed coastal restoration efforts, particularly the Violet Diversion.	EPA	There are no anticipated changes in the Water Control Plans at Bayou Bienvenue or Bayou Dupre as a result of the HSDRRS. If Water Control Plans change, those changes and the potential for impacts on the Central Wetlands will be described in future supplement(s) to the CED. Also, see response to comments number 117 and number 118.
149	General Comment			We encourage the Corps to accelerate the pace of implementation of compensatory mitigation for the HSDRRS. To ensure the effectiveness of this work and compliance with the pertinent laws and regulations, we recommend that the CED contain an explicit commitment to fully address the 12 compensatory mitigation plan components required by the 2009 Department of Defense and EPA final rule regarding compensatory mitigation for the losses of aquatic resources.	EPA	The USACE remains committed to implementing compensatory mitigation for HSDRRS habitat impacts as quickly as possible. It is assumed that the "12 compensatory mitigation plan components" mentioned are the components identified in 33 CFR §332.4(c)(2) through 332.4(c)(13), published in 2008. The HSDRRS mitigation IERs seeking approval to implement USACE-constructed mitigation projects will contain information regarding each of these 12 mitigation plan components, as applicable.

Comment - Response Matrix on the Draft Hurricane and Storm Damage Risk Reduction System (HSDRRS) Comprehensive Environmental Document (CED) Phase I						
#	Location			Comment	Reviewer	Preparer's Response
	Page	Line	Section			
150	General Comment			Overall, the CED presents a good summation of the implementation of alternative arrangements (including the extensive coordination undertaken), project features constructed and the resulting impacts to significant resources. The Service has previously brought attention to the amount of time being required to finalize mitigation plans and urges the rapid implementation of mitigation to ensure additional temporal impacts do not have to be incorporated into mitigation features.	USFWS	Thank you for your comment. See the responses to comment numbers 103 and 149.
151	General Comment			We built high walls, beefed up the pump stations and capacity. Where does this water go? Does it pump outside the protection, or circulate inside the walls of protection? A slow moving rain maker will stress the system if it doesn't pump outside the system. If there is a breach, over topping, we will drown inside the system designed to protect us. People will not leave. They have a misconceived faith the system is fail proof.	Edward Chauppetta	Precipitation that falls within the protected side of the HSDRRS is removed via pumps that lift stormwater out of the HSDRRS and into adjacent water bodies, such as Lake Pontchartrain.

Comment - Response Matrix on the Draft Hurricane and Storm Damage Risk Reduction System (HSDRRS) Comprehensive Environmental Document (CED) Phase I						
#	Location			Comment	Reviewer	Preparer's Response
	Page	Line	Section			
152	General Comment			Another concern is raising the river levees. I live in St. Bernard where they are anticipating a bike path atop the levy. I personally rather put the monies into more protection, even though the money was allocated for that purpose. Someone suggested going ahead with the path. He stated they did the same in Jefferson Parish. The Army Corp supposedly came back and removed the path structure and raised the levy. Haven't we wasted enough money. Don't be influenced by politics. Saving lives and property comes first.	Edward Chauppetta	Thank you for your comment. Access is available at the top of all levees for vehicles for the purpose of levee inspection and maintenance. In some of the Mississippi River levee reaches, bike paths have been built on the levee top access roads including a portion of the Mississippi River levee on the East Bank Jefferson Parish.
153	General Comment			The third concern is dredging the river to 50 ft. That's fine for commerce. A lot of study needs to go into this project. As I stated I live in St. Bernard. There is a crescent or severe turn at Violet. When the river is high and flowing frantically it tears away at the batture. There are areas where the river gets close to the levy. We have a paved embankment. This a good feature but my concern is what is going on beneath the concrete at river's edge. They routinely line the turn with rocks to stabilize the area.	Edward Chauppetta	The Mississippi River is maintained for both flood protection and for navigation. In some Mississippi River reaches, where river scour is more severe, the embankment of the river is hardened to reduce the impacts of river scour on the base of the levee. The purpose of the hardened embankment is to decrease erosion along the slope and toe of the levee.

RESTORE
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March 30, 2013

Mrs. Sandra Stiles
U.S. Army Corps of Engineers
Regional Planning and Environmental Division South
Environmental Planning Branch; CEMVN-PDN
P.O. Box 60267
New Orleans, LA
70160-0267

Comments on the Draft Comprehensive Environmental Document (CED) titled:
"Comprehensive Environmental Document Greater New Orleans (GNO) Area Hurricane Storm Surge Damage Risk Reduction System (HSDRRS)"

Dear Mrs. Stiles,

Thank you for sending me the hard copy of the CED Executive Summary and the CD of the whole report. Although I have not been able to do a really detailed study of the material, I believe that I get the overall message. I have the following comments:

1. As I have said many times in the past, I believe that it is impossible to keep New Orleans from being destroyed by inundation therefore it is counterproductive to do anything other than relocate the people to higher ground. The money spent on temporary measures such as levees, floodwalls, gates, and pump stations would be better spent building a new city north of Lake Pontchartrain. That could be done in phases if the area to be protected were much smaller, limited to the financial district, the port, and the tourist quarter. However, I know that only the final catastrophe will get people to admit that such a strategy would have been the wise, prudent approach.

2. Meanwhile, it concerns me that I could not find, among all the places where sea level rise is finally being talked about, any documentation of the actual projection which is being utilized, nor the source of that number, whatever it might be. What I have observed through the years is a reluctance, not just on the part of the Corps of Engineers, but also among all coastal restoration planners, to pick a number that fits with "doable" engineering projects instead of using a number that is more likely, or, as I would myself choose, the "worst case" number that would make the planning most robust. Since the projections for sea level rise keep shifting that "worst case" number upward, what I would have chosen as a limit a few years ago would now seem to be in the "more likely" range. The trend toward an acceleration in the rate and the expected degree of rise in sea level should guide you toward the more prudent choice of a number that, although disturbing, will likely be the wiser choice.

3. I am not an engineer and so I do not know the seriousness of a couple of things I have picked out as examples of what would appear to me to be situations akin to what happened in Braithwaite during Hurricane Isaac.

As I perceived that situation, there was something of a "funneling" effect. A lot of sea water moved into a smaller and smaller place and had no escape route so it flooded the community. That funnel effect looks likely for the area of St. Claude/Jourdan/ Japonica streets at the head of the Inner Harbor Navigation Canal, where, on Map 6 I see no preventive measure.

Similarly, although there is a Sector Gate near the mouth of Bayou St. John near Killdeer Street, it looks to me like there is also the likelihood that, during a storm surge situation, lake water velocities would be amplified at that location, just as they are in a hydraulic jack.

Having such apparently vulnerable elements in a plan would seem to undermine its overall reliability, just as the failure of a few short stretches of levee during Katrina led to massive flooding.

4. As I said above, my primary concern is the ongoing false hope caused by a system that cannot really protect people

completely and indefinitely. That false hope is certain to lead to more drownings.

However, I also have concerns about the ecological impacts. Keeping a major human presence in an area not fit for human habitation is not good for the people nor is it good stewardship of our natural resources. The longer people stay where they do not belong, the more telling will be the adverse impacts upon the coastal and oceanic ecosystems and the harder it will be to restore the proper dynamic equilibrium to those systems once the people are removed.

The extensive discussions in Chapter 4 show that the Corps does understand the many adverse impacts of its former and future work on ecosystems. The fact that public pressure has led to the "Emergency" declaration way of getting around the legal framework meant to diminish those impacts is no surprise to me. However, as I have said in the past, more than once, I would hope that someday the Corps might gather the courage to tell Congress things that are hard to hear, such as: the cost of permanently ruining a coastal ecosystem is not offset by the half-century benefits to a regional economy.

Meanwhile, the token "wildlife crossings" shown in the maps seem hardly sufficient since they are so far apart. That is the kind of "mitigation" that seems so transparent and such an afterthought that it is almost heartbreaking to think of what will really be happening to the wild lives.

Thank you for the opportunity to submit these comments.

Sincerely, Michael Tritico

Michael Tritico, Biologist and President of RESTORE

Restore Explicit Symmetry To Our Ravaged Earth

Michael Tritico
P.O. Box 233
Longville, LA
70652

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Mrs. Sandra Stiles
U.S. Army Corps of Engineers
Regional Planning and Environmental Division South
Environmental Planning Branch; CEMVN-PDN
P.O. Box 60267
New Orleans LA 70160-0267

70160026767

-----Original Message-----
From: Carithers, Clay MVN
Sent: Thursday, March 28, 2013 6:31 AM
To: Behrens, Elizabeth MVN
Cc: Stiles, Sandra E MVN; Wilkinson, Laura L MVN
Subject: RE: Message from Unknown sender (5047314625) (UNCLASSIFIED) - RE CED RE MITIGATION IERs

Libby ---
Below is the voicemail message and my initial stab at response. Your turn now. Email final response to LL.

Clay

Voicemail message from Jason Smith, Jefferson Parish Dept. of Environmental Affairs, left on 27 March 2013 --- "What are the anticipated completion dates of the mitigation IERs, IER 36 and IER 37?"

Response ----
Your question pertains to the IERs being prepared for the Lake Pontchartrain and Vicinity (LPV) HSDRRS Mitigation Project (IER 26) and the West Bank and Vicinity (WBV) HSDRRS Mitigation Project (IER 37). Note that for each of these mitigation projects, CEMVN is first preparing a Programmatic IER (PIER) which will be followed one or more tiered IERs (TIERs). Each PIER will address the overall plan for mitigating unavoidable habitat impacts resulting from construction of the applicable portions of the Greater New Orleans HSDRRS. However, each PIER will only seek authorization to implement the Tentatively Selected Plan (TSP) that involves purchase of credits from a mitigation bank. The TIERs will seek authorization to implement the remaining TSPs which all involve Corps-constructed mitigation.

It is currently anticipated that the PIER for LPV mitigation (e.g. PIER 36) will be released for public review around April 2013. We are still in the process of developing the schedule for the LPV mitigation TIERs. Due to unforeseen delays, we are presently uncertain as to when the PIER for WBV mitigation (e.g. PIER 37) will be released for public review although we hope to be able to release PIER 37 by the end of this year. We are still in the process of developing the schedule for the WBV TIERs.

Original Message-----
From: Roy Arrigo [mailto:tranerep@hotmail.com]
Sent: Wednesday, March 20, 2013 10:22 PM
To: Stiles, Sandra E MVN
Subject: Public Comments/Questions

Ms. Stiles,

Please address the following questions at the public meeting scheduled at the Corp's Leake Street office on Tuesday March 26 at 6:30pm. I also request that this statement and these questions become a part of the official record for the CED-Greater New Orleans Area-HSDRRS.

Claims have been made that the Corps of Engineers required the state of Louisiana to increase the real estate interest of levee inspection zones from their existing toe plus 6 feet width to toe plus 15 feet, and that to not increase the real estate interest would jeopardize the certification of those levees where only a toe plus 6 feet real estate interest exist.

Please clarify:

1) Does any Corps policy require local sponsors to increase existing real estate interest in order to attain minimum toe plus 15 feet inspection zones?

2) Did the Corps request Louisiana to increase levee inspection zones from toe plus 6 feet real estate interest to toe plus 15 feet real estate interest statewide?

3) In cases where the existing real estate interest was levee toe plus 6 feet, does this circumstance threaten the certification of those levees?

4) Did the Corps notify Louisiana that 6 foot inspection zones were a threat to levee certification statewide?

5) Have Louisiana levees with toe plus 6 foot inspection zones actually met certification?

6) In cases where levees with toe plus 6 foot inspection zones have been certified, provided that these inspection zones are maintained as they were when certified, can this levee certification be rescinded for reasons of inadequate inspection zones sizes?

Please allow me to thank you in advance for addressing these questions at Tuesday's meeting.

Regards,

Roy Arrigo

6724 Bellaire Drive

New Orleans, LA 70124

Please excuse typos, sent from my iPhone.

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Mr Edward Chauppetta
2213 Munster Blvd
Meraux LA 70075

3-19-13

Attention Sandy Stiles:

I have a few concerns.

We built high walls, beefed up the pump stations and capacity.

Where does this water go? Does it pump outside the protection or circulate inside the walls of protection?

A slow moving rain maker will stress the system if it doesn't pump outside the system.

If there is a breach, over topping we will drown inside the system designed to protect us.

People will not leave. They have a misconceived faith the system is fail proof.

Another concern is raising the river levees.

I live in St. Bernard where

they are intiapating a bike path atop the levy.

I personally rather put the monies into more protection, even though the money was allocated for that purpose.

Someone suggested going ahead with the path. He stated they did the same in Jefferson Parish. The Army Corp supposedly came back and removed the path structure and raised the levy. Haven't we wasted enough money.

Don't be influenced by politics.

Saving lives and property comes first.

The third concern is dredging the river to 50 ft.

That's fine for commerce. A lot of study needs to go into this

project.

As I stated I live in St. Bernard. There is a crescent or severe turn at Violet. When the river is high and flowing frantically it tears away at the bottom.

There are areas where the river gets close to the levy. We have a paved embankment.

This a good feature, but my concern is what is going on beneath the concrete at river's edge.

They routinely line the turn with rocks, to stabilize the area.

People live along the river and have no clue to what is going on.

Concerned citizen,
Edward J. Carippetta

Mr Edward Chauppetta
2213 Munster Blvd
Meraux LA 70075

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U.S.A.
Freedom
FOREVER

Sandy Stiles
Regional Planning and Environment Div.
U.S. Army Corps of Engineers
P.O. Box 60267
New Orleans, La. 70160-0267

The CED describes the five-parish HSDRRS with a cumulative impact analysis; identifies remaining data gaps, conceptually explains the status of the proposed mitigation plan, and informs on the development of long term operations and maintenance.

Speaker Request/Comment Card

Would you like to speak tonight? Yes ☐ No ☑

Comments: A CONCERN FOR THE MISS GULF COAST IS that THE LA STATE MASTER PLAN OF PROTECTING LAKE PONTCHARTRAIN WILL FLOOD SOUTH MISS. MORE NOW THAN IN THE PAST

Name MIKE SMITH **Affiliation** CITY OF WAVELAND
Street 427 HWY 90 **Phone** 228-493-6643
City, St Zip WAVELAND, MS 39576 **Fax**
E-mail FIREMAN39576@AOL.NET

The CED describes the five-parish HSDRRS with a cumulative impact analysis; identifies remaining data gaps, conceptually explains the status of the proposed mitigation plan, and informs on the development of long term operations and maintenance.

Speaker Request/Comment Card

Would you like to speak tonight? Yes ☑ No ☐

Comments: Seek clarification of a veg. policy

Name Roy ARRIGO **Affiliation** 17th ST. CANAL COALITION
Street 6724 Bellaire DR **Phone** 504 432-4404
City, St Zip New Orleans, LA 70124 **Fax** NONE
E-mail TRANEREP@hotmail.com

The CED describes the five-parish HSDRRS with a cumulative impact analysis; identifies remaining data gaps, conceptually explains the status of the proposed mitigation plan, and informs on the development of long term operations and maintenance.

Speaker Request/Comment Card

Would you like to speak tonight? Yes ☒ **No** ☐

Comments: QUESTION: STATUS OF MRL HEIGHT IN ST. BERNARD & EAST PLAQUEMINES. PARTICURALY @ CARNARVON JUNCTION OF HSDRRS AND MRL!

Name RAY GAROFALO **Affiliation** STATE REP 103

Street 100 PORT BLVD 2ND FL. **Phone** 504 279-1124

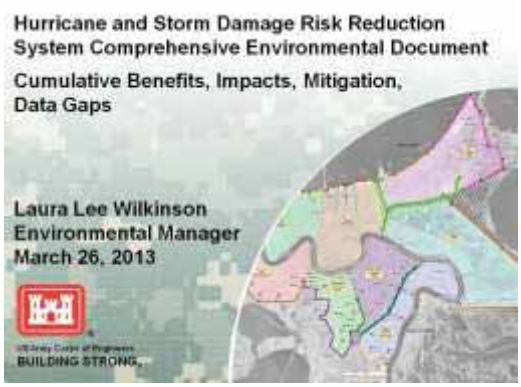
City, St Zip CHALMETTE, LA 70075 **Fax**

E-mail RAY@RAYGAROFALO.COM

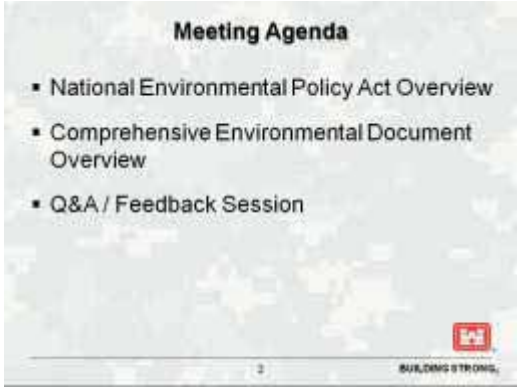
Public Meeting Summary

Hurricane and Storm Damage Risk Reduction System Comprehensive Environmental Document Cumulative Benefits, Impacts, Mitigation, Data Gaps

Location	
Time	6:30 p.m.
Attendees	Approx. 30
Format	Open House Presentation
Handouts	• Comprehensive Environmental Document – Volumes I, II & III • Comprehensive Environmental Document – Executive Summary • Post-Isaac Hurricane Modeling Brochure
Facilitator	Rene Poche



Rene Poche: Thank you so much for coming out this evening. My name is Rene Poche and I'm with the public affairs office here with the Corps of Engineers and I will be facilitating tonight's meeting. A couple of things, if you have not signed in we ask that you do in the back near the entry. We will put you on the mailing list and can keep up with you by sending you information when it becomes available. I also ask that you hold all your questions until after the presentation for a couple of reasons. First, it helps us get through the presentation and more importantly, your question may be answered in the upcoming slides. So we will now get started.



Here's tonight's agenda. We are going to look at the National Environmental Policy Act Overview, we are going to look at the Comprehensive Environmental Document Overview and then we are going to get to the question and answer feedback session.

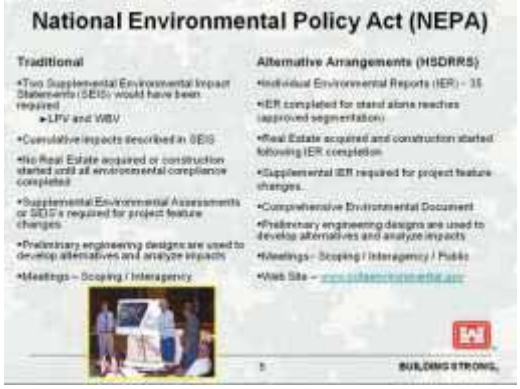
How do we reduce risk? There's a variety of ways and this slide shows that. We start at the top with the initial risk and then there are ways we can reduce that risk. Here we call it buying down risk, as it is a shared responsibility with us, local partners and residents in the area. Here are some ways we can reduce that risk. Insurance, building codes, zoning, levee features, response plans, outreach. At the end of the day, you are going to have some type of risk as we can't eliminate risk

The following notes were recorded by USACE contractors. These notes are intended to provide an overview of the presentations and public questions and comments, and are not intended to provide a complete or verbatim account of the meeting. This account is not intended to be a legal document.

100% but we can reduce the risk. Everyone contributes to reducing that risk.

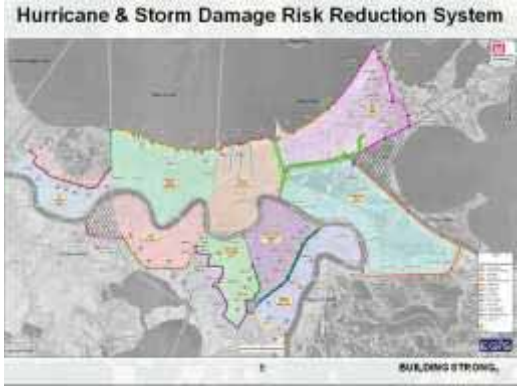
I'm going to turn it over now to Laura Lee Wilkinson, she's the environmental manager and she will take you through the majority of the meeting.

Laura Lee Wilkinson: The last time we had a public meeting we had some scoping meetings on the comprehensive environmental document and that was back in September 2009. I don't if you remember that specifically, but I thought I would go through some summary to let you know how our process works. We were granted alternative arrangements by the president's Council on Environmental Quality back in March 2007 and the reason we asked for this expedited process was to allow us to implement the Hurricane Storm Damage Risk Reduction System and complete the projects by June 2011 or as quickly as possible. This Hurricane Storm Damage Risk Reduction System provides a 1% risk reduction system to the New Orleans metropolitan area. These alternative arrangements allowed us to expedite the environmental process. We did a thorough analysis that allowed ways through public involvement to separate the system into pieces to expedite the process.

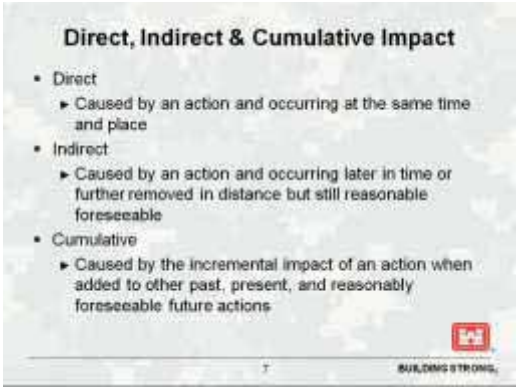


To walk you through this, we have a traditional process of implementing the National Environmental Policy Act and then we have the alternative arrangements. Some of the differences listed here, if we had done it the traditional way, we would to have to have done two environmental impact statements, one for the Lake Pontchartrain and Vicinity and another for the West Bank and Vicinity and it would have been five to seven years before we could have started construction because we would have to have done all human impact analysis, we would have to have done some scoping meetings in the beginning and then detailed impact analysis to have all designs in hand and all details worked out before we could have even moved to acquire real estate. So, with the alternative arrangements what we were able to do is have separate individual environmental reports for separate reaches of the Hurricane Damage Risk Reduction System, which I'm going to call from now on HSDRRS, and Supplemental Environmental Reports when there was a design change. The way to look at the larger picture of the entire system, as part of the alternative arrangements, when enough information was available we would come out with a Comprehensive Environmental Document and so that is why we are here tonight. We have enough information to provide a summary of the cumulative or the comprehensive impacts to November of 2010. I'm also going to share with you some other differences in that, as part of the alternative arrangements, I don't know how many of you have been to one of our public meetings, but since 2007 we've held upwards of 200 public meetings discussing different reaches or areas of this project implemented in the HSDRRS system. As for public involvement, we've hosted 6500 field trips to let the public, neighborhood associations or stakeholders know about the project. We even set up a dedicated website so, like a gentlemen asked me earlier about St. Charles Parish and he can go to the website and pull up the report and if you had comments or questions about that, you can email or call with specific questions.

Public Meeting Summary

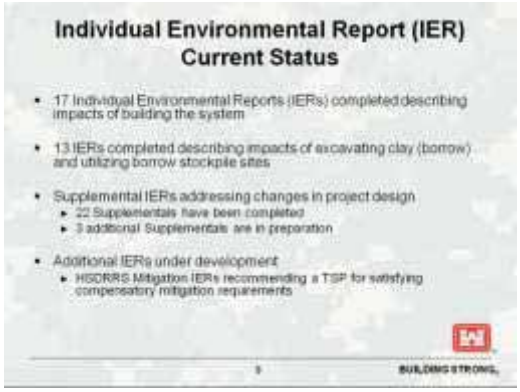


This slide shows you the Hurricane & Storm Damage Risk Reduction System for the New Orleans metro area and it encompasses St. Charles, Jefferson, Orleans, St. Bernard and Plaquemines Parishes; Plaquemines is not completely surrounded by the system though.



Some terms that we use to assess impacts as part of the NEPA Process are direct, indirect, cumulative impacts and they are defined here. A direct impact is caused by an action and occurring at the same time and place. An indirect, is an action occurring later in time or further removed in distance from the project and then cumulative is the incremental impact of an action when compared to past, present and reasonably foreseeable actions.

As part of the Comprehensible Environmental Document, we looked at resources and they are all listed here , things that the public holds dear, wildlife, wetlands, threatened and endangered species, but it's also socio-economic impacts, impacts to tax revenues and property values, environmental justice, community cohesion; these are all things that are discussed in the Comprehensive Environmental Document.



So what is the current status of all of these individual Environmental Reports? You can see the numbers here. We have 17 individual Environmental Reports that were completed and 13 IERs that were completed just to discuss the digging of borrow, which is materials that's used to construct the levees. Expedited as this process was, there were some design changes and to make sure we had covered this and disclose the impacts to the public, we had 22 Supplemental IERs to discuss that and we actually now have three additional supplements that are in preparation and two other major IERs, which are the mitigation IERs that will be coming out in the near future. One will be for the Lake

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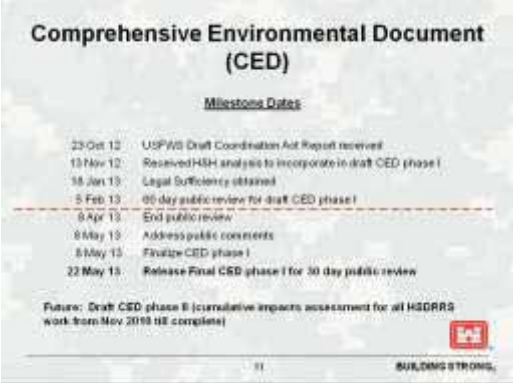
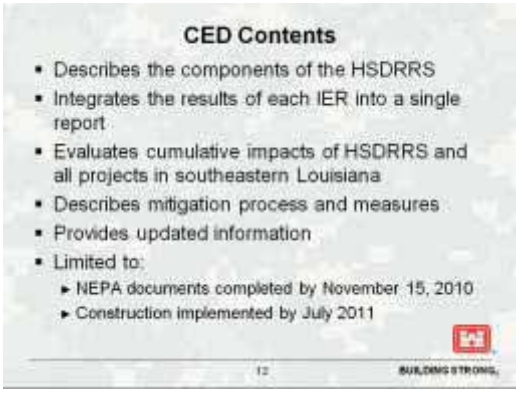
Pontchartrain and Vicinity Impacts and the other will be for the West Bank and Vicinity.

So this next slide shows you all of the 17 IERs and 22 different Supplements that I've previously discussed. The blue on this is completed and the red are those that are in progress. I had some questions earlier about the permanent pump station projects and we have a supplement coming out on that one so you can see IER S 5.a is in red, so it's in progress.



If you want to know details about each of these individual IERs, because these are just the titles with abbreviation, Appendix I in the CED has everything listed. We are now currently in the 60-day review process, it started on February 5th and ends on April 8th, so we are taking comments on this document and we are also taking comments here tonight. IF you want a hard copy, I have lots of hard copy left. It's a three-volume book with a nice 11 x 14 executive summary in the back. What I do want to keep stressing though, is this is the first phase o f the Comprehensive Environmental Document. The impacts and the cumulative effects analyzed in this document are for November 2010 as our cutoff date because we had so much information involved in the last seven years of this construction and the planning for this HSDRRS. We thought it best to put out as much information as you can absorb out there and when all construction is complete, we will complete out with a final phase two Comprehensive Environmental Document to cover everything from Nov. 2010 until construction is complete, which I think is now 2014 or 2015. We have some other projects that are still ongoing; we have a pump station that estimated in 2016. All of that information will be included in phase two.



Because this is phase one of a now multi-phase document so we are not going to be signing a decision record on this Comprehensive Environmental Document as we will finalize it by including all comments received and responses and put it out for a 30-day public review. There is no decision to be made yet because we are still undergoing the project. So what does the CED contain? It describes components of the HSDRRS and it integrates it into one report, but there will be a second phase to this. It evaluates the cumulative impacts of HSDRRS as well as other projects in Southeastern Louisiana. It describes the mitigation process and measures that we implemented during construction. Currently we have such things as best management practices to minimize noise and dust and storm water runoff. If also provides updated information that may have changed since the original IER went out for public review. It is limited to Nov. 15, 2010 and construction that was implemented by July 2011.

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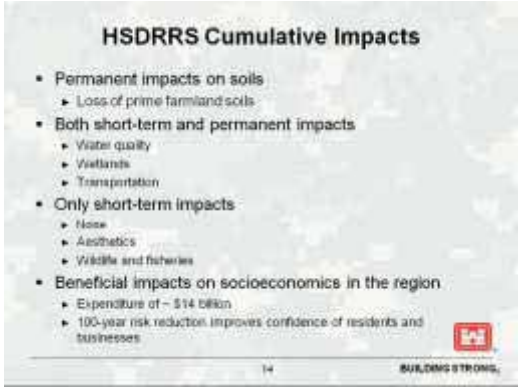
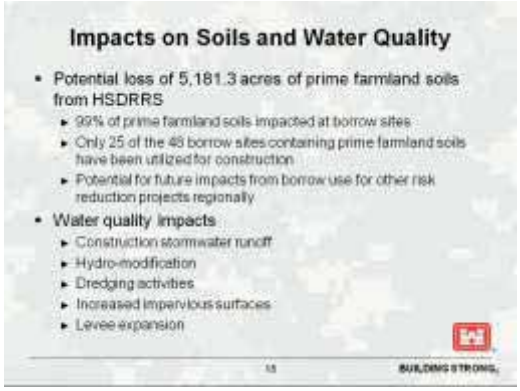
Public Meeting Summary

As far as the cumulative assessment of other regional projects that we looked at and compared it with, were those that are listed here like the New Orleans to Venice Project, the LACPR Study, the MRGO Draft, the authorization as well as the state master plan so other projects we looked at and compared what those impacts will do to our projects.



As far as cumulative impacts, the major impacts that we had was that there was a permanent impact on soils. Tables 2 and 3 of the executive summary on pages 45 and 46 show how all resources were impacted; there are some summary tables there. They are broken down by intensity, whether it's negligible, moderate or major and broken down by resource. If you want the details of everything, you can look at those two tables. On the impacts of socioeconomics, we actually had beneficial impacts when you thing about the amount of money that was spend to implement the Hurricane Storm Damage Risk Reduction System, that was 14 billion dollars that was spent in this area. We did our best to describe some things that are not necessarily quantifiable, but by putting them in a system that would provide 1% protection, it improved the confidence of residents and businesses in the area and as a result, you can see there's been rebuilding going on versus just abandoning. That is an example of some of the benefits; the next few slides will be the negative impacts.



The major impact that we had, had to do with the excavation of borrow material and the construction of the levee building and that makes sense. It was 114 miles that we constructed and it impacted about 5,181 acres to prime and farmland soils. Again, this is the estimate that was from Nov. 2010 and this acreage would be if all borrow pits were excavated and to date, we've only excavated 25 of the 48 that looked at or investigated. Some other impacts are water quality impacts. During construction when you construct a levee or floodwall, you have storm water runoff, you have hydro-modification, we had to do some dredging to construct the board barrier; these were all impacts having to do with constructing the system.

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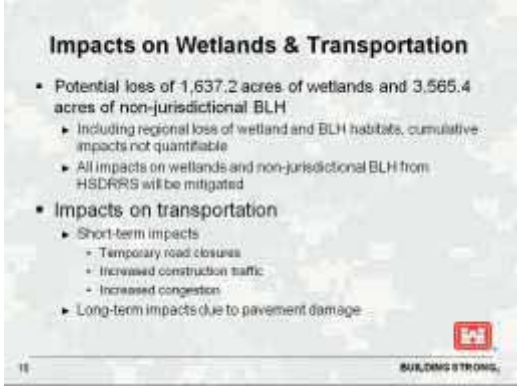
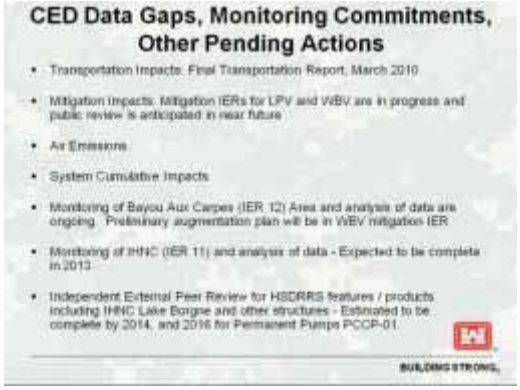


This slide will show you the acreage for wetlands. We had a potential loss of 1,637 acres of wetlands and 3.565 acres of non-jurisdictional bottomland hardwoods. Again, the majority of this had to do with excavation for construction of the levee system and the wetlands that were impacted had to do with the construction of the levees, not necessarily the excavation of borrow. Non-wet bottomland hardwoods were the majority of the impacts in the borrow material. Impacts for transportation, those come from general construction such as traffic delays, increased congestion and this coupled with the fact that we are not the only people in town doing construction as there is road way improves and other state and redevelopment projects and people rebuilding houses along side us constructing; this was all discussed.



This slide discusses the Data Gaps as to what the CED does not include or what we do not have information on currently but will be included, as best we can, in the next phase of this document. What we included in the phase one appendices, there is a final transportation report. This is the estimate of what traffic would have used and impacting around the metropolitan area, mostly talking about borrow materials used in constructing the levees. Again, it's an estimate and as more information is narrowed down and completed in these projects, we can look to see about adding additional information as it relates to actual construction amounts. The mitigation, as I mentioned that they are still ongoing, putting our IERs for mitigation for the West Band and Vicinity and Lake Pontchartrain and Vicinity projects so those projects are anticipated to put out for public review in the near future and those will have the absolute wetlands impacts as results of the HSDRRS system. We had some additional things to monitor with our construction impacts and had to with the IER 12 area, which was the Bayou Aux Carpes area and we've been monitoring in the Inner Harbor Navigation Canal mostly for water quality impacts and that monitoring, at least in the IHNC, the monitoring is completed and we are still working on the report for that, but it's expected to be completed this year. The IEPR or the Independent External Peer Review, this is ongoing and they set forth what plans and projects to review back in Sept. 2008 and they narrowed it down to 10 unique features that they are going to review and seven system applications. This had to reviewing design guidelines, the armoring manual, the iron weld pipe study as well as many others. These are expected to be complete in 2014 except for the permanent pump stations projects because it's protested so we are estimating that to be complete in 2016.

As far as comments that we have received thus far on the Comprehensive Environmental Document, it's been basically

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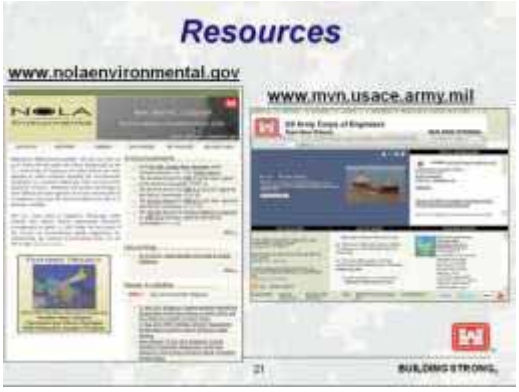
on the modeling and referencing to the recent storm Isaac and the impacts to surrounding areas. What we do have available is a report that is current because the CED is addressing those impacts from Nov. 2010 and Isaac occurred in 2012. So if you are interested specifically in the storm surge repairing with Hurricane Isaac with the 100-years HSDRRS system, this is the link where you can find that report to review with appendices. In Phase II, what we will do in work to incorporate this information.

Rene Poche: In addition to hearing what you have to say tonight, there are some other ways you can contact us and I direct your attention toward the center of the slide toward the bottom. You can contact Sandra Stiles and her information is there is you have any questions or comments that you would like to submit.

We are also out there on the internet in a variety of ways if you want to find out some of the things that we are doing. You can go like our Facebook page and we post there regularly. If you want to see some of the pictures of what is going on we have a Flickr site and you can look out there and see progress from start to finish. We also have a Twitter account and we also post videos on You Tube.



Some other resources available, we have nolaenvironmental.gov, which is a great tool to find out what is going on with all the projects. We also have a public website and you see the web address there. We are now going to move into our Q & A section. If you can state your name when Sarah comes to you, so we can get that into the record and your questions that would be helpful.

Clement Cole: Wondered if all the work on the 17th Street Canal has been finished.

Rene Poche: No, we still have some work we are doing out there.

Laura Lee Wilkinson: I'm not the project manager for the 17th Street Canal, but I'm the environmental manager for assessing current work or the temporary pump stations.

Clement Cole: The canal itself and the protection on the east side of the canal.

Laura Lee Wilkinson: That was a project that was discussed in IER 27 and there is still remediation work going on for the different reaches of the 17th Street Canal; it's an ongoing project. As far as the mouth of the canal and as I mentioned earlier, because of the protest on the project the contract hasn't necessarily been awarded so again, there will be a massive pump station [Inaudible] as well.

Craig Berthurd: I live on the 17th Street Drive and we were told on that on the east bank of 17th Street on the Orleans side that the Corps was completely finished with their work there, on the Orleans side, not the Jefferson side.

Laura Lee Wilkinson: No, we are still looking at doing some additional work like remediation.

Craig Berthurd: Like what?

Laura Lee Wilkinson: I believe there is some sheet pile they are looking to install.

Craig Berthurd: Where?

Laura Lee Wilkinson: It's adjacent to south of the interstate

Craig Berthurd: Is it extensive?

Laura Lee Wilkinson: No, it's five or six-hundred feet.

Craig Berthurd: And that's the only project hat you know of that's left on the Orleans side of the canal?

Laura Lee Wilkinson: I believe so and there is some work on the London Ave. Canal as well. Theirs is a few reaches on London on both the east and west side.

Rene Poche: We will verify the information and if it's anything different, we will get the information to you.

Ray Garofalo: I'm from St. Bernard Parish. I first want to thank you guys for protecting us and we appreciate everything you've done; we need it and appreciate it. My question regards the Mississippi River Levee heights. Can you address that or is that something I can enter into the record.

Rene Poche: Let's hear your question.

Ray Garofalo: Where the HSDRRS meets the Mississippi River Levee in Caernarvon, there is a drop off to the Mississippi River Levee and we've been told in other public meetings that the Mississippi River Levee on the West Bank is a foot higher than the levee on the East Bank. We are concerned that if we have a strong storm surge that comes up the river, we are going to be flooding on the East Bank even though we have the nice 31-32 foot wall now, we will flood from the Mississippi River. I have many constituents in that area who are concerned about this issue so we would like to have some input from the Corps of the possibility of that occurring number one, and number two, to find out if there are any plans to address this in the future.

Rene Poche: We have your comments and questions and we will get some information and get that to you. It's a bit complex to…

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Ray Garofalo: Garret Graves just told me that you guys are doing work and doing a study to see if that's actually an eventuality or potentially an eventuality and I just wanted to come and get it on the record.

Rene Poche: We have it now and we will get back in touch with you.

Rudy Newbeck: I was trying to get some answers before the formal meeting started, but the answers that I'm getting are really no good. I'm going to rephrase my question. What is being done to protect all the parishes that boarder on Lake Pontchartrain on the north and western shore? Is anything going to be done to help these people? We had a little storm called Isaac come in and flooded some 60 miles away from the Gulf of Mexico with a storm surge that traveled up in there and flooded areas that had never been flooded before. I think it's about time for the Corps, if they have any input or whatever, to try and find out what project would best serve all of the people in the Lake Pontchartrain Basin. We have spent tons of money on Jefferson, Orleans, Plaquemines, but nothing has been done for the people on the on the north and western shores of Lake Pontchartrain and it's about time for someone to come up with the plan that something can be done and will be done. So far, it looks like this is not going to happen. I also has some kind of funny question. Is the Corps of Engineers having basically the same kind of problem that the federal government has; the Corps with Lake Pontchartrain, the federal government with illegal immigrants? The federal government says we will let them come across the border and we will handling them after they get here, well don't look at the water that way. Let's handle the water before it gets into Lake Pontchartrain because now we have the proof that what we have at the present time as far as protection does not protect everybody.

Rene Poche: To your question, the state master plan addresses barrier-type project on the east side that runs parallel to the railroad tracks over there. I'm not sure of what other projects they may have in that area, but I would ask that you take a look at the state master plan. We had on the west side, we did have one project but the funding hasn't been there for quite some times. I know that since the events of last August-September, those areas are being looked at again. That's about an in-depth an answer I can give you right now, but the best thing you can do is look at the state's master plan and talk to them about what their plans are for that area.

Rudy Newbeck: May I say something else please? This project that you are talking about on the eastern side of Lake Pontchartrain, would that be what is called a land bridge between Chef Menteur and the Rigolets?

Rene Poche: Yes, I think that's how some folks know it.

Rudy Newbeck: I've walked in that marsh many times before and I suppose the Corps now is going to build something like they did on the 17th Street Canal…

Rene Poche: No, this is a state…

Rudy Newbeck: And the soil will not hold.

Rene Poche: This is the state that is looking at this with their master plan. We don't have anything in there right now, so this is something the state is taking up.

Margaret Longstreet: Thank you for letting us come here and sharing the information with the public. I have a question about Seabrook or the Industrial Canal and the gate that was placed there. I guess it's a multi-question regarding who determines when that gate is closed, when it's opened? My concern is that, because I'm a boater, and being a boater I've learned quite a lot about the waterways within Lake

Pontchartrain and the Rigolets and Chef Pass and the lake is majorly filled by ingress of water of the Rigolets, Chef Pass and the Seabrook or the Industrial Canal, which is water coming up from the Gulf up the Mississippi River to Lake Borgne and into the Lake. By putting a gate between Seabrook and the MRGO, you have blocked off one of three ingresses of water into Lake Pontchartrain, which leaves water coming through Chef Pass and the Rigolets in the Lake, as well as all the rivers that dump into the lake. One of my concerns is that by controlling the gate at Seabrook, you are controlling and not allowing further water to get into the lake from that point. Once a storm has passed and the gates are still locked, you have not allowed water to egress out of the Lake as you've taken out one of three pathways for the water to leave the lake, which means water is being retained more in the lake, duration wise. I guess my concern is what time do you close the gate, whose closing the gate and when does it reopen to figure out that time? I am living in Slidell, we moved there in 2008 because of Katrina, and I have been told by the my neighbors that water never, ever, ever came into the backyards during Katrina, and these are 11 and 12 feet above sea level. Since we have been there in 2008, we've had five hurricanes and all five hurricanes we have water in our backyard, a third to halfway in our backyard and our house is 11 feet above sea level. Residents who have been there for over 25 years say this has never occurred; it happened in Katrina, but that was like the anomaly. People in that area are really recognizing that there is a lot more volume of water in the lake area, whether it's from global warming or whatever, I don't know, but there is more water in the lake now than ever before and when the storm s come and water ingresses into the Lake, we are just seeing more impact. Putting all the barriers on the South Shore has created concern that that's putting more water held up on the North Shore; I know your maps or the impacts don't show that. My question mostly regarding the Seabrook and closure and opening of that gate.

Nancy Powell: I'm chief of the hydraulics bridge with the Corps of Engineers and right now what we are doing is writing what we call a Water Control Plan and it's going to cover the operation of the Seabrook Structure as well as the IHNC Surge Barrier, sector gate and lift gate on that structure also. I think it was last month we held a public meeting at the Greek Church on the Lake Front and had some general discussions about what you are talking about, so your comments have been noted and will go into the document that talks about how decisions are to be arrived to when those gates are supposed to be open and closed. Ultimately, when the project is turned over to the local sponsor, the local sponsor will be responsible for operating according to that Water Control Plan.

Margaret Longstreet: I guess at the moment those gates are controlled by the Corps?

Nancy Powell: That is correct. We have not completed construction; we are almost there, but we can't turn the structures over for operation until construction is complete and we have this water control document written and approved.

Roy Arrigo: My question is on the Corps' policy. Does Corps policy call on the local sponsor, the state in this case, to increase their real estate interest in order to attain the 15-foot vegetative free zone described by the policies?

Rene Poche: That's what I was telling you before. We received your question, but we are not able to give you a response here tonight on that. We are working on it and that list of questions that you sent me via email and that will be coming out soon and that question will be addressed there.

Roy Arrigo: And that question is not exactly one of the ones on email.

Rene Poche: Then we will go back and review, get it and make it part of that.

David Garcia: I'm the mayor of the City of Waveland, MS and we realize what y'all are doing to protect the metropolitan area of New Orleans and we certainly agree that the people of St.

Tammany need protection as well. What does the Corps have planned for the MS Gulf Coast region because we are already receiving the thanks from all the hurricanes? One of the evacuation route out on Highway 603 floods with a tropical storm now, which has never, ever happened in the past. That highway has been raised four or five feet over the years but it was four lanes in the beginning so what is the Corp's plan in the MS region or we just going to be left with all this water?

Rene Poche: Remember, we had this discussion with Congressman Palazzo a few months back and it's bigger than just the new Orleans District; the Mobile District is the district responsible for your area. I can't give you an exact answer of what the Corps is doing. We understand your concern and we have it here as part of the record and we will keep working with you and primarily the Mobile District will keep working with you. Someone who lived in Clermont Harbor, I understand what you are saying.

David Garcia: Like the gentleman said, we need…it looks like there should be talks between Vicksburg office, New Orleans and Mobile offices. We shouldn't be creating problems for other people like Congressman Palazzo said when we can't everyone to the same table.

Rene Poche: And I know those discussions are happening between the three districts; to what extent right now, I don't know. I'm not the technical type here.

David Garcia: When will we get an update on that?

Rene Poche: We can look into it and we have your contact information. I would say keep talking with Mobile District and to some extent Vicksburg as well.

David Garcia: They don't like talking about it.

Bethany Garfield: I actually live very close to here and unfortunately I didn't get to review this whole thing and I came in a little late so I don't know if it was talked about before I came in. I'm actually curious about the project for this area here; I believe it was supposed to start in November, something about raising the levees a couple of feet. You were supposed to dig into The Fly there and do away with all those trees that you guys could raise the levees. I think the purpose was for any threat of storm surge traveling up the Mississippi even though I was never really clear about the purpose of the project. I'm wondering if you know what the purpose of that project was and if it will go underway so I think it was planned to start in November.

Rene Poche: I think we are going to have to go back and get some information and get with you. What I can tell you is that you've seen the levee work going on out here going back toward the Jefferson Parish line. I'm not sure of the exact schedule of what is going on with The Fly area, but we will get that.

Rudy Newbeck: In connection with the lady who asked the question about the gate at Seabrook, I attended the meeting at the Greek Church and asked the question, what was the primary purpose for the gate at Seabrook. The answer from the Corps at that time was to keep water from Lake Pontchartrain from entering into the canal. I don't know how that fits with how you explained that and that is what was told to me at that meeting.

Rene Poche: That is correct. The Seabrook, in conjunction with the IHNC Surge Barrier, is to keep any additional water or surge from getting into the IHNC Corridor so that was a correct statement they made.

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I believe this is the same gentleman as before – he had a sweater on earlier?? You would know for sure as he was a bit combative.

Craig Berthurd: I have another question about the outfall canals and levees there. Are all those levees certified right now, the 17th, London and Orleans Canals?

Rene Poche: I think I understand your question, but I don't know the answer. Certified, I'm not sure that is the correct term so I will check.

Craig Berthurd: Are any of them in threat of being de-certified?

Rene Poche: If it's one of your questions, it will be responded to, nice try.

Craig Berthurd: I'm just wondering if the levees were certified.

Rene Poche: I don't know that answer and I can't speak out of turn and give you bad information. What I can tell you is that we have your questions and we are going to respond to them and we will get that to you soon.

Craig Berthurd: I was just asking something that you would think would be yes or no.

Rene Poche: And I don't know. As soon as I say one, it's the other…

Craig Berthurd: So it changes.

Rene Poche: I don't know, I don't know that answer as I'm not the engineer and I'm not the project manager. I'm just the public affairs guy. I take the questions, get the answers and get back with you and I want to give you the most accurate information.

Bethany Garfield: You mentioned that a 1637 acres of wetlands were impacted by some of your levee projects, maybe other projects as well. I'm wondering if there are any counter-actions going on to address that loss of wetland?

Laura Lee Wilkinson: As I mentioned in the presentation, we have two mitigation IERs that will be going out in the near future. What we are looking to do as part of the mitigation process, one because we impacted wetlands and non-wet bottomland hardwoods, we are going to responsible for mitigating. We are looking to pull our resources to do some sort of large-scale project of a marsh remediation or enhancement of an area. As of yet, the post action document is not available for public review, but when it is and if you are interested I can take your name and make sure you are sent a copy. We will be mitigating as part of this process and NEPA requirements were as a federal agency, because of the impacts we've done, we are going to mitigating that. So it's complex on how it's done as it's not an acre-to-acre kind of process because we look at the value of the wetland that are impacted and the habitat type and that goes through an alternative analysis and disclose what the impacts would be with different projects. I think the mitigation IER will answer your question better.

Bethany Garfield: When you say you look at the value of the wetland impacted, are you speaking in terms of storm protection, I know you mentioned habitat right after that.

Laura Lee Wilkinson: Wetland values assessment, a WVA is what we call it, it goes through a model and is assigned and economic value to the acres, but also to the quality. As far as storm surge, the

system that we constructed, most of it as levees and floodwalls to protect the New Orleans metro area. I agree that wetlands do play a part of that in protecting. It's a 1% or 100-year storm risk reduction.

Bethany Garfield: So in essence, the levees are being seen as the new form of protection as opposed to the wetlands that were there but may not have protected against a 100-year storm. So you are saying that you put levees up so the wetlands are not necessarily needed any more.

Laura Lee Wilkinson: No. I'm saying that the wetlands that were impacted with the construction of this project, we are responsible to mitigate for.

Rene Poche: Thank you for coming this evening. We do have comments cards in case you think of something after the fact and want to submit that. Thanks for coming out.

END OF AUDIO.

The following notes were recorded by USACE contractors. These notes are intended to provide an overview of the presentations and public questions and comments, and are not intended to provide a complete or verbatim account of the meeting. This account is not intended to be a legal document.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

MAR 19 2013

Mrs. Sandra Stiles
Environmental Planning Branch, CEMVN-PDN
U.S. Army Corps of Engineers
P.O. Box 60267
New Orleans, LA 70160-0267

Dear Mrs. Stiles:

The U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Army Corps of Engineers (Corps) February 2013 draft Comprehensive Environmental Document (CED) for the Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS). In general, the draft CED accurately and effectively describes the environmental impacts of the HSDRRS through November 2010. These environmental effects must be understood within the scope and context of the HSDRRS. The post-Katrina improvements to the Greater New Orleans Area levee system were clearly a national priority of great urgency. There was a strong basis for using an alternative process for compliance with the National Environmental Policy Act (NEPA). The timely completion of the HSDRRS stands as one of the most important milestones in the ongoing recovery of the Greater New Orleans Area.

Proposals to expedite NEPA processes can raise concerns that some aspect of the environmental assessment could be curtailed, potentially leading to inferior information, reduced public involvement, and a less acceptable environmental outcome. In the case of the HSDRRS, however, the alternative arrangements did in some ways surpass what is typically achieved in standard NEPA processes. For example, as the draft CED states, there were 200 public meetings, 11 meetings with non-governmental organizations, and 6,500 site visits and field trips. In this way, the level of public outreach for the HSDRRS went well beyond the typical NEPA process. In addition, the avoidance of impacts to jurisdictional wetlands for levee-building (or "borrow") material is one of the significant environmental accomplishments of this risk reduction project, particularly in light of the volume of such material identified and used. In the case of levee projects covered by standard NEPA processes, it is not uncommon to have wetland impacts associated with the source of borrow materials.

The construction of levee systems can result in both direct and indirect impacts to wetlands and aquatic resources. While direct impacts are relatively easy to quantify, indirect impacts can be technically challenging to assess and yet of significant consequence to aquatic resources and other aspects of the environment. The assessment of potential indirect impacts to wetlands and aquatic resources is often the most critical component of the environmental review of levee projects. In the case of the HSDRRS, the potential for indirect adverse impacts to wetlands and aquatic resources was limited by the fact that most of the project was to be built on or along existing levees. There were notable exceptions, such as the Borgne Surge Barrier. But in general, the potential for significant indirect impacts was relatively minimal given the scope and scale of the project. In this way, the environmental assessment of the HSDRRS was

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simpler than what would be needed for the construction of a similarly large-scale and complex levee system where no levees existed. This point would be highly relevant to any proposal to expedite the NEPA process for a new levee system (as opposed to the upgrade of an existing system).

Despite the generally low potential for indirect impacts from the HSDRRS, in some locations there is a long-term environmental risk associated with increases in the frequency of gate closure due to relative sea level rise. This is the case, for example, in the Central Wetlands area, which is enclosed within the so-called "Chalmette Loop" portion of the HSDRRS. Water circulation, navigable access, and the ingress and egress of aquatic organisms to the Central Wetlands are controlled by the Bayou Bienvenue and Bayou Dupre sector gates. According to section 5.3.2.1.4 of the draft CED, these gates would remain open "except during storms and high tides". While the definition of a "high tide" was not provided, it is reasonable to assume that the water elevation which currently constitutes a high tide would be met with increasing frequency due to relative sea level rise. This could lead to an increase in the frequency of gate closure, which in turn could result in adverse impacts to wetlands, fisheries, water quality, and navigation. The HSDRRS CED should at a minimum qualitatively assess such potential adverse impacts in the Central Wetlands and other aquatic areas that could be affected by the HSDRRS gates and water control structures. To address uncertainties regarding the future rate of relative sea level rise, this assessment should consider a range of potential changes in water elevations. In the case of the Chalmette Loop and Central Wetlands, this assessment should include consideration of the potential effects of increased closure frequency on proposed coastal restoration efforts, particularly the Violet Diversion.

Although the Corps avoided wetland losses associated with borrow material, construction of the HSDRRS did result in direct impacts to as many as 1,637 acres of wetlands, primarily due to the expansion of existing levees. The need to provide timely and effective compensatory mitigation for these unavoidable wetland impacts is the most critical remaining environmental compliance challenge for the HSDRRS. This compensatory mitigation is not being implemented concurrently with project construction. Indeed, the planning and implementation processes for this compensatory mitigation do not appear to be advancing with the same haste and urgency as the design and construction processes for the risk reduction portions of the HSDRRS. Granted, the Corps has and continues to be asked to review a broad range of compensatory mitigation options, including ones that are atypical and may not comply with current policies. Nevertheless, the current schedule for implementation of compensatory mitigation raises concerns about compliance with existing laws and regulations, temporal losses of wetland functions, and the ability of the Corps to ensure the availability of funds set aside to complete this aspect of the HSDRRS. We encourage the Corps to accelerate the pace of implementation of compensatory mitigation for the HSDRRS. To ensure the effectiveness of this work and compliance with the pertinent laws and regulations, we recommend that the CED contain an explicit commitment to fully address the 12 compensatory mitigation plan components required in the 2008 Department of Defense and EPA final rule regarding compensatory mitigation for losses of aquatic resources.

In addition to the above comments and recommendations, EPA has the following editorial notations and requests for additional or clarifying information:

- Page ES-5: The discussion of the National Flood Insurance Program (NFIP) could be clarified by explaining whether the NFIP certification is not typically afforded to a project incorporating interim protection measures or whether FEMA maintains some concerns about the integrity of the interim closure structures that were in place as of June 2011. According to the Corps, those interim measures are providing the same level of flood protection as expected by the completed project. In other words, could those communities served by the 80% of the HSDRRS work completed in June 2011 be eligible for NFIP now? Without further explanation, this discussion could be interpreted several ways.

- Page ES-36: The discussion of the Louisiana Coastal Area (LCA) Ecosystem Restoration Plan here and elsewhere in the draft CED should inform the reader that the State of Louisiana has terminated the cost-share agreements for a number of authorized LCA projects.

- Page ES-57: The last paragraph explains the difference between the number of environmentally cleared borrow sites and those that were utilized for HSDRRS construction as of July 2011. It would be instructive to add a discussion as to whether it is now expected that most of those sites will ultimately be required for completion of the HSDRRS project and, if not, whether they will be eligible for use on future coastal restoration and protection projects. The return on the public's investment in this endeavor may well be better than presented in this short summary.

- Page 1-23 and Table 1-3: The row in the table pertaining to IER 12 could use some editing. First, the word "hydrological" in the second column should be replaced with "ecological." Second, column three should reference sections 5.3.2.2 and should correct the next one to 5.3.2.6.1.

- Page 4-49 and Tables 4-6 and 9-1: These sections of the draft CED state that the HSDRRS resulted in direct impacts to approximately 1,483 acres of wetlands, while the executive summary (page ES-57) indicates that there were direct impacts to 1,637 acres of wetlands. These numbers need to be reconciled.

- Page 5-16: The description under the first paragraph of Section 5.3.1.3.7 seems to refer to the West Closure Complex, though it is not named. This narrative assumes that the structure was not constructed as of the cutoff date for this draft CED. However, because this is such a large and significant feature of the overall project, there would be less opportunity for confusion if these few sentences were updated.

- Page 5-21, Section 5.3.1.5.6, bullet three: Edit to read: "...should be constructed within a 100 ft wide corridor from the GIWW into the 404(c) area, impacting as little of the wetland habitat as feasible."

- Page 5-48, last sentence: Note that, as it currently looks, the long-term monitoring plan may well be developed after the augmentation features are constructed, but that sequencing was not stipulated.

- Page 7-2; Table 7-1: Add Clean Water Act Section 404(c) as a relevant law and regulation providing guidance in the development of the HSDRRS.

- Page 9-5, Wetlands: Add mention of the impacts to the Bayou aux Carpes Clean Water Act Section 404(c) wetlands.

- Page 9-3; Table 9-1: What is the basis of the finding that wetland impacts from the HSDRRS were "moderate" when reviewed at the sub-basin level? Certainly, the cumulative direct loss of either 1,637 or 1,483 acres of wetlands could be considered significant or major (see above comment regarding discrepancy in direct wetland impacts). Is there a technical basis to support the finding of moderate wetland impacts in each sub-basin?

- Appendix G: This presentation of monitoring data collected is not instructive without further explanation, including the purpose for the data collection, the implications of the data collected, and possibly maps of where the data was collected.

Thank you in advance for your consideration of these comments. EPA looks forward to working with the Corps to expeditiously address these recommendations. If you have any questions or would like to discuss this matter in greater detail, please contact John Ettinger at (504) 862-1119 or by e-mail at ettinger.john@epa.gov.

Sincerely,

Sharon Fancy Parrish

Sharon Fancy Parrish
Chief
Wetlands Section

cc: LDNR, Baton Rouge, LA
LDEQ, Baton Rouge, LA
NMFS, Baton Rouge, LA
USFWS, Lafayette, LA

CONGRESSIONAL CONTROL RECORD

DATE REC'D: **08 March 2013**

SUBJECT NAME: Constituent concerns That HSDRRS Has Not Been Fully Evaluated

SUSPENSE DATE: ~~19~~ 31 March 2013 **NO: 13-023**

DATE (Letter): **March 19, 2013** TYPE: LTR

FROM: Vitter FILE DESIG: **Congressional**

SUMMARY – Constituents Dennis Strecker and Thomas Thompson wrote separate letters regarding their concerns that the HSDRRS has not been fully evaluated. See their enclosed letters.

TO: PM - Podany
PD - Constance
~~TEH - Park~~ ED -

DATE: 22 February 2013

COMPLETED:

TO: _____ DATE: _____

13-023

DAVID VITTER
LOUISIANA

DEPUTY WHIP

Armed Services

Banking, Housing, and Urban Affairs

Environment and Public Works

Small Business and Entrepreneurship

United States Senate

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March 6, 2013

Colonel Edward Fleming
District Commander
U. S. Army Corps of Engineers
New Orleans District
Executive Office
PO Box 60267
New Orleans, LA 70160-0267

Dear Colonel Fleming:

I have been copied on separate letters from Mr. Dennis Strecker and Mr. Thomas Thompson regarding their concerns that the HSDRRS has not been fully evaluated. I have enclosed copies of these letters for your review.

I would appreciate any information that you may be able to provide to address the concerns of Mr. Strecker and Mr. Thompson. Please refer all correspondence in this regard to my Metairie Regional Office at 2800 Veterans Boulevard, Suite 201, Metairie, LA 70002.

Thank you for your time and consideration.

Sincerely,

David Vitter

David Vitter
United States Senate

Enclosure

Received By
CEMVN-EX
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New Orleans District

MAR 08 2013

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February 7, 2013

Dennis Strecker
283 Carr Dr
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Dennis.c.strecker@charter.net

Mrs. Sandra Stiles
U. S. Army Corps of Engineers
Regional Planning and Environmental Division South
Environmental Planning Branch
CEMVN-PDN
P.O. Box 60267
New Orleans, Louisiana 70160-0267
laura.l.wilkinson@usace.army.mil

Reference: Public comment on the: "Comprehensive Environmental Document (CED) titled, "Comprehensive Environmental Document Greater New Orleans (GNO) Area Hurricane Storm Damage Risk Reduction System (HSDRRS)" - http://www. http://nolaenvironmental.gov

Dear Mrs. Sandra Stiles,

The flood impact of the levees and structures built on the east side of the Mississippi since 1965 to areas outside of the flood protection system as part of the HSDRRS has not been fully evaluated. Prior to 1965 the highest recorded water level in Lake Pontchartrain was 7.5' from Hurricane Betsy based on records going back to the early 1900s. Since then there have been a number of hurricanes that have matched or exceeded Hurricane Betsy's storm surge in Lake Pontchartain; Hurricanes Juan (1985), Hurricane Rita (2005), Hurricane Katrina (2005), Hurricane Gustav (2008) and Hurricane Isaac (2012). This may be a coincidence, but until a storm such as Hurricane Betsy is modeled with and without the HSDRRS and compared for accuracy with known storm surge water levels from Betsy, there is no certainty of the impact the HSDRRS has on areas outside the system. This is particularly troublesome for people exposed to these storm surges since it appears we can no longer use historical data prior to HSDRRS to determine our increase risk, if any.

Sincerely,

Dennis Strecker

February 7, 2013

Thomas Thompson
217 Windward Passage
Eden Isles, Louisiana 70458
thomasthompson@yahoo.com

Mrs. Sandra Stiles
U. S. Army Corps of Engineers
Regional Planning and Environmental Division South
Environmental Planning Branch
CEMVN-PDN
P.O. Box 60267
New Orleans, Louisiana 70160-0267
laura.l.wilkinson@usace.army.mil

Reference: Public comment on the: "Comprehensive Environmental Document (CED) titled, "Comprehensive Environmental Document Greater New Orleans (GNO) Area Hurricane Storm Damage Risk Reduction System (HSDRRS)" - http://www. http://nolaenvironmental.gov

Dear Mrs. Sandra Stiles,

The referenced CED must not be approved until the full impact of the HSDRRS on the Lake Pontchartrain basin is known.

At the Corps public meeting in Slidell Louisiana on November 14, 2012, Colonel Fleming, commander of the Corps' New Orleans District Office, admitted that only 40% of the HSDRRS was modeled to determine its impact on the Lake Pontchartrain basin.

It would be absurd to accept the GNO HSDRRS CED when Colonel Fleming admits that 60% of the HSDRRS was not included when evaluating its impact on the Lake Pontchartrain basin.

The Corps must revise all of their models and studies to include 100% of the HSDRRS before any CED of the system can be considered a valid and accurate representation of the environmental impact it has on the greater New Orleans area.

Click on the link below to hear Colonel Fleming admit that only 40% of the HSDRRS was modeled when evaluating its impact to the Lake Pontchartrain basin.

http://youtu.be/PkmatvfMIRk

Sincerely,

Thomas Thompson

Eric Webb

From: Wilkinson, Laura L MVN <Laura.L.Wilkinson@usace.army.mil>
Sent: Friday, March 01, 2013 1:04 PM
To: Eric Webb
Subject: FW: 130211/0310 USACE-NOA-Draft CED-Comprehensive Environmental (UNCLASSIFIED)
Attachments: image001.png

Classification: UNCLASSIFIED
Caveats: NONE

Comment from LDEQ on draft CED.
LL

-----Original Message-----
From: Beth Altazan-Dixon [mailto:Beth.Dixon@LA.GOV]
Sent: Friday, March 01, 2013 8:46 AM
To: Stiles, Sandra E MVN; Wilkinson, Laura L MVN
Subject: 130211/0310 USACE-NOA-Draft CED-Comprehensive Environmental

March 1, 2013

Joan M. Exnicios, Chief

USACE Environmental Compliance Branch

P.O. Box 60267

New Orleans, LA 70160-0267

Sandra.e.stiles@usace.army.mil; Laura.L.Wilkinson@usace.army.mil <mailto:Sandra.e.stiles@usace.army.mil>

RE: 130211/0310

USACE-NOA-Draft CED-Comprehensive Environmental

Document Greater New Orleans (GNO) Area Hurricane

Storm Damage Risk Reduction System (HSDRRS)

St. Charles, Jefferson, Orleans, St. Bernard and Plaquemines Parishes

Dear Ms. Exnicios:

The Department of Environmental Quality (LDEQ), Business and Community Outreach Division has received your request for comments on the above referenced project.

After reviewing your request, the Department has no objections based on the information provided in your submittal. However, for the St. Charles Sub-basin (IER #1 and IER Supplemental #1), please note that the Bayou Trepagnier sediment remediation project mentioned in this section of the Hazardous, Toxic and Radioactive Waste chapter was completed in January 2012.

Also for your information, the following general comments have been included. Please be advised that if you should encounter a problem during the implementation of this project, you should immediately notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640.

* Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.

* If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.
* If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.
* All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-9371 to determine if your proposed project requires a permit.

* If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit application or Notice of Intent must be submitted no later than January 1, 2013. Additional information may be obtained on the LDEQ website at http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx <http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx> or by contacting the LDEQ Water Permits Division at (225) 219- 9371.

* If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly regarding permitting issues. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.
* All precautions should be observed to protect the groundwater of the region.
* Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.
* Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions.
* If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.

Currently, St. Charles, Jefferson, Orleans, St. Bernard and Plaquemines Parishes are classified as attainment with the National Ambient Air Quality Standards and have no general conformity determination obligations.

Please send all future requests to my attention. If you have any questions, please feel free to contact me at (225) 219-3958 or by email at beth.dixon@la.gov <mailto:beth.dixon@la.gov> .

Sincerely,

Beth Altazan-Dixon, EPS III

Performance Management

LDEQ/Office of the Secretary

Business and Community Outreach and Incentives Division P.O. Box 4301 (602 N. 5th Street) Baton Rouge, LA 70821-4301
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Classification: UNCLASSIFIED
Caveats: NONE

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

APR 16 2013

REPLY TO
ATTENTION OF

Regional Planning and
Environment Division South
Environmental Planning Branch

Honorable David Vitter
United States Senate
2800 Veterans Boulevard
Suite 201
Metairie, Louisiana 70002

Dear Senator Vitter:

This response is in reference to your letter dated March 6, 2013, concerning Mr. Dennis Strecker's and Mr. Thomas Thompson's letters to the US Amy Corps of Engineers (Corps). These letters inquired specifically about the Comprehensive Environmental Document Greater New Orleans Hurricane and Storm Damage Risk Reduction System hydrologic studies and models on current and historical storm surge affects to the Lake Pontchartrain basin and surrounding areas.

A copy of the Corps' letters to Mr. Strecker and Mr. Thompson are enclosed. If you have any questions or require additional information regarding the hydrologic modeling, please contact Ms. Nancy Powell, Chief, Hydraulics & Hydrologic Branch. She may be reached at (504) 862-2449 or email nancy.j.powell@usace.army.mil. For specific questions pertaining to the Comprehensive Environmental Document, please contact Ms. Joan Exnicios, Chief, Environmental Planning Branch. You may reach her at (504) 862-1760 or by email at joan.m.exnicios@usace.army.mil.

Sincerely,

For LTC, EN

Edward R. Fleming
Colonel, US Army
District Commander

Enclosures

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF

APR 16 2013

Regional Planning and
Environment Division South
Environmental Planning Branch

Mr. Dennis Strecker
283 Carr Drive
Slidell, Louisiana 70458

Dear Mr. Strecker:

This letter is in response to your letter dated February 7, 2013, providing comments to our draft Comprehensive Environmental Document (CED) Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS) February 2013." The US Army Corps of Engineers, New Orleans District (CEMVN) would like to thank you for your participation in the public review process. Items cited in your letter regarding your comments on the evaluation of the potential impacts of the HSDRRS are addressed below:

1. **"The flood impact of the levees and structures built on the east side of the Mississippi since 1965 to areas outside of the flood protection system as part of the HSDRRS has not been fully evaluated."**:

CEMVN Response: The draft CED Phase I incorporates information from the Individual Environmental Reports (IERs) completed through November 15, 2010 and provides a cumulative impact assessment of the initial construction components for 217 miles of the HSDRRS implemented before July 2011. The Preface of the CED (P-1 to P-4) provides a summary of the hydrologic analysis that is currently available regarding impact of the pre- and post 100-year HSDRRS, specifically for Hurricane Isaac's impact outside the system. In the future, when all information is available, a CED Phase II will be released that will describe the cumulative impacts for all the HSDRRS construction, including a hydrologic assessment, transportation analysis, mitigation and monitoring as well as an Independent External Peer Review of specific features. Only after all phases of the CED have been released for public review, comments received and considered will the CEMVN District Commander approve the proposed recommended action and sign a Decision Record for the Final CED.

2. **"...until a storm such as Hurricane Betsy with and without the HSDRRS and compared for accuracy with known storm surge water levels from Betsy, there is no certainty of the impact the HSDRRS has on areas outside the system."**:

CEMVN Response: A "Cumulative storm surge comparison of the Historical Lake Pontchartrain and Vicinity and West Bank and Vicinity and the 2012 100-year Hurricane and Storm Damage Risk Reduction System hydrologic modeling assessment" is in progress to evaluate impacts outside the system. This hydrologic assessment proposes to develop 1965, 2005, and 2012 versions of the SL16 mesh, representing the levee system in the years 1965,

2005, and 2012, and run simulations with ADCIRC+SWAN, of the following storms: Betsy, Camille, Juan, Katrina, Rita, Gustav, Ike, and Isaac with the best available data. Once complete, a hydrologic report would be released by November 2013 that would describe and evaluate the historical as well as the present cumulative storm surge impact of the completed HSDRRS and the surrounding area. This report and its findings would be incorporated into the CED Phase II.

I hope this addresses your comments. If you have any questions or need additional information concerning the CED in general please contact Ms. Laura Lee Wilkinson. You may reach her at (504) 862-1212 or email at laura.l.wilkinson@usace.army.mil. If you have specific questions concerning the hydrologic modeling please contact Ms. Nancy Powell. She may be reached at (504) 862-2449 or email nancy.j.powell@usace.army.mil.

Sincerely,

Joan M Exnicios

Joan M. Exnicios
Chief, New Orleans
Environmental Branch

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

APR 16 2013

REPLY TO
ATTENTION OF

Regional Planning and
Environment Division South
Environmental Planning Branch

Mr. Thomas Thompson
217 Windward Passage
Eden Isles, Louisiana 70458

Dear Mr. Thompson:

This letter is in response to your letter dated February 7, 2013, providing comments to our draft Comprehensive Environmental Document (CED) Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS) February 2013." The US Army Corps of Engineers, New Orleans District (CEMVN) would like to thank you for your participation in the public review process. Items cited in your letter regarding your comments on the evaluation of the potential impacts of the HSDRRS are addressed below:

1. **"The CED must not be approved until the full impact of the HSDRRS on the Lake Pontchartrain basin is known.":**

CEMVN Response: The draft CED Phase I incorporates information from the Individual Environmental Reports (IERs) completed through November 15, 2010 and provides a cumulative impact assessment of the initial construction components for 217 miles of the HSDRRS implemented before July 2011. The Preface of the CED (P-1 to P-4) provides a summary of the hydrologic analysis that is currently available regarding impact of the pre- and post 100-year HSDRRS, specifically for Hurricane Isaac's impact outside the system. In the future, when all information is available, a CED Phase II will be released that will describe the cumulative impacts for all the HSDRRS construction, including a hydrologic assessment, transportation analysis, mitigation and monitoring as well as an Independent External Peer Review of specific features. Only after all phases of the CED have been released for public review, comments received and considered will the CEMVN District Commander approve the proposed recommended action and sign a Decision Record for the Final CED.

2. **"The Corps must revise all of their models and studies to include 100% of the HSDRRS before any CED of the system can be considered a valid and accurate reperesentation of the environmental impact it has on the greater New Orleans area.":**

CEMVN Response: A "Cumulative storm surge comparison of the Historical Lake Pontchartrain and Vicinity and West Bank and Vicinity and the 2012 100-year Hurricane and Storm Damage Risk Reduction System hydrologic modeling assessment" is in progress to

evaluate impacts outside the system. This hydrologic assessment proposes to develop 1965, 2005, and 2012 versions of the SL16 mesh, representing the levee system in the years 1965, 2005, and 2012, and run simulations with ADCIRC+SWAN, of the following storms: Betsy, Camille, Juan, Katrina, Rita, Gustav, Ike, and Isaac with the best available data. Once complete, a hydrologic report would be released by November 2013 that would describe and evaluate the historical as well as the present cumulative storm surge impact of the completed HSDRRS and the surrounding area. This report and its findings would be incorporated into the CED Phase II.

I hope this addresses your comments. If you have any questions or need additional information concerning the CED in general please contact Ms. Laura Lee Wilkinson. She may be reached at (504) 862-1212 or email at laura.l.wilkinson@usace.army.mil. If you have specific questions concerning the hydrologic modeling please contact Ms. Nancy Powel. You may reach her at (504) 862-2449 or email nancy.j.powell@usace.army.mil.

Sincerely,

Joan M Exnicios

Joan M. Exnicios
Chief, New Orleans
Environmental Branch

United States Department of the Interior

NATIONAL PARK SERVICE
Jean Lafitte National Historical Park and Preserve
New Orleans Jazz National Historical Park
419 Decatur Street
New Orleans, Louisiana 70130-1035

IN REPLY REFER TO:
1.A.1. (JELA-S)

April 15, 2013

Ms. Sandra Stiles
U.S. Army Corps of Engineers (ACOE)
New Orleans District
PO Box 60267
New Orleans, Louisiana 70160-0267

Re: National Park Service (NPS) Review of Comprehensive Environmental Document

Dear Ms. Stiles:

The NPS Southeast Regional Office, Natural Resources Division and Jean Lafitte National Historical Park and Preserve (preserve) have reviewed the Draft Comprehensive Environmental Document Vol. I-III, and we have the following comments:

1) A Wetland Statement of Findings, per PM 77-1, will be required for compensation activities on National Park Service federal lands.
2) Sect 4.2.3.1 Certain wetland and land loss references appear outdated. Please provide more recent sources for example Dahl 1991, Boesch 1994, USGS 2003. Are more recent and accurate sources available to address current rates of wetland loss?
3) Kesel 1987, is also an outdated reference for sediment load reductions in the Mississippi River. We offer Mead Allison's as an appropriate reference. For example: Allison, M.A., Demas, C.R., Ebersole, B.A., Kleiss, B.A., Little, C.D., Meselhe, E.A., Powell, N.J., Pratt, T.C., and Vosburg, B.M., 2012. A water and sediment budget for the lower Mississippi-Atchafalaya River in flood years 2008-2010: implications for sediment discharge to the oceans and coastal restoration in Louisiana. *Journal of Hydrology* 432/3:84-97. Ehab Mesehle also may have some appropriate publications on sediment budgets.
4) Page 4-48 Consider spelling out entire name of WVA with the first use.
5) Page 4-49 Consider spelling out name for AAHU with the first use. We found this section vague which made it difficult to understand direct wetland impacts to the preserve.
6) 5.2.2.2 The use of AAHU's is not acceptable by the NPS to determine compensation. Please refer to Procedural Manual #77-1 for NPS compensation policies. This remains true for all following compensation discussion. Methodology indicates that there will be two Programmatic Mitigation IERs that will be prepared.
7) Page 5-9 FWS Coordination. Please advise us if there was NPS consultation.
8) Section 5.3.1.5 Wetlands. This section discusses acreage to be mitigated, but does not offer plan details. We look forward to mitigation plan preparation.

We found that the Comprehensive Environmental Document soundly summarizes for general audiences, but request more detailed information with regard to areas within the preserve.

We are now focused on processing the most recent edits to the draft mitigation plans for the sites tentatively selected for mitigation within the preserve. We await receipt of the wetland habitat analysis and the ArcGIS shape files (as built ROW, new park boundary file, real estate parcels) used by the ACOE. That information will allow us evaluate treatments of the CIT Tract Land exchange.

If you have any questions please contact Guy Hughes, Chief of Resource Management, guy_hughes@nps.gov, 504-512-2558.

Our apologies for not providing comments sooner.

Sincerely,

Lance Hatten
Acting Superintendent

Louisiana Audubon Council
1522 Lowerline St., New Orleans, Louisiana 70118-4010

April 8, 2013

Ms. Sandra Stiles
USACE, CEMVN-PDN
Regional Planning and Environ Div
Environ. Planning Branch
PO Box 60267
New Orleans, LA 70160

Re: Draft CED Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS) project.

Dear Ms. Stiles,

The Louisiana Audubon Council has reviewed the Draft Comprehensive Environmental Document (CED) for the HSDRRS project. We understand that this document only addresses environmental issues up to Nov. 15, 2010. The following are the comments for the LAC and we request that these issues be addressed in the Final CED:

End of Alternative Arrangements for HSDRRS:

We note the following statements in the Draft CED, p. 4-2:

"At this time, future levee lifts to maintain the 100-year level of risk reduction through the year 2057 are not authorized and no such levee lifts are currently planned. It is estimated that the total future levee lifts through 2057 to provide the 100-year level of risk reduction would need approximately 7.3 million cy of borrow to achieve project goals. For purposes of analysis, it is assumed that the required borrow material would not necessarily be removed from previously identified borrow sites, but instead could come from any available source in the region. This is because the NEPA Alternative Arrangements do not apply to this future construction work, that various waivers granted to the CEMVN Chief of Real Estate to deviate from standard borrow acquisition process will not apply, and the Authorizations for HSDRRS construction were specifically for emergency work." (p. 4-2).

"Therefore, after completion of the HSDRRS, additional NEPA analyses would be conducted on the impacts of removing soil from borrow areas for all future maintenance levee lifts through 2057. (p. 4-2).

"Alternative arrangements are limited to those actions necessary to control the immediate impacts of the emergency and will remain in effect during the preparation and competition of the Individual Environmental Reports (IERs) and Comprehensive Environmental Document (CED) included in the alternative arrangements." (CEQ letter 2/23/07).

Our questions are: On what date does the Alternative arrangements for the emergency building of HSDRRS sunset? When does the emergency terminate? When do the normal NEPA procedures take over?

Leaky Levees: indirect impacts.

1). Morganza to the Gulf:

The impacts to enclosed wetlands over the life of the project are not included in the Draft CED. For example, in the Morganza to Gulf PEIS it was recognized that relative sea level rise (RSLR) would change the future closure of openings to interior wetlands:

"Under future conditions, closure frequency could increase if the closure trigger is not adjusted to account for sea level rise. For example, under existing conditions, HNC floodgate closure (based on a 2.5-ft closure stage only, not the salinity triggers) would occur approximately 1.5 days per year. If the trigger remained the same through 2085, low RSLR would require closure 5 days per year by 2035 and 168 days per year by 2085 (refer to RSLR rates in table 3-1). Intermediate RSLR would require closure for 15 days per year by 2035 and 354 days per year by 2085. High RSLR would require closure for 24 days per year in 2035 and 365 days per year in 2085. To prevent frequent structure closings, operation plans will need to be re-evaluated periodically and closure trigger elevations may need to be increased if significant sea level rise occurs." USACE (2013b, p. 81 in LAC, 2013).

2). HSDRRS:

Several areas (IER-16, Lake Cataouatche) and (IER-10, Chalmette Loop) include significant wetlands on the protected side of the HSDRRS project. According to the DCED, these wetlands will remain in contact with the tidal influences and will only be closed off "during storms and high tides." The question is, what happens during the 57 year life of the project when RSLR forces increased frequency of closure of gates and culverts to avoid inundation during periods of high water?

IER-10 (Chalmette Loop)

This issue is especially significant for the Chalmette Levee, IER-10. What is the "trigger" used to close the structures? How many days per year will the interior wetlands be isolated from the GOM influence because of RSL rise? The closure should be addressed for each IER segment which has interior wetlands based on Corps' computer modeling.

EPA (2013) expressed concern that the Central Wetlands, which are enclosed by the Chalmette Loop, are controlled by Bayou Bienvenue and Bayou Dupre sector gates. These sector gates would remain open "except during storms and high tides." (p. 5-43). EPA states that, "water elevation, which currently constitutes a high tide would be met with increasing frequency due to relative sea level rise." This is a similar situation to Morganza to the Gulf project. The Corps should include in the Final CED the criteria used to close the gates, and the future frequency of closure based on projected RSL rise for the life of the project.

Violet Canal: Fresh water discharge through the Violet Diversion will be adversely impacted by increased closure frequency of the sector gates. How will the project affect proposed coastal restoration efforts? This should be included in the Final CED.

IER-16 (Lake Cataouatche)

"To minimize the impacts on 2,485 acres of wetlands located north of US 90, the combined cross section at the perimeter of the project was sized to equal the combined cross-section of the openings through US 90 prior to HSDRRS construction. The approximately 265 acres of wetlands located south of US 90 will continue to have hydrologic connections, but with a reduced cross-sectional area (IER #16)." (p. 5-23).

"As noted in IER #16, the USFWS recommends that the previous induced development study examine potential development over the period of analysis (i.e., 50 years) to be consistent with the planning process. Information about potential development of the area in question derived from this analysis was used to determine wetlands and non-jurisdictional BLH mitigation requirements. The St. Charles Parish Development Study demonstrates the likely development that will occur within the study area, and the period of analysis for the induced development is appropriate. However, the USACE does not mitigate for indirect impacts such as induced development, where local and state entities regulate zoning and land use

and are able to assign mitigation requirements directly to the developer. The USFWS recommendation was not adopted as a mitigation measure." (DCED, p. 5-23).

"Changes in floodgate operations or more frequent closures due to increased storm frequencies at any gated structure in the HSDRRS could be required in the future due to sea-level rise or changes in climate patterns. These changes cannot be predicted at this time, and may never be severe enough to force an operational change. However, any increase in the duration of HSDRRS floodgate closures would increase the depth and duration of flooding of the marsh, adversely impacting plant health and causing wetland loss." (DCED, p. 4-54).

We agree that increased duration of flooding caused by closure of the sector gates will adversely affect the wetlands. Computer modeling of the future RSLR is within the realm of predictability. The estimates of RSLR for southeastern Louisiana has been estimated by climate scientists and the range of rise can be plotted for future years. These predictions should be modeled and included in the Final CED. The increased inundation of wetlands and the adverse impacts must be included in the Final CED as indirect impacts of the project.

Wetlands enclosed by HSDRRS.

The USFWS submitted recommendations in Nov. 26, 2007 for minimizing adverse impacts on the natural environment from the entire HSDRRS project. A few of the significant recommendations follow with the Corps concurrence:

"Recommendation 11: In general, larger and more numerous openings in a risk reduction levee better maintain estuarine-dependent fishery migration. Therefore, as many openings as practicable, in number, size, and diversity of locations should be incorporated into project levees."
CEMVN Response 11: Concur."

"Recommendation 13: Flood protection water control structures should remain completely open except during storm events. Management of those structures should be developed in coordination with the USFWS, NMFS, LDWF, and LDNR."
CEMVN Response 13: Concur."

"Recommendation 15: The number and siting of openings in flood protection levees should be optimized to minimize the migratory distance from the opening to enclosed wetland habitats.
CEMVN Response 15: Concur." (from DCED p. 6-6).

We request that the Final CED include tables listing the number of acres enclosed by the HSDRRS project for each IER segment, the status of those wetlands, and how the Corps plans to maintain the productivity of those wetlands over the life of the project. Any deterioration of the wetlands over the life of the project must be included as indirect impacts and stated as such in the Final CED.

Mitigation:

"USFWS Recommendation 24: Acquisition, habitat development, and maintenance and management of mitigation lands should be allocated as first-cost expenses of the project, and the local project-sponsor should be responsible for operational costs. If the local project-sponsor is unable to fulfill the financial mitigation requirements for operation, then the CEMVN shall provide the necessary funding to ensure that mitigation obligations are met on behalf of the public interest. (DCED, p. 6-8)

CEMVN Response 24: Construction of the project features is cost-shared between the Federal Government and non-Federal sponsor. However, costs for operation, maintenance, repair, replacement, and rehabilitation will be the responsibility of the non-Federal sponsor." (p. 6-8)

It is stated that 5,128 acres of wetlands and BLH habitats (DCED p. 4-52) were lost by the construction of the HSDRRS. The mitigation of those wetlands losses will have a basic cost. How much has the Corps estimated for mitigation of impacts? Is this money set aside - to be available when the

Corps purchases mitigation lands to compensate for wetlands impacts? What is the timeframe to institute the mitigation features? We support the USFWS's recommendation that money for purchase of mitigation should be allocated as first cost of the project. There have been many occasions where the money for a public works project "ran out" and the low priority mitigation requirements were forgotten.

"EPA (2013, p. 2), also agrees with the USFWS, "The need to provide timely and effective compensatory mitigation for these unavoidable wetland impacts is the most critical remaining environmental compliance challenge for the HSDDRS." "the current schedule for implementation . . . raises concerns about compliance . . . and the ability of the Corps to ensure the availability of funds set aside to complete this aspect of the HSDRRS."

The Audubon Council is also concerned about the lack of availability of funds to carry out the mitigation program for HSDRRS. We request that the Final CED answer the questions above and assure the public that the mitigation program will be carried out to its conclusion.

Induced development:

CED Scoping Comment: "Induced development – conservation easements."

"USACE Response: Induced development and the use of conservation easements were issues raised by U.S. Fish and Wildlife Service (USFWS) with the IER #16 project work. The USACE determined that USFWS recommendations that non-development easements be acquired for enclosed wetlands would not be adopted. The USACE policy on induced development is that land development is subject to state and local land use rules, including permit and zoning requirements. Therefore, state and local entities are responsible for determining whether mitigation for development is appropriate. This is strengthened by a study that USACE performed in 1994 to help develop policy guidance on mitigation for induced development as a result of potential indirect impacts from the Westwego to Harvey Canal Hurricane Protection Project." (p. 1-26)

"…Indirect impacts such as land development are subject to compliance with local and state permit and zoning requirements, and therefore local and state interests are responsible for defining the appropriate mitigation requirements for land development activities. The direct causative agents of indirect impacts and the beneficiaries are the developers themselves. It is not equitable to allow state and local governments to avoid assuming responsibility for managing development and resources by placing the burden of local environmental protection on the national taxpayer." (USACE, DCED p. 1-26)

We also agree that conservation easements be included in the mitigation for enclosing wetlands that the Corps acknowledges are under development pressure. The building of the HSDRRS should not be a stimulus for development of wetlands. This is why our organization opposes the inclusion of wetlands behind a hurricane protection levee. Wetlands do not need flood protection and impoundment may accelerated the loss of these enclosed wetlands.

External Engineering Peer Review:

According to the Federal Register (USACE, 2007), the external engineering peer review was supposed to be made available to the public no later than the publication of the draft CED. According to the Draft CED, "The estimated completion date of Independent External Peer Review (IEPR) for all HSDRRS features, products, and activities is 2014." (p. ES-54, 55). This process includes completion of individual reviews, completion of summary reports, approval of peer review package, and posting for public release by Mississippi Valley Division.

Based on this time schedule, the IEPR will come more than a year after the CED is completed. The intention of the External Peer Review was to provide the public with some certainty that the levees and structures were being built to avoid engineering failures. By delaying the IEPRs, it raises concern about the credibility of the Corps' engineering. What happens if the project is built and later there are changes recommended by the outside expert? The IEPRs should be completed in a timely manner and the reports should have a positive impact on future projects.

Communication with Public:

We attended most of the early public meetings on the HSDRRS project. Of continued concern to us, has been the reluctance by the NOD to provide technical information on issues raised at public meetings. In most cases when we asked for technical data (that the Corps used to support its statement at the meeting), we were told that a FOIA request was required to receive the information. This is contrary to the position that CEQ and the Corps took, in support of a free flow of information between the agencies and the public. We attended these meetings in 2006 with the USACE, EPA, CEQ and NGOs to develop the Alternative Arrangements.

We have found a continued reluctance on the part of the NOD to provide information requested. In some cases, information requested under FOIA was provided only after a 90 day period. This is an unacceptable policy. In fact, the omission of critical information in IER-18, 19 stimulated a letter requesting a meeting with CEQ and NOD to discuss the deficiencies (LAC, 2007).

It was the LAC that brought to the attention of the Corps that the Bayou aux Carpes 404(c) area was being designated as a borrow "staging" area. The Corps' maps continued to show that designation at subsequent public meetings for several weeks.

We thank you for the opportunity to review the Draft CED and request that our comments be made part of the public record.

Sincerely,

Barry Kohl

Dr. Barry Kohl, President,
La Audubon Council

cc:
EPA, Dallas
USFWS, Lafayette
NMFS, Baton Rouge
Sierra Club, Delta Chpt
GRN, New Orleans
LEAN, Baton Rouge
NAS, Baton Rouge
NWF, Baton Rouge

References:

CEQ, 2007. Letter from James L Connaughton, CEQ to Gen. Don T. Riley, Dir of Civil Works, USACE. Regarding approval of alternative Arrangements for HSDRRS. Letter dated Feb. 23. 2007.

EPA, 2013. Letter to Sandra Stiles, NOD from Sharon Parrish, regarding the DCED, HSDRSS document. Letter dated March 19, 2013

LAC, 2007. Letter to Col. Alvin Lee, NOD, regarding data omitted by Corps in IER 18 and 19, HSDRSS. Request meeting with NOD and CEQ. Letter dated Dec. 14, 2007.

LAC, 2008. Letter to Gib Owen, NOD, regarding selection/rejection of borrow sites, HSDRRS. Letter dated Feb. 10, 2008.

LAC, 2013. Letter to Nathan Dyan, NOD, regarding the Draft, Revised Programmatic Environmental Impact Statement (DRPEIS); and Draft Post-Authorization Change Report (DPAC) Morganza to Gulf of Mexico, Louisiana. Letter dated Feb. 18, 2013. 7 pp.

USACE 2013b. Draft Post Authorization Change (DPAC) Report Morganza to the Gulf of Mexico, Louisiana, January 2013. Included in CD distributed by NOD as MtG Item 02a., 114 pp.

USACE, 2007. Adoption of Alternative Arrangements Under the National Environmental Policy Act for New Orleans Hurricane and Storm Damage Reduction System. Federal Register, v. 72, n. 48, March 13, 2007. p. 11337-11340.

LAC, 2013. Letter to Nathan Dyan, NOD, regarding the Draft, Revised Programmatic Environmental Impact Statement (DRPEIS); and Draft Post-Authorization Change Report (DPAC) Morganza to Gulf of Mexico, Louisiana. Letter dated Feb. 18, 2013. 7 pp.

GULF RESTORATION NETWORK
healthygulf.org

UNITED FOR A HEALTHY GULF

541 Julia Street, Suite 300, New Orleans, LA 70130
Phone: 504.525.1528 Fax: 504.525.0833

8 April, 2013

Sandra E Stiles, MVN
United States Army
Corps of Engineers
New Orleans District
Post Office Box 60267
New Orleans, LA 70160-0267
Sandra.E.Stiles@usace.army.mil
mvnenvironmental@usace.army.mil

RE: **Comprehensive Environmental Document (CED), Greater New Orleans Hurricane And Storm Damage Risk Reduction System (HSDRRS)**

Ms. Stiles,

I am writing on behalf of the Gulf Restoration Network (GRN).[1] We have had long-standing concerns about the inadequacy of the alternative arrangements to NEPA that were arranged for the Greater New Orleans hurricane system post-Katrina. While the need for infrastructure was urgent and great, we feel that this process has failed to inform the public and will more likely lead to a failure to replace wetland values lost during the construction of the system. As these wetlands provide a degree of flood risk reduction, their replacement is a concern of public safety as well as the environment.

We feel that this practice of alternative arrangements to NEPA should not provide the Corps with a way to proceed for other ongoing and proposed hurricane protection and coastal restoration efforts.[2] The standard NEPA process is a way for agencies to review major projects and examine the best alternative for achieving project goals in current conditions.

What we have lost via this alternative arrangements process is an opportunity to improve the basic design of the risk reduction system. The NEPA process was an opportunity to take a hard look at the impacts of the built risk reduction features to the natural risk reduction features. Because of this failure to learn, we fear that future risk reduction projects will continue to dismiss the value of wetlands as risk reduction features.

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[1] A diverse coalition of individual citizens and local, regional, and national organizations committed to uniting and empowering people to protect and restore the resources of the Gulf of Mexico.
[2] Feb 23, 2007 CEQ letter from James L. Connaughton to Maj. Gen. Don T. Riley

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Since Katrina, a new design strategy on tidal surge reduction has been needed. We feel that this approach is outlined in great detail in the Multiple Lines of Defense Strategy[3]. This document outlines the manner in which coastal wetlands provide storm protection in concert with features of the built environment. A major component of this strategy is the design of built flood risk reduction features and wetlands restoration to avoid the enclosure of wetlands behind constructed features, and, to the maximum extent practicable, allow for natural tidal connections to the estuarine system.

This enclosure has been shown to lead to degradation of function[4] and eventual loss of the wetland. In Terrebonne parish, marsh management has led to the degradation of wetland functions, particularly the lack of soil organic accretion. In a worst case, impounded and drained wetlands in the New Orleans East sub-basin burn continually, occasionally leading to a public health hazard[5].

This "Lines of Defense" strategy document also informed the NGO comment to the MRGO restoration plan, in and around the New Orleans East and Chalmette Loop sub-basins. Rather than restore wetlands inside of these enclosed areas, the NGO alternative plan outlined the need to restore critical land features highlighted by the LCA project as important for flood risk reduction.

As the wetlands in and around the Greater New Orleans system are a part of the risk reduction system, it is contradictory that indirect impacts to these wetlands are not listed in the Comprehensive Environmental Document. There are tidal gates for navigation that generally remain open, and do allow some flow between enclosed and exterior environment. But as sea level rises, we anticipate the gates will be closed more and more often as 2057 approaches, until they are closed by default. This design will restrict access to fishing areas, as well as have negative impacts to wetlands enclosed, then impounded, within the system.

Thanks for this opportunity to comment on the Comprehensive Environmental Document for the Greater New Orleans Hurricane Storm Defense and Risk Reduction System. Enumerated comments are below.

---

[3] Multiple Lines of Defense Strategy. http://www.mlods.org/

[4] Cahoon and Groat, ed. 1990. A Study of Marsh Management Practice in Coastal Louisiana. http://www.data.boem.gov/PI/PDFImages/ESPIS/3/3654.pdf

[5] Schliefstein, M. *Smoke from marsh fire prompts health warnings, school restrictions* Monday, August 29, 2011http://www.nola.com/traffic/index.ssf/2011/08/eastern_new_orleans_marsh_fire.html

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Comments

1. **The alternative arrangements pursuant to 40 CFR 1506.11 have resulted in further delays to assessment of impacts and to mitigation of the loss of ecosystem functions.**

2. **There remains a major question of when the emergency circumstances come to an end.**

3. **The CED document is incomplete, especially pertaining to indirect impacts of the HSDRRS system upon wetlands and federal projects, including newly impounded wetland forests in Lake Catahouachie sub-basin, as well as federal lands and federal restoration projects enclosed by the system in New Orleans East and Chalmette Loop sub-basins.**

4. **Because the impact assessment remains incomplete, mitigation plans lag behind. Construction of wetland features is a critical component of flood risk reduction in the New Orleans District, and their funding must be assured.**

5. **Given the failure of this process to take a hard look at the impacts and evaluate alternatives for risk reduction that synthesize natural and built risk reduction features, we protest the use of such alternative arrangements in the future.**

For a healthy Gulf,
[sent via e-mail]

Scott Eustis, M.S., Coastal Wetland Specialist

Cc: Matt Rota, Water Resources Program Director
Cyn Sarthou, Executive Director

Louisiana Audubon Council
Coalition to Restore Coastal Louisiana
Lake Pontchartrain Basin Foundation
Louisiana Environmental Action Network
US EPA
NOAA

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
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Lafayette, Louisiana 70506

April 5, 2013

Colonel Edward R. Fleming
District Commander
U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Colonel Fleming:

The U.S. Fish and Wildlife Service (Service) has reviewed the Department of the Army, Corps of Engineers (Corps), Comprehensive Environmental Document (CED) for the Greater New Orleans (GNO) Area Hurricane Storm Damage Risk Reduction System (HSDRRS) transmitted to our office via a February 5, 2013, letter from Ms. Joan M. Exnicios, Chief, of your Environmental Planning Branch. The Service submits the following comments in accordance with the National Environmental Policy Act of 1969 (NEPA, 83 Stat. 852, as amended; 42 U.S.C. 4321 et seq.) and the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The CED addresses impacts associated with construction of HSDRRS that was authorized following the extensive damage resulting from Hurricane Katrina's landfall in southeast Louisiana. To construct the newly authorized level of hurricane and flood reduction features the Corps implemented, with approval from the Council on Environmental Quality, NEPA Alternative Arrangements. Approximately 217 miles of levees and other flood reduction measures (e.g., T-walls, floodgates, pump stations, etc.), along with associated features (e.g., borrow sites, access roads, etc.) needed to construct the system were addressed in several Individual Environmental Reports (IERs). IERs addressed construction impacts by portions of the system having independent utility. The CED presents an interim summary of impacts and constructed features that were addressed in IERs completed by November 15, 2010. Impacts and features occurring after that date will be addressed in a CED supplement.

General Comments

Overall, the CED presents a good summation of the implementation of alternative arrangements (including the extensive coordination undertaken), project features constructed and the resulting impacts to significant resources. The Service has previously brought attention to the amount of time being required to finalize mitigation plans and urges the rapid implementation of mitigation to ensure additional temporal impacts do not have to be incorporated into mitigation features.

The Service does, however, have specific comments on the document; those comments are presented below.

Specific Comments

Volume I

Page ES-48, first paragraph – This paragraph references an Appendix S which should contain the current guidelines for assessing impacts to open water habitats and submerged aquatic vegetation during the implementation of the proposed projects. We were unable to locate Appendix S, nor the subject guidelines, in the CED; we recommend that this appendix be included. This same comment applies to the last paragraph on page 2-30.

Page ES-56 - The value for wetland impacts appears to be incorrect and should be revised to include 1,483.49 acres of wetlands and 3,644.81 acres of non-jurisdictional bottomland hardwood habitat to coincide with the rest of the document. Other pages where impact acreage discrepancies occur are 9-5, and Volume 3, Appendix N, Table 1.

Page 2-30, HSDRRS Mitigation Components, last paragraph - This paragraph mentions guidelines that will be used in assessing impacts to open water habitats and submerged aquatic vegetation during the implementation of the proposed mitigation projects. It is our understanding that those guidelines have not been officially accepted by the involved natural resource agencies, and many variable-specific and site-specific assumptions related to these habitats are currently under development by our office. We recommend that this paragraph be removed, with the exception of the first sentence, and that the following statement be added: "Those guidelines are nearing completion, but are undergoing further refinement. We anticipate their completion prior to the release of any supplemental CEDs, and a full description will be included as appropriate in forthcoming NEPA documents."

Page 4-51, Table 4-6, Wetlands and Non-Jurisdictional BLH Impacts - Impacts for IER 13 are incorrectly listed. Approximately 58 acres (38.86 AAHUs) of wetlands were impacted, and 13 acres (7.80 AAHUs) of non-jurisdictional BLH were impacted.

Page 4-7, New Orleans East Sub-basin, fourth paragraph - We recommend removing/revising the last sentence which states that "A probable positive impact...resulted from the concentration of numerous prey items at the cofferdam and the attraction of larger fish and predators to the area." This concentration may be a temporary benefit to predatory organisms or activities (e.g., recreational fishing) but it could also prove to be a negative impact to prey species.

Page 4-74, Specific Impacts of the HSDRRS, Gretna-Algiers Sub-basin - To prevent any further impacts that could result from operation of the pump station, (i.e., scouring, banks erosion, etc.) due to its discharge of 20,000 cubic foot per second (cfs), foreshore protection would be constructed within the channel adjacent to the western Gulf Intracoastal Waterway (GIWW) shoreline. We recommend revising the last sentence to state that "rock foreshore protection," rather than "rock placement" on the shoreline could improve edge habitat.

Page 4-77, 4.2.5.2.2 HSDRRS 2057 Impacts - In regards to the "Improved Protection on the Inner Harbor Navigation" Canal project, the Corps has previously disclosed that the impact of sea level rise in conjunction with marsh loss on the operational scenario of the water control structures is unknown and could result in increased frequency and duration of closures. This could translate into impacts to aquatic resources and fisheries by disrupting migration patterns and ingress and egress into interior marshes. Because these impacts could result in a change in frequency and/or duration of gate closure the Corps intends to incorporate adaptive management to address such changes. As it relates to cumulative impacts to fisheries and wetland habitats the uncertainty of future operational scenarios should be addressed.

Page 5-6, second-to-last paragraph – This paragraph states that the anticipated date for completion of the programmatic mitigation IERs (IER #36 and 37) is October 2012. We recommend that this be updated to reflect the current anticipated schedule.

Page 5-14 Mitigation - According to the CED, to avoid the movement of sediments into Lake Pontchartrain the Service recommended that the coffer dam be used only during a slack tide. We recommend that the word "used" be replaced with "constructed" to accurately reflect our comment.

Page 5-49, Specific Monitoring Measures, Gretna-Algiers Sub-basin - The National Park Service has indicated that amphibian surveys will not be conducted within the Bayou aux Carpes area. This section should be revised accordingly.

Page 6-15, CEMVN Response 15, last paragraph – The Service requests that all natural resource agencies involved in mitigation be coordinated with to determine what certain mitigation activities will be necessary to meet the projects initial success criteria.

Page 8-11, 8.7 Other Non-Federal Sponsor Responsibilities – This section should indicate that the local sponsors will be aware of the need to coordinate changes with the natural resource agencies to ensure such changes do not result in additional unmitigated impacts or result in possible impacts to any threatened or endangered species.

Page 9-5, Fisheries - The second paragraph states, "the installation of rock shoreline, fronting protection, and breakwaters would provide more productive habitat for fisheries by improving edge habitat along shorelines." Natural shorelines provide the most suitable habitat for fisheries; this statement should be revised to acknowledge that while productive and possibly diverse, rock shorelines may not provide a more productive habitat for fisheries.

Volume II

Appendix D Site Location Maps - Several borrow sites, listed below, appear to have boundaries that do not reflect those shown in the IER. Some may have been modified post-IER, but that should be noted somewhere in the CED and/or appendix:

Westbank D

Westbank E Phase 1

Riverbirch Phase 2

Contreras Dirt

Acosta 2

Additional maps needing other revisions include:

Churchill Farms – only shows planned excavation, not the entire environmentally cleared area, which could all potentially be excavated.

Stumpf 1and 2 – boundaries are incorrectly mixed together.

Tac Carrere appears to be misplaced to the south.

Idlewilde Stage 1and 2 boundaries reversed in the CED.

Tabony and Brad Buras labels are reversed in the CED.

Willowbend Phase 1 shows only about half of the site.

Volume III

Appendix G, Page 1 – A title and legends need to be added to this table for clarification.

We look forward to assisting the Corps in the final documentation and assessment of project effects on our trust resources. Should you have any questions regarding our comments, please contact David Walther (337/291-3122) of this office.

Sincerely,

for Jeffrey D. Weller
Supervisor
Louisiana Ecological Services Office

cc: FWS, SE Refuges Complex, Bayou Lacombe, LA
EPA, Dallas, TX
NMFS, Baton Rouge, LA
Corps, New Orleans, LA (Attention: Sandra Stiles, CEMVN-PDN)
LDWF, Baton Rouge, LA
OCPR, Baton Rouge, LA
LDNR, CMD, Baton Rouge, LA

Eric Webb

From:	Wilkinson, Laura L MVN <Laura.L.Wilkinson@usace.army.mil>
Sent:	Friday, April 05, 2013 4:23 PM
To:	Eric Webb
Subject:	FW: Comments, HSDRRS Comprehensive Environmental Document (UNCLASSIFIED)
Attachments:	image003.jpg; HSDRRS Draft CED_CPRA Comments.docx; HSDRRS Draft CED_ Editorial Comments.docx

Classification: UNCLASSIFIED
Caveats: NONE

CPRA comments.
LL

-----Original Message-----
From: Stiles, Sandra E MVN
Sent: Friday, April 05, 2013 2:45 PM
To: Wilkinson, Laura L MVN
Subject: Fw: Comments, HSDRRS Comprehensive Environmental Document

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Message sent via BlackBerry Device permanently
Attached to my hand

From: Elizabeth Davoli [mailto:Elizabeth.Davoli@LA.GOV]
Sent: Friday, April 05, 2013 07:00 AM Pacific Standard Time
To: Stiles, Sandra E MVN
Subject: Comments, HSDRRS Comprehensive Environmental Document

Sandra-

Attached are two sets of comments on the CED. One is general comments on the document and the other is editorial comments.

Liz

Description: CPRA_circle_logo_resized2

Liz Davoli, R.P.A.

Coastal Resources Scientist Supervisor

Environmental Section, Planning & Research Division

Coastal Protection and Restoration Authority

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Classification: UNCLASSIFIED
Caveats: NONE

COMMENTS ON HSDRRS DRAFT COMPREHENSIVE ENVIRONMENTAL DOCUMENT

Chapter 1

The CED is written as a snapshot in time (2010) rather than an evaluation/analysis of the cumulative impacts from constructing/upgrading the Hurricane and Storm Damage Risk Reduction System.

"It's proposed to supplement the CED as construction activities beyond July 2011 are completed." Will the CED be supplemented ad infinitum in a piecemeal fashion? Will there be a supplement in 2057?

Per the Notice of Intent published in the Federal Register in 2007:

- *The CED will incorporate by reference and address the work completed and the work remaining to be completed on a systemwide scale and a final mitigation plan*. The IERs are not incorporated by reference; instead large chunks were copied/pasted into the CED. A final mitigation plan is not included.
- *The CED will include a discussion of how the individual IERs are integrated into a systematic planning effort*. This is not captured in the CED.

Page 1-1: *The HSDRRS effectively achieved the 100-year level of hurricane and storm damage risk reduction by June 2011.* If this is the case, why is the cut off for projects included for analysis in the CED November 2010? The IERs have been supplemented multiple times for each project within LPV and WBV and design changes have increased or decreased the overall project impacts disclosed in the original IERs. Why is this not documented within the CED?

Chapter 2

This chapter includes a discussion of IERs not included or not analyzed. If the cut-off date for inclusion was November 2010, why are the incomplete projects included and discussed?

Page 2-30 leaves the reader with the impression that mitigation projects are still in development when this is not the case. The TSPs have been selected for LPV and WBV.

Chapter 4

Much of the information included in this chapter is pulled directly from the IERs for the individual projects. Rather than pull large blocks of text from those IERs, summarize the information within tables and direct readers to NOLA Environmental for the IER documents.

It should be clear to readers that the IERS completed by November 2010 were for all of the risk reduction projects. The IERs not completed were for supplemental IERs for the risk reduction projects as well as borrow and both LPV and WBV mitigation.

Development (residential and commercial) continues within the HSDRRS system and is not necessarily tied to post-Katrina redevelopment. In the CED, it is stated that development is not a cumulative effect of HSDRRS. If not for the protection the levees, floodwalls, and floodgates and other features provide from storm events, would development be occurring inside the system?

No discussion of cumulative effects of HSDRRS on induced development reducing wetlands inside and/or outside of the system is included within the CED. No discussion of forced drainage requirements to keep system de-watered or altering tidal connections.

Page 4-17: Induced development as a result of HSDRRS would potentially remove prime farmland soils as fill is brought in. How is induced development as a result of HSDRRS a minor impact? The TSP for the WBV mitigation removes prime farmland soils to create marsh and swamp. Although not analyzed in this CED (but will be in a future supplemental CED), USACE's actions impact soils.

Pages 4-50 to 4-52, Table 4-6: The table reflects the wetland impacts documented in the Fish and Wildlife Coordination Act Report, not the actual impacts for which mitigation was developed. The calculated impacts to be mitigated should be included in the CED, not out-of-date estimates.

<u>Chapter 5</u>
Mitigation for the HSDRRS wetland impacts is not discussed within the CED and, instead, it's stated that programmatic IERs will be prepared. Will a supplemental CED be prepared to discuss the cumulative effects of HSDRRS on wetlands?

What was the methodology for calculation of wetland mitigation for contractor-furnished borrow areas? Were borrow impacts tracked to determine overall impacts and were credits purchased from an approved bank at the time of impact or were all wetland impacts mitigated through an approved bank at one time? Were wetland impacts on contractor furnished borrow areas calculated using WVA or MCM?

Pages 5-4 to 5-6, Section 5.2.2.1 and Section 5.2.2.2 read as if mitigation is still in the development process when that's not the case. The TSPs have been selected for LPV and WBV.

WVA is not an appropriate evaluation tool to assess the impacts of HSDRRS construction to wetland habitats.

On page 5-6: *All compensatory mitigation activities will be consistent with standards and policies established in the CWA Section 404 regulatory program and the appropriate USACE policies and regulations governing compensatory mitigation*. The USACE New Orleans District's HSDRRS mitigation is inconsistent with the CWA Section 404 regulatory program as well as USACE policies and regulations. Throughout the mitigation project selection process, District personnel consistently put more emphasis on mitigating in-kind than being consistent with a watershed approach. The actions taken appear to be contrary to USACE's implementation guidance for WRDA '07 – "*the mitigation planning process includes…compensating for lost non-negligible resources through in-kind mitigation to the extent incrementally justified employing a watershed approach in mitigation planning; and, identifying the features of the mitigation plan and how it will be implemented in the project decision document*."

Figure 5-1 on page 5-7 is titled HSDRRS Wetland Compensatory Mitigation Sites Being Evaluated. USACE selected the TSPs for the mitigation sites in 2011. It is misleading to imply the project sites on the figure are currently under evaluation for use as mitigation when the decision to utilize specific sites has been made.

Pages 5-10 to 5-18 detail mitigation measures and BMPs discussed within the IERs to be implemented during construction. The text does not clarify if these measures and BMPs were in fact implemented during construction activities nor does the text state if additional wetland impacts occurred. Rather than copy/paste this text directly from the IERs, the CED should discuss the cumulative effects of HSDRRS construction activities on wetlands.

EDITORIAL COMMENTS ON DRAFT HSDRRS COMPREHENSIVE ENVIRONMENTAL DOCUMENT

1. Pp. ES-45 and ES-46: Suggest changing the orientation of the basins by 180°.

2. P. 1-2, 2nd paragraph, 4th sentence: Change "HSDRSS" to HSDRRS.

3. Pp. 2-29 to 2-30: The reader is left with the impression that IERs 36 and 37 are only for the borrow sites rather than mitigation.

4. P. 3-21, Figure 3-7: The boundaries of the HSDRRS project areas on the larger map (not the inset) would be helpful.

5. P. 4-2, 4th paragraph: Is the discussion of proposed levee lifts limited to those projects for which IERs were completed by November 2010?

6. P. 4-3 to 4-5, Table 4-1: For the purpose of discussion of analyzed impacts, it would be helpful for the reader if the date of completion were included for each IER.

7. P. 4-18, Water Quality: USACE levee construction responsibilities date from the nineteenth century. Hydro-modification has been in place for over 100 years in the New Orleans region.

8. P. 4-21: Discussion of impacts to the 404(c) area. Water quality: The IERs are supposed to be incorporated by reference. Rather than include the detailed discussion on individual IERs, summarize and incorporate by reference.

9. P. 4-33, 2nd paragraph, Seabrook: Since data collection will continue into 2013, will there be further analysis in future supplemental CEDs?

10. P. 4-40: Suggest using the Water Quality summary instead of the pages of detailed, in-depth information pulled from the IERs.

11. P. 4-41: Suggest removal of "In the last 100 years, a large portion of historical BLH habitat has been logged and converted into agricultural and urban lands (Dahl et al. 1991). Approximately 200 years ago, 30 million acres of BLH covered the southeastern U.S., but it is estimated that loss rates were as high as 431,000 acres per year from 1965 to 1975. As a result, very little original BLH habitat exists in the southeastern U.S. (USEPA 2009a). These sentences appear to have been randomly tossed into a discussion of BLH within the HSDRRS system.

12. P. 4-55 to 4-56: Summarize within a table, if possible.

13. P. 4-56, NOV: Are the impact numbers accurate? A different alternative was selected as the preferred after the public release of the Draft EIS for NOV. Recommend the impact numbers be double-checked.

14. P. 4-57, Transportation: Consider a table.

15. P. 4-63, Fisheries: Is it relevant to discuss the history of fishing from prehistory to the mention of the gas engine?

16. P. 4-64: Why are 2005 data used for shrimp and crab landings? More recent data should be used. Annual data 1998-2000 is over a decade out of date.

17. P. 4-66: Update Table 4-9.

18. Pp. 4-68 to 4-78: Much of this information can easily be summarized within a table.

19. P. 4-79: "It is anticipated that a report will be prepared detailing the final results of the DO and salinity data collection efforts in 2013. Those data and interpretation of changes in DO and salinity will be used by CEMVN to evaluate alternatives for providing rectification or mitigation." Will these alternatives be evaluated in a supplemental CED?

20. P. 4-82: "Long-term effects of flood risk reduction infrastructure would slow the erosion of valuable fish habitat by reducing the potential of more fragmentation due to high energy storm surge."

21. P. 4-91, New Orleans East Sub-basin, 1st paragraph: "The new floodwall (IER Supplemental #6) eliminated the existing terrestrial wildlife access to Lake Pontchartrain along the reaches, which potentially impacted species such as nutria (Myocastor coypus), red fox (Vulpes vulpes), raccoon, Virginia opossum, and nine-banded armadillo." Nutria and nine-banded armadillo are invasive species. Would access to the lake promote the destructive activities of these species?

22. Why isn't the section on wildlife tailored to the WMA within the HSDRRS system?

23. P. 5-4, Section 5.2.2.: "Any fill or excavation in open water habitat that is designated by oyster seed grounds by LDWF." Is this applicable to HSDRRS?

24. P. 5-6: "Anticipated date for completion of programmatic mitigation IERs (IERs #36 and #37) is October 2012." Should "2012" be 2013?

25. P. 5-45: "Work that was originally proposed for foreshore protection as described in IERs #6 and #7 was not needed to meet the current 100 year level of risk reduction and therefore was performed." Add not before "performed" if this was the case.

26. Pp. 5-45 & 5-46, Monitoring: Isn't monitoring underway for the Bayou Aux Carpes 404(c) area?

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701

April 2, 2013 F/SER46/RH:jk
225/389-0508

Ms. Joan Exnicios, Chief
Environmental Planning Branch
New Orleans District, U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Ms. Exnicios:

NOAA's National Marine Fisheries Service (NMFS) has reviewed the draft Comprehensive Environmental Document (CED) for the Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS) transmitted by your letter dated February 5, 2013. The draft CED summarizes information from Individual Environmental Reports (IER) released for HSDRRS prior to November 15, 2010. Information in IERs released after that date will be incorporated into supplemental CEDs to be released in the future.

The HSDRRS consists of 217 miles of flood reduction structures including a combination of earthen levees, T walls, and a wide variety of water control structures. HSDRRS was authorized and funded by Congress following the passage of Hurricane Katrina in 2005 which resulted in widespread destruction and loss of life in the New Orleans area and surrounding parishes. Given the need to rapidly implement HSDRRS, Emergency Alternative Arrangements under National Environmental Policy Act procedures were developed and authorized by the Council on Environmental Quality. The release of the CED is intended to provide a summary of actions taken, and impacts to resources of concern, from initiation of HSDRRS through November 15, 2010.

NMFS staff have worked closely with those of the U.S. Army Corps of Engineers (USACE) and the other natural resource agencies in the development of the Emergency Alternative Arrangements and implementation of HSDRRS. USACE staff, especially those of the New Orleans District, should be commended for the level and quality of effort invested in the implementation of HSDRRS, as well as their efforts to minimize environmental impacts associated with the project. Regarding information provided in the draft CED, NMFS finds the document is very well written and generally accurately summarizes issues and impacts to resources of concern. However, we have the following comments and revisions which we recommend be addressed in a supplemental CED:

EXECUTIVE SUMMARY

Page ES-56, paragraph 2. According to this section of the CED, 1,637 acres of wetlands and 3,565 acres of non-jurisdictional bottomland hardwoods were directly impacted by HSDRRS construction. These numbers do not match the figures provided in Table 4-6 of the CED or Table 1 in Appendix N. Given the importance of the quantification of impacts to wetlands, essential fish habitat (EFH), and bottomland hardwoods, NMFS recommends all sections of the CED be revised to consistently and accurately provide the most up-to-date numbers possible.

Section 4.0 AFFECTED ENVIRONMENT, HSDRRS COMPONENT PROJECT IMPACTS, AND HSDRRS CUMULATIVE IMPACTS

Page 4-49, paragraph 1. This paragraph provides a good summary of how impacts to open water habitats, with and without submerged aquatic vegetation (SAV) would be evaluated and what impacts would be compensated. However, no section of the document, including Table 4-6 or the U.S. Fish and Wildlife's draft Coordination Act Report, quantifies impacts to open water with SAV. Appendix N includes a quantification of impacts to open water habitats but does not specifically identify if any included SAV. If HSDRRS implementation did not impact open water having SAV, such should be stated in this section of the CED. Alternatively, Appendix N should be revised to quantify impacts to open water with, and without, SAV. In addition, this paragraph (and paragraph 1, page 5-4) references an Appendix S as having open water impact assessment guidelines. There is no Appendix S in the CED.

Table 4-6, pages 4-50 through 4-52. This table quantifies impacts of each IER to wetlands and non-jurisdictional bottomland hardwoods. There is no quantification of wetland impacts by habitat type in the CED, other than in the draft CAR. Given mitigation for impacts will be in-kind (e.g., brackish marsh mitigation for brackish marsh impacts), future CEDs should provide a quantification of impacts by habitat type. NMFS acknowledges, as is stated in the CED, we are allowing fresh and intermediate marsh impacts to be combined to allow one project to compensate for impacts to both habitat types.

Page 4-52, paragraph 1. This paragraph discusses indirect wetland impacts which could result from HSDRRS construction. Specifically, it indicates some features were modeled and found to increase inundation depth, frequency and duration on adjacent or enclosed wetlands. Such impacts were not evaluated using the Wetland Value Assessment methodology, although such an evaluation is possible. A supplemental CED should discuss potential wetland impacts which could result from modeled hydrologic impacts and quantify compensatory mitigation needs to offset such impacts.

Page 4-55, 4-56. This section identifies wetland restoration projects which could benefit the HSDRRS area, including the Bonnet Carre diversion, Violet Canal freshwater diversion, and Caernarvon Outfall Management projects. Wording should be added to those projects giving the current status of project implementation and their likelihood of implementation.

Page 4-64, paragraph 2. This paragraph provides a listing of estuarine finfish species likely to be in the project area, including Atlantic menhaden. Gulf menhaden is the appropriate species to be listed here, not Atlantic menhaden.

Page 4-72, paragraph 1. The last sentence indicates the reduction of salinities caused by closure of the Mississippi River-Gulf Outlet would have a long term beneficial impact on fisheries in the Lake Pontchartrain basin. We recommend this statement be deleted or clarification be provided indicating the closure of the Mississippi River-Gulf Outlet would likely benefit only those fishery species which utilize fresh to low salinity wetlands as nursery and foraging habitats.

Tables 4-12 and 4-13. These tables list federally managed fishery species in the vicinity of the HSDRRS project area, including Gulf stone crab and gray snapper. Those two species should be deleted from these tables and any discussion pertaining to essential fish habitat.

Page 4-114, paragraph 2. This paragraph indicates construction activities associated with IER 10 resulted in a loss of 42 acres of open water categorized as EFH. Table 1 in Appendix N quantifies the impacts to open water for IER 10 as 50 acres. The correct acreage of impacts to all categories of EFH should be determined and all appropriate sections of the CED should be revised to consistently cite the same numbers.

Section 5.0 HSDRRS MITIGATION

Mitigation is being developed in coordination with the natural resource agencies and will be addressed in a separate IER. It has been our understanding sufficient funds have been set aside to fund mitigation to offset impacts to wetlands and associated EFH. NMFS is concerned there may be a funding shortfall to accomplish the necessary mitigation given increasing delays to construct and or acquire mitigation while cost of constructing flood protection measures increase. NMFS recommends supplemental CEDs address the subject of mitigation commitments made to date and discuss the adequacy of the funds set aside to purchase or construct mitigation, as well as maintain the mitigation project(s) until initial success criteria are reached and the project(s) are turned over to the non-federal sponsor.

We appreciate the opportunity to review and comment on the draft CED. If you have questions regarding comments provided above, please contact Richard Hartman at richard.hartman@noaa.gov or at (225) 389-0508, extension 203.

Sincerely,

Virginia M. Fay

Virginia M. Fay
Assistant Regional Administrator
Habitat Conservation Division

c:
FWS, Lafayette, Walther
EPA, Dallas, Ettinger
LA DNR, Consistency, Lovell
LDWF, Balkum
F/SER4, Rolfes, Dale
F/SER46, Swafford
F/SER, Keys, Silverman
NOAA PPI, Nunenkamp
File