Mississippi Valley Division,
Regional Planning and Environment Division South

Upper Barataria Basin, Louisiana, Feasibility Study

Appendix G – Public Comments and Responses

December 2021

Upper Barataria Basin, Louisiana, Feasibility Study

Appendix G – Public Comments and Responses

Table of Contents

Upper Barataria Basin, Louisiana, Feasibility Study

Appendix G – Section 1

USACE Reponses to Public Comments on 2nd Draft Report

Public Comments on second Draft Report and USACE Responses

Name	Date	Method of Comment	Comment	Response
John Dale "Zach" Lea	12/16/2020	Email to UBB	Please give me a map showing the detail of the proposed project with the Davis Pond Diversion Project. As I understand it, the Upper Barataria project will not affect water flow through Davis Pond. Correct? Thank you	A map of project is included in the main report. This project will not impact the operation of the Davis Pond Diversion Project.
Paul Hogan	1/6/2021	Email to UBB	This project is desperately needed to protect the homes, business, and industry located on the upper side of the project. It will protect multiple parishes and the communities within then situated around the basin. Just the benefits resulting from the protection to industry and those who live in the area that operated the industries should have a positive cost benefit ratio. Whatever can be done to make this project become a reality needs to be undertaken.	Sent: Wed, Jan 6, 2021 9:10 pm Subject: RE: [Non-DoD Source] UBRR (UNCLASSIFIED) CLASSIFICATION: UNCLASSIFIED Thank you Dr. Hogan, We have received your comment and stored it as an official comment to be addressed with the Project Delivery Team.
Ricky Hogan	1/9/2021	Email to UBB	Guys I'm in support of this project. This is long over due.	Wonderful! Thank you Mr. Hogan for your comment.
Allison Froeba	1/11/2021	Email to UBB	I'm working with a developer in Mathews LA and need to know if the Latour Golf Course will be affected in the design of the Upper Barataria Levee. We currently have real estate for sale and are about to build new homes. We were also looking into building a club house. I need to know asap if we should stop any new construction or if there is a construction elevation that we need to build to. I will attend the live webinars, but please message me. The address is 300 La Tour Blvd, Mathews, LA 70375	Good afternoon and thank you for your question. Please refer to page 85 of the UBB FS and EIS which can be found at (https://www.mvn.usace.army.mil/Portals/56/Upper%20Barataria%20Basin%20Second%20Draft%20Report%20EIS_11_DEC_2020.pdf). The map of Reach H will provide you with a conceptual idea of the proposed UBB levee alignment which may help you in the planning process with your developer. The proposed levee for Reach H would be constructed with one lift to an elevation of 16 feet in 2026 in order to maintain the 1 percent AEP design elevation over the authorized 50 year period.
Riley Dufrene	1/12/2021	Email to UBB	Good morning. I read the article published by Times Picayune and have a question regarding the statement below. My family (and several others) own a recreational property which will be outside the proposed flood protection area and is not located on the Bayou Gauche Island. It is only accessible by boat. Being that the recreational properties will be impacted by the flood gate, is there any consideration for floodproofing these structures as well or is this included in the figures below? Thanks in advance! "The project also estimates that it might cost $84 million to either buy out, floodproof or elevate 270 residences and businesses on the unprotected side of the system in the towns of Bayou Gauche, Mathews and Gheens, which will likely see higher surge levels after the levees are completed."	Thank you for your question. There are no guarantees at this time what the outcome will be for each structure. If we induce damage we will mitigate for it, but whether that means dry-proofing, house-raising, buyouts, etc. we just don't know yet. The 3 x 3 x 3 process of SMART planning really limits the scope of work that we can do right now, so many of these questions will be reassessed in Pre-Construction Engineering and Design (PED) phase where we will complete the detailed engineering and technical studies needed to begin construction of the project (if it is authorized and funded by Congress). Your comment will be reported in the final feasibility report for review.

Lauren Kent Jackson	1/12/2021	Facebook during meeting 1	Can you elaborate on the type of material that will be used to construct the levees? Particularly where inland fishing will be affected? Will this dramatically reduce tidal movement in the areas to the West of the proposed project?	Our design standard for levee embankment is Clay in accordance with ASTM D2487 as CL or CH with less than 35% natural occurring sand. Hydraulic structures are planned and intended to maintain flow regime outside of storm events. The system will only be closed during storm events so, theoretically it will not affect the normal tidal regime.
Mark Schleifstein	1/12/2021	Facebook during meeting 1	Why is armoring not included? What happens if overtopping occurs with no armoring with this design? Who pays for rebuilding if elevation compromised without armoring? How quickly would compromised portions be restored?	Armoring was shown to not be cost effective. There is potential for failure events but life safety shouldn't be a concern if people evacuate. The project needs to be maintained to its approved authorized design.
Alisha Renfro	1/12/2021	Facebook during meeting 1	In the Feasibility report it says the official closing date for comments is January 29, 2021, but it's really the 25th?	Public comments are due by January 25th based on the NOA and other official documents. There is a typo in the Draft Report. Thank you!
Lauren Kent Jackson	1/12/2021	Facebook during meeting 1	Has CPRA given this proposed project a code designation yet? I understand this is still in the feasibility study phase.	CPRA project number is BA-0211
Belinda Simoneaux	1/12/2021	Facebook during meeting 1	Y'all talk about coastal erosion. But what y'all are doing with this levee. There will be no lower Louisiana. It will wash away from storm surge from Hurricanes. That's so sad to lose Louisiana because of y'all actions	Thank you for your comment.
Belinda Simoneaux	1/12/2021	Facebook during meeting 1	How long can I expect to live in my house on Bayou Gauche Island, before I flood and can no longer live with water up to my roof. I'm in limbo right now. I can't do anything are make any changes in my house. When will I get money to buy a house somewhere else.	Thank you for your comment. The Final Report discusses the induced flooding that is expected in Bayou Gauche with project. We have several mitigation measures in our plan to reduce the damages to homes. "The 1 percent AEP design levee is estimated to induce flooding in the communities of Bayou Gauche, Gheens, and Mathews, which are located outside of the system on the east side of the levee. The induced flooding is greatest within the community of Bayou Gauche, which is directly adjacent to the levee. This area is estimated to receive 1 to 1.5 feet of induced flooding under existing conditions and 2 to 4 feet under future conditions. Mitigation for potential induced damages will be further investigated during PED, including options to make improvements to the existing local levees (Gheens and Mathews) as a mitigation measure. At this time, we have included the highest cost, a worst case scenario mitigation for potential induced flooding, which includes acquisition of 64 residential structures in Bayou Gauche, 173 residential structures in Gheens, and 33 residential structures plus 5 commercial structures in Mathews. Though the highest cost (acquisitions) was accounted for in the overall project cost estimate, individual investigation and mitigation for each structure, if appropriate, will be done during PED.
Timothy Horton	1/12/2021	Facebook during meeting 1	Reminds me of my days at HPO. Thank you for continuing to do the right thing. Over build, in time and under budget!!	Thank you for your comment.

Lucy Loup	1/12/2021	Facebook during meeting 1	Can you comment on review and consideration of the alternative proposals submitted to include all portions of Bayou Gauche, including Bayou Gauche island itself and Kerry's Pointe community?	The Kerry Point subdivision is in the part of Bayou Gauche that is outside of the system. It is currently estimated to receive the same degree of induced flooding as the rest of that part of Bayou Gauche. Our final report states ". The 1 percent AEP design levee is estimated to induce flooding in the communities of Bayou Gauche, Gheens, and Mathews, which are located outside of the system on the east side of the levee. The induced flooding is greatest within the community of Bayou Gauche, which is directly adjacent to the levee. This area is estimated to receive 1 to 1.5 feet of induced flooding under existing conditions and 2 to 4 feet under future conditions. Mitigation for potential induced damages will be further investigated during PED, including options to make improvements to the existing local levees (Gheens and Mathews) as a mitigation measure. At this time, we have included the highest cost, a worst case scenario mitigation for potential induced flooding, which includes acquisition of 64 residential structures in Bayou Gauche, 173 residential structures in Gheens, and 33 residential structures plus 5 commercial structures in Mathews. Though the highest cost (acquisitions) was accounted for in the overall project cost estimate, individual investigation and mitigation for each structure, if appropriate, will be done during PED."
Albert Loar	1/12/2021	Facebook during meeting 1	Has this started? or is it over?	The project is in the study phase. After the Chiefs Report is signed in Oct 2021 then it would go to Congress to determine if it would be funded for construction.
Anonymous	1/13/2021	Facebook during meeting 2	Did presenter say that public comments are due Jan 25? The Executive Summary of the report gives Jan 29 as the deadline.	Public comments are due by January 25th based on the NOA and other official documents. There is a typo in the Draft Report. Thank you!
Kevin Falgout	1/13/2021	Facebook during meeting 2	What is the current plan for the levee on grand bayou canal? (T-Wall, Additional fill, etc.)	It is a combination depending on the exact location. The majority of that reach is Levee but were structures are too close the levee footprint we are proposing floodwall. See Appendix A. 1.3.4 Hydraulic Reach D : Section 1.3.5 ("Hydraulic Reach E"), which describes the access road for Reach E (see Figure1-9). Section 1.9.3 ("Hydraulic Reach E"), in the Civil Design section, which includes Figure1-28 (a cross section). Section 1.10.2 ("Hydraulic Reach E"), in the Structural Design section, which describes, among other things, an approx. location of the 400-ft. floodwall section.
Thomas Adler	1/21/2021	Email to UBB	see PDF	Thank you for your comment. Managed retreat experiences from locations in different countries and with different economic and developmental characteristics have identified similar challenges to implementation. Social and livelihood losses, jurisdictional conflicts, and lack of political will inhibit the effectiveness of impactful retreat. Residents of all income levels can feel economic and social losses from relocation. Regional governments resist the loss of tax base from relocations, or support residents who recognize and accept the risk and resist relocation. In the UBB Study area, under the initial scoping period, managed retreat was considered impractical and cost-prohibitive as a primary measure and alternative to evaluate. The risk-prone areas are both broad and densely populated areas, and the acquisition would include many properties. The acquisition would likely face legal challenges, which would have cost and schedule implications that do not achieve the study goals and objectives to reduce risk of life to populations and reduce damage to structure and contents in the period of analysis. In the Louisiana coastal areas, where residents and business are tied to the coastal landscape, where they work and play, there is historical evidence to show people don't fully retreat from the Coastal, but rather retreat vertically, using methods as home raising or rebuilding at a higher elevation. This is also reflected in future local government plans, such as the State of Louisiana 2017, the state has recommended elevating homes outside of structural systems, rather than force a managed retreat plan through acquisitions. Typically for coastal studies, the economics would reflect both of these trends in the FWOP structure data sets. Structures in low-lying areas subject to severe damages at frequent events would only be expected to be damaged once before their first-floor elevation would be adjusted to be outside of the FWOP 100-year floodplain. Also, any future development that would be included in the structure inventory would be placed one foot higher than the FWOP FEMA 100-year floodplain, which would account for the RSLR trends. In the case of Upper Barataria, investigations showed that there were no such extremely vulnerable low-lying structures in the inventory. Furthermore, a conservative approach was taken regarding future development, so the structure inventory used in the analysis does not include any structures that do not already exist. In spite of previous disaster declarations and coastal storm events, the population of the study area has grown over the past two decades. This historical data shows that recent flood events have not resulted in significant outmigration from the study area, and the post-flood response of property owners in the past has been consistent with the assumption that the structure inventory will remain in place throughout the period of analysis.

Dennis Miller	1/13/2021	Email to UBB	I was wanting to inquire if this project is going to be design build or design bid build. Can you provide commentary.	Thank you for your comment. Those decision will be made in PED.
Alisha Renfro	1/25/2021	Email to UBB	See PDF on RESTORE	See Annex 1
Nicholas Matherne	1/13/2021	Email to UBB	see PDF	See Annex 2
Facebook Comments	1/12/2021	Log of comments	See Annex 3	See Annex 3

Upper Barataria Basin, Louisiana, Feasibility Study

Appendix G – Section 2

Public Comments on 2nd Draft Report

From: John-Dale-Zach Lea
To: DLL-MVN-Upper_Barataria_FS
Subject: [Non-DoD Source] Connection to Davis Pond
Date: Wednesday, December 16, 2020 8:23:07 AM

Please give me a map showing the detail of the proposed project with the Davis Pond Diversion Project. As I understand it, the Upper Barataria project will not affect water flow through Davis Pond. Correct? Thank you.

John Dale "Zach" Lea, Ph.D.

Agricultural Economist

Sustainably Smart Projects

985-272-3681

jdzlea@hotmail.com

From: Thomas Adler
To: DLL-MVN-Upper_Barataria_FS
Subject: [Non-DoD Source] Public Comments on the Second draft of the upper Barataria EIS
Date: Thursday, January 21, 2021 9:25:41 AM
Attachments: Adler comments.PDF

Danielle,

Please find attached my comments, I've also sent them via US mail.

Thanks,
Tom Adler

Tom Adler
148 Hibiscus Pl.
River Ridge, LA 70123

January 21, 2021

Danielle Keller
Room 335
CEMVN-PMR-C
7400 Leake Avenue
New Orleans, LA 70118

Comments on the Draft Feasibility Report with Integrated Environmental Impact Statement Second Draft: December 11, 2020 for Upper Barataria Basin, Louisiana

The report seeks to quantify benefits received with the project over its assumed 50 year life (2026-2076) and compare damages suffered "without the project" showing that the benefits exceed costs. **In doing so, a number of assumptions are made that don't pass the reasonability test when looking at the larger whole.**

For example, page 23 of Appendix B, the Ec.onomics Study, dated December 11, 2020, states: *"The increase in damages from 2026 to 2076 are due to sea level rise".* Indeed, Table B:6-4 provides a table of the expected annual damages without the project as $54,510,000 in 2026, increasing to $157,181,000 in 2076. This assumption is based on flooding becoming worse each year. The economic model is incorrectly overstating "no-project damages":

- **People in the path of sea level rise will not simply rebuild every year,** they will migrate to dry land so the number of structures should be modeled to decrease every year starting from the 22,726 residential structures and 2,200 non-residential structures (Table B:5-1) and decreasing to zero structures in 2123 when the entire area is inundated (see Figure 3, Appendix A, Annex 8 of the UBB Second Draft report). There should be a similar reduction in the population assumptions of Section 3.1.5.3.3 *Population and Housing* of the Upper Barataria Basin second draft report.
- **Damages are inflated** in the Economics study on page 21, section 5.12 Damages to Street and Highways: *"Using a normal distribution, a mean value for the damages per mile and a standard deviation were calculated for each of the three depths of flooding"* This assumes as sea level increases and flooding depths get worse, we will simply rebuild our roads at the same elevation every year with an annual price tag of $1,734,000 in 2026 and $4,274,000 in 2076 (Table B:6-2 of the Economics Study). While this is a great assumption if the goal is to show high annual damages without the proposed levee, it does not seem reasonable in the real world. A real world estimate is easily obtainable by just averaging actual historical FEMA costs with an inflater since there have been 22 disaster declarations related to hurricane and tropical storm incidents and 19 disaster declarations related to flooding incidents in the study area per the report.

Why are the "no-project" damages being inflated? To justify a $2 billion levee that has significantly increased in scope and ultimately will not save the project area from flooding: ***"The fact of sea level rise is certain; only the rate is uncertain."*** (page 6 of Annex 8, Appendix A) Is it truly in the Army Corps best interest to plan for population *increases* in this vunerable project area and imply that this project will keep them safe? Please use this as an opportunity to begin a meaningful discussion of managed retreat from areas most vulnerable to sea level rise.

Sincerely,

Tom Adler

From:	Nicholas Matherne
To:	Keller, Danielle A CIV (USA); DLL-MVN-Upper_Barataria_FS
Cc:	Donald Henry; Sam Scholle; mlj@stcharlesgov.net; Michael Palamone; Samantha de Castro; Mike Chopin; James P. Jasmin; Henry Picard; kgalloway@gisy.com; rodney@greenupind.com; oneilm@gisy.com; Ray Bender - Greenup Industries LLC (rbender@greenupind.com)
Subject:	[Non-DoD Source] Public Comments on UBB FS EIS Reach E
Date:	Thursday, January 14, 2021 12:08:18 PM
Attachments:	UBRR_Segment 5-B 11-9-20 Public Meeting Comments.pdf

In response to concerns over the alignment of the T-Wall and Rollergate across LA Hwy 306 as part of Segment 2 of the UBRR project (Hydrologic Reach E of the UBB FS EIS), a Public Meeting was held with the residents of the area at the Paradis Fire Station on November 9, 2020. Following this public meeting, multiple emails were sent by residents of the area who were in attendance at the public meeting to Mr. Sam Scholle of St. Charles Parish Government and forwarded to the Design Team for review and submittal to the USACE team working on the UBB FS EIS. Below is a consolidated overview of the comments for USACE review, consideration, and response. The content of the original emails, along with sketches by the residents are attached to this email.

Alternative T-Wall Alignment Option #1 – Construct levee and/or concrete T-Wall geographically north along Badeaux Ln, crossing Hwy 306, routing south on the east side of Sunset Pumping Station.

Benefits:

* Noise Reduction from Pumping Station Engines
* Eliminates all potential damage to water, power, cable, phone, and sewer lines, as well as homes on Badeaux Ln and in Kerry's Pointe

Alternative T-Wall Alignment Option #2 – Construct a levee system around Simoneaux Pond with two swing gates.

Benefits:

* Protects all residents of St. Charles Parish, as well as the future growth of these areas impacted.

Other Comments

Comment: To drive 90 foot piles for the proposed option along Kerry's Pointe East there would be at least a 100-120 foot of boom on the crane. If a crane failure or mishap with a pile were to occur, our homes and personal safety will be compromised as we would be in the drop zone! There's no way around that. Hence, will we be restricted from getting into our own homes during Construction?

Comment: How will this equipment be brought into work area? Kerry's Pointe is a private subdivision and would

require a right of way on our property to access such work sites? As we do not support the option of building T Wall so close to our homes we would not grant such access without a challenge.

Comment: If a temporary construction fence is constructed during construction where will it be placed in reference to our homes? Someone needs to review this and provide an answer.

Comment: On Alternate #1 (addressed above), could you advise the purpose of the new additional access road at the east end of Kerry's Pointe connecting to the existing Badeaux Lane? With the installation of the roller gate at the existing Kerry's Pointe entrance, we are unclear as to what the purpose of this 2nd entrance might be.

Please let me know if you have any further questions regarding these public comments.

Thanks,

Nicholas Matherne, CFM

Project Manager | Highway-Structural

BURK-KLEINPETER, INC.

4176 Canal Street, New Orleans LA 70119

O. 504.486.5901 F. 504.488.1714 C. 985.856.4170

bkiusa.com

From:	Nicholas Matherne
To:	Keller, Danielle A CIV (USA); DLL-MVN-Upper_Barataria_FS
Cc:	Donald Henry; Dwayne Bourgeois; mlj@stcharlesgov.net; Rechelle Champagne; Sam Scholle; Mike Chopin; Henry Picard; oneilm@gisy.com; kgalloway@gisy.com; jloeske@gisy.com; rodney@greenupind.com; Ray Bender - Greenup Industries LLC (rbender@greenupind.com); James P. Jasmin; Ignacio Harrouch; Jas Singh
Subject:	[Non-DoD Source] UBB 2nd Draft FS EIS Design Team Comments & Questions
Date:	Wednesday, January 13, 2021 4:35:09 PM
Attachments:	UBB Study 2nd Draft Comments_LBLD-NLLD.pdf

Danielle,

On behalf of the Lafourche Basin Levee District, North Lafourche Levee District, St. Charles Parish, and the Upper Barataria Risk Reduction Design Team, I wanted to thank you for your staff's time last Wednesday walking us through the updates to the UBB FS EIS Second Draft and for the opportunity to provide our collective comments and questions on the report. Attached is a memorandum from Donald Ray Henry of LBLD (collaboratively composed by the levee districts, parish, and design team) outlining our questions and concerns with various aspects of the report, its findings, and its methodologies. As mentioned during last Wednesday's WebEx meeting, we would appreciate your team taking the time to address each of our questions and comments, and we would like to offer to make ourselves available to discuss any further questions your team may have, whether in-person or virtually.

Please let me know how our Design Team can further assist your FS team to address the attached comments.

Thanks,

Nicholas Matherne, CFM

Project Manager | Highway-Structural

BURK-KLEINPETER, INC.

4176 Canal Street, New Orleans LA 70119

O. 504.486.5901 F. 504.488.1714 C. 985.856.4170

bkiusa.com

From: Miller, Dennis
To: DLL-MVN-Upper_Barataria_FS
Subject: [Non-DoD Source] Question
Date: Wednesday, January 13, 2021 3:53:09 PM
Attachments: image003.png

Good Afternoon:

I was wanting to inquire if this project is going to be design build or design bid build. Can you provide commentary.

Dennis E. Miller, P.S. | Vice President

Civil & Environmental Consultants, Inc.

600 Marketplace Ave, Suite 200, Bridgeport, WV 26330

direct 304.848.7102 office 304.933.3119 mobile 304.844.1169

www.cecinc.com <Blockedhttps://www.cecinc.com/>

From: Riley Dufrene
To: Keller, Danielle A CIV (USA); DLL-MVN-Upper_Barataria_FS
Subject: [Non-DoD Source] FW: Alternative 1 Plan Inquiry - Riley Dufrene
Date: Wednesday, January 13, 2021 7:23:29 AM

Danielle,

I sent the two emails below back in January of 2020, but didn't receive a response or acknowledgement. I just wanted to make sure these were reported as well. Thank you!

Regards,

Riley Dufrene

Sr. Mechanical Maintenance Engineer

//////////////////

Bayer U.S. – Crop Science

Monsanto Company

DSIDA

West Engineering Building (WEB)

Luling, LA 70070, USA

Tel: +1 985-785-3514

Cell: +1 985-722-7621

E-mail: Riley.Dufrene@bayer.com <mailto:Riley.Dufrene@bayer.com>

Web: http://www.bayer.com <Blockedhttp://www.bayer.com/>

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From: Riley Dufrene
Sent: Friday, January 10, 2020 11:51 AM
To: UpperBaratariaFS@usace.army.mil
Subject: RE: Alternative 1 Plan Inquiry - Riley Dufrene

Please see email below. I'd like to formally request an alternate solution to the t-wall that's being proposed to border the residential areas in the Bayou Gauche area. All waterfront property owners paid a premium for their property in order to have access to the waterway for both commercial and recreational use. Our property value will plummet. More importantly, this waterway is a staple amongst the community. Where most neighborhoods have parks, playgrounds, ponds, and sidewalks for the kiddos, we really only have this bayou for sightseeing, fishing, hunting, boating, etc… If access were to be cut off from our neighborhoods, our community would not be the same.

Is there an alternative option or design that can be considered? Is it a possibility to place the levee on the east side of Grand Bayou? Thank you in advance for your consideration.

Also, at the community meeting, I had requested that the Civil Engineer on the project give me a call if possible to discuss the current design of the t-wall since the members in attendance did not have any details. I would really appreciate hearing back from the CE so that I can communicate this information to the community.

Regards,

Riley Dufrene

Mechanical Maintenance Engineer

//////////////////

Bayer U.S. – Crop Science

Monsanto Company

DSIDA

West Engineering Building (WEB)

Luling, LA 70070, USA

Tel: +1 985-785-3514

Cell: +1 985-722-7621

E-mail: Riley.Dufrene@bayer.com <mailto:Riley.Dufrene@bayer.com>

Web: http://www.bayer.com <Blockedhttp://www.bayer.com/>

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From: Riley Dufrene
Sent: Tuesday, January 7, 2020 2:10 PM
To: UpperBaratariaFS@usace.army.mil <mailto:UpperBaratariaFS@usace.army.mil>
Subject: Alternative 1 Plan Inquiry - Riley Dufrene

Good afternoon Danielle, my name is Riley Dufrene and I'm a resident of Bayou Gauche. Like several others, I'm an owner of waterfront property in Reach D which borders the existing Sunset Drainage levee. Per the Alternative 1 Plan, a T-wall is being proposed for all residential waterfront properties with existing levees in the Bayou Gauche area (Reach D&E). I have two questions: Will the design of the t-wall/levee allow for access to the bayou for the property owner? Also, can you provide any details regarding the aesthetics of the wall? The waterway access was the deciding factor to build our new home in the location that it is in today so my family is a bit concerned. If you need a reference point, my address is 227 Old Farm Lane Des Allemands, LA 70030.

Thank you in advance!

Regards,

Riley Dufrene

Mechanical Maintenance Engineer

//////////////////

Bayer U.S. – Crop Science

Monsanto Company

DSIDA

West Engineering Building (WEB)

Luling, LA 70070, USA

Tel: +1 985-785-3514

Cell: +1 985-722-7621

E-mail: Riley.Dufrene@bayer.com <mailto:Riley.Dufrene@bayer.com>

Web: http://www.bayer.com <Blockedhttp://www.bayer.com/>

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From: Riley Dufrene
To: Keller, Danielle A CIV (USA); DLL-MVN-Upper_Barataria_FS
Subject: [Non-DoD Source] RE: Proposed Upper Barataria Levee System - Concern (UNCLASSIFIED)
Date: Wednesday, January 13, 2021 7:19:59 AM

Thanks Danielle for your response and submission of my comment. Have a good day.

Regards,

Riley Dufrene
Sr. Mechanical Maintenance Engineer

//////////////////

Bayer U.S. - Crop Science
Monsanto Company
DSIDA
West Engineering Building (WEB)
Luling, LA 70070, USA
Tel: +1 985-785-3514
Cell: +1 985-722-7621
E-mail: Riley.Dufrene@bayer.com
Web: Blockedhttp://www.bayer.com

-----Original Message-----
From: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Sent: Wednesday, January 13, 2021 6:35 AM
To: Riley Dufrene <riley.dufrene@bayer.com>; DLL-MVN-Upper_Barataria_FS <UpperBaratariaFS@usace.army.mil>
Subject: RE: Proposed Upper Barataria Levee System - Concern (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Mr. Dufrene,

Thank you for your question. There are no guarantees at this time what the outcome will be for each structure. If we induce damage we will mitigate for it, but whether that means dry-proofing, house-raising, buyouts, etc. we just don't know yet. The 3 x 3 x 3 process of SMART planning really limits the scope of work that we can do right now, so many of these questions will be reassessed in Pre-Construction Engineering and Design (PED) phase where we will complete the detailed engineering and technical studies needed to begin construction of the project (if it is authorized and funded by Congress). Your comment will be reported in the final feasibility report for review.

Thank you,
Danielle

Danielle A Keller, PhD
Project Management, U.S. Army Corps of Engineers
7400 Leake Avenue, New Orleans, LA 70118 Danielle.a.keller@usace.army.mil
Work: (504) 862-1744

-----Original Message-----

From: Riley Dufrene [mailto:riley.dufrene@bayer.com]
Sent: Tuesday, January 12, 2021 9:26 AM
To: DLL-MVN-Upper_Barataria_FS <UpperBaratariaFS@usace.army.mil>
Subject: [Non-DoD Source] Proposed Upper Barataria Levee System - Concern

Good morning. I read the article published by Times Picayune and have a question regarding the statement below. My family (and several others) own a recreational property which will be outside the proposed flood protection area and is not located on the Bayou Gauche Island. It is only accessible by boat. Being that the recreational properties will be impacted by the flood gate, is there any consideration for floodproofing these structures as well or is this included in the figures below? Thanks in advance!

"The project also estimates that it might cost $84 million to either buy out, floodproof or elevate 270 residences and businesses on the unprotected side of the system in the towns of Bayou Gauche, Mathews and Gheens, which will likely see higher surge levels after the levees are completed."

Regards,

Riley Dufrene

Sr. Mechanical Maintenance Engineer

//////////////////////

Bayer U.S. - Crop Science

Monsanto Company

DSIDA

West Engineering Building (WEB)

Luling, LA 70070, USA

Tel: +1 985-785-3514

Cell: +1 985-722-7621

E-mail: Riley.Dufrene@bayer.com <mailto:Riley.Dufrene@bayer.com>

Web: Blockedhttp://www.bayer.com <Blockedhttp://Blockedwww.bayer.com/>

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CLASSIFICATION: UNCLASSIFIED

From:	Riley Dufrene
To:	DLL-MVN-Upper_Barataria_FS
Subject:	[Non-DoD Source] Proposed Upper Barataria Levee System - Concern
Date:	Tuesday, January 12, 2021 10:30:16 AM
Attachments:	image001.png image002.png image003.png

Good morning. I read the article published by Times Picayune and have a question regarding the statement below. My family (and several others) own a recreational property which will be outside the proposed flood protection area and is not located on the Bayou Gauche Island. It is only accessible by boat. Being that the recreational properties will be impacted by the flood gate, is there any consideration for floodproofing these structures as well or is this included in the figures below? Thanks in advance!

"The project also estimates that it might cost $84 million to either buy out, floodproof or elevate 270 residences and businesses on the unprotected side of the system in the towns of Bayou Gauche, Mathews and Gheens, which will likely see higher surge levels after the levees are completed."

Regards,

Riley Dufrene

Sr. Mechanical Maintenance Engineer

//////////////////////

Bayer U.S. – Crop Science

Monsanto Company

DSIDA

West Engineering Building (WEB)

Luling, LA 70070, USA

Tel: +1 985-785-3514

Cell: +1 985-722-7621

E-mail: Riley.Dufrene@bayer.com <mailto:Riley.Dufrene@bayer.com>

Web: http://www.bayer.com <Blockedhttp://www.bayer.com/>

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From: Brian Froeba
To: Keller, Danielle A CIV (USA)
Cc: Allison Froeba; DLL-MVN-Upper_Barataria_FS; Brian Froeba
Subject: [Non-DoD Source] Re: New Upper Barataria Levee - Mathews LA (UNCLASSIFIED)
Date: Monday, January 11, 2021 2:37:10 PM

Danielle,

Thank You for responding. We are currently permitted to build two houses at LaTour Golf club at BFE 7', and are scheduled to begin this week. The LaTour subdivision is outside of the proposed levee protection at elevation 16'. We have an enormous amount of property to develop within the next several years, and would like to know what the new BFE of these houses would need to be. Building these homes at the current BFE of 7 feet would require these houses to be raised only a few years after being built and this is not an option for us.

Would the new houses and clubhouse need to be built to an elevation of 16 feet?

Thanks,
--

Thank you,

Brian Froeba, P.E.

Specialized Engineering, LLC

619 Homedale St.

New Orleans, LA 70124

Cell #: 504-220-7724

On Mon, Jan 11, 2021 at 2:11 PM Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil <mailto:Danielle.A.Keller@usace.army.mil> > wrote:

> CLASSIFICATION: UNCLASSIFIED
>
> Ms. Froeba,
>
> Good afternoon and thank you for your question. Please refer to page 85 of the UBB FS and EIS which can be found at (https://www.mvn.usace.army.mil/Portals/56/Upper%20Barataria%20Basin%20Second%20Draft%20Report%20EIS_11_DEC_2020.pdf <Blockedhttps://www.mvn.usace.army.mil/Portals/56/Upper%20Barataria%20Basin%20Second%20Draft%20Report%20EIS_11_DEC_2020.pdf>).
>
> The map of Reach H will provide you with a conceptual idea of the proposed UBB levee alignment which may help you in the planning process with your developer. The proposed levee for Reach H would be constructed with one lift to an elevation of 16 feet in 2026 in order to maintain the 1 percent AEP design elevation over the authorized 50 year period.
>
> Thank you,
> Danielle
>
> Danielle A Keller, PhD
> Project Management, U.S. Army Corps of Engineers
> 7400 Leake Avenue, New Orleans, LA 70118
> Danielle.a.keller@usace.army.mil <mailto:Danielle.a.keller@usace.army.mil>
> Work: (504) 862-1744
>
> -----Original Message-----
> From: Allison Froeba [mailto:afroeba@forefrontem.com <mailto:afroeba@forefrontem.com>]
> Sent: Monday, January 11, 2021 10:07 AM
> To: DLL-MVN-Upper_Barataria_FS <UpperBaratariaFS@usace.army.mil <mailto:UpperBaratariaFS@usace.army.mil> > >
> Cc: Brian Froeba <bfroeba@seng-llc.com <mailto:bfroeba@seng-llc.com> > >
> Subject: [Non-DoD Source] New Upper Barataria Levee - Mathews LA

I'm working with a developer in Mathews LA and need to know if the Latour Golf Course will be affected in the design of the Upper Barataria Levee. We currently have real estate for sale and are about to build new homes. We were also looking into building a club house. I need to know asap if we should stop any new construction or if there is a construction elevation that we need to build to. I will attend the live webinars, but please message me.

The address is 300 La Tour Blvd, Mathews, LA 70375

Thank you,

Allison Froeba, PE

CLASSIFICATION: UNCLASSIFIED

From: Allison Froeba
To: DLL-MVN-Upper_Barataria_FS
Cc: Brian Froeba
Subject: [Non-DoD Source] New Upper Barataria Levee - Mathews LA
Date: Monday, January 11, 2021 10:36:45 AM

I'm working with a developer in Mathews LA and need to know if the Latour Golf Course will be affected in the design of the Upper Barataria Levee. We currently have real estate for sale and are about to build new homes. We were also looking into building a club house. I need to know asap if we should stop any new construction or if there is a construction elevation that we need to build to. I will attend the live webinars, but please message me.

The address is 300 La Tour Blvd, Mathews, LA 70375

Thank you,

Allison Froeba, PE

From: Rick
To: DLL-MVN-Upper_Barataria_FS
Subject: [Non-DoD Source] St. Charles levee Luling to Raceland
Date: Saturday, January 09, 2021 9:43:14 AM

Guys I'm in support of this project. This is long over due. Ricky Hogan. St. Charles resident.

Sent from my iPhone

From: phinda9@aol.com
To: DLL-MVN-Upper_Barataria_FS
Subject: [Non-DoD Source] UBRR
Date: Wednesday, January 06, 2021 8:58:48 PM

This project is desperately needed to protect the homes, business, and industry located on the upper side of the project. It will protect multiple parishes and the communities within then situated around the basin. Just the benefits resulting from the protection to industry and those who live in the area that operated the industries should have a positive cost benefit ratio.

Whatever can be done to make this project become a reality needs to be undertaken.

Thanks,

Paul Hogan
P.O. Box 250
Des Allemands, LA 70030
504-615-4862

From: Alisha Renfro
To: DLL-MVN-Upper_Barataria_FS
Subject: [Non-DoD Source] Mississippi River Delta Coalition Comments
Date: Monday, January 25, 2021 5:28:57 PM
Attachments: Upper Barataria FEIS Comment MRD.pdf

Attached are the comments from the Mississippi River Delta Coalition on the Upper Barataria Basin Project.

Alisha Renfro, Ph.D.

Senior Manager for Science Policy

Gulf Program

National Wildlife Federation

3801 Canal St. Suite 400

New Orleans, LA 70119

Office: 504-943-1565

Cell: 504-512-1014

RenfroA@nwf.org <mailto:RenfroA@nwf.org>

January 25, 2021

U.S. Army Corps of Engineers
Attn: Danielle Keller
Room 335
CEMVN–PMR–C
7400 Leake Avenue
New Orleans, LA 70118

RE: Upper Barataria Basin, Louisiana: Draft Feasibility Report with Integrated Environmental Impact Statement Second Draft

Dear U.S. Army Corps of Engineers,

We appreciate this opportunity to provide comments on the 2nd Draft Feasibility Report with Integrated Environmental Impact Statement (DFRIEIS) of the Upper Barataria Basin (UBB) project. We support providing storm risk reduction for coastal communities. For communities in Louisiana's upper estuarine areas such as the UBB, threats are increasing because of past government policies and are now accelerating because of climate change.

The optimization of the tentatively selected plan (TSP) doubled the height of levees needed for the project and considerably increased the environmental impact of the project, making it necessary to go back out for public review. One thing to note is that while the federal register lists the closing date for comments as January 25, 2021, the report lists the closing date as January 29, 2021. In the interest of clarity and transparency, all comments submitted by the 29th must be considered.

As matters of law and policy:

1. The Corps must comply with the National Water Resources Planning Policy which requires that all water resources projects protect and restore the environment, including by protecting and restoring the functions of natural systems. (42 USC 1962–3). The TSP does not meet these requirements. The DFRIEIS purpose and need statement also does not adequately account for these requirements, despite the offhand reference to a claim that the project will decrease saltwater intrusion from increased storm surge.

2. The Corps should analyze this project under the Principles, Requirements, and Guidelines (PR&G). Proper reliance on the PR&G will ensure that the Corps fully accounts for all project costs and benefits, including the costs and benefits to the environment and public welfare.[1] At a minimum, the Corps should be fully

[1] Congress directed the Corps to finalize its PR&G implementing regulations in Section 110 of the Water Resources Development Act of 2020. P.L. 116-260, Division AA, Section 110 (December 27, 2020).

evaluating the Environmental Quality (EQ) account as part of its analysis of project costs and benefits, and as a driver for project selection.

3. The Corps should put an immediate pause on the NEPA/feasibility study processes pursuant to the January 20, 2021 Executive Order on Protecting Health and the Environment and Restoring Science to Tackle the Climate Crisis. See https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/. This Executive Order directs all federal agencies to immediately review and address the promulgation of federal regulations and other federal actions during the past four years to ensure that those actions confront the climate crisis including by, among other things, "listening to science to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides; to bolster resilience to the impacts of climate change; and to prioritize both environmental justice.

Specific Comments

Restore the Mississippi River Delta Campaign (MRD) is a coalition of the National Audubon Society, the Coalition to Restore Coastal Louisiana, Environmental Defense Fund, National Wildlife Federation, and the Pontchartrain Conservancy. Together we advocate for science-based restoration in coastal Louisiana. We represent thousands of Louisiana members and supporters. MRD is dedicated to large-scale, ecosystem restoration in the Mississippi River Delta. As organizations with long-standing interest in risk reduction and restoration projects along Louisiana's coast, we would like to provide the following comments on the Draft Feasibility Report with Integrate Environmental Impact Statement (DFRIEIS) of the Upper Barataria Basin project.

We are disappointed that this DFRIEIS fails to adequately address obvious questions about the viability of this project in the face of climate change and near certain future relative sea level rise (RSLR). Instead of taking a realistic and wholistic view of the problem and examining innovative ways to cope in a climate constrained future, the proposal is to revert to form once again and fall back on the same failed gray infrastructure solutions. **This proposal promises to create a public expectation of action and relief that will very likely not be delivered in a timely manner.**

The grey infrastructure proposed is very expensive and will take decades to finalize engineering and design, secure funding and construct. *During that time, communities and ecosystems are continuously exposed to flood threats.* Using natural infrastructure and non-structural projects can reduce the risk more quickly with lower costs to taxpayers, protect against multiple flood threats and provide multiple ecosystem service benefits.

The DFRIEIS cumulative effects analysis does not address the "big picture" effects or what the Corps' own RSLR projections envision, much less the range of possible RSLR projections adopted by the local sponsors' 2017 Coastal Master Plan. There is no discussion of the future frequency of flood gate and culvert closures at Bayou des Allemandes and elsewhere along the alignment, what ecological harm an increasing frequency of closures might

cause, or what effects those closures will have on rainfall inundation of communities. It is indisputably true that as sea levels rises interior communities will be forced to adapt by building interior ring levees and drainage capacity, or by adopting non-structural flood risk reduction measures, begging the question of why that is not being proposed as an alternative in the first place.

As the DFREIES acknowledges the swamps to be enclosed behind the levee already suffer from the effects of past engineering, especially the leveeing of the Mississippi River which cut off inflow of sediment, freshwater and nutrients, as well as the hydrological disruption caused by roads and canals. The only possible remedy, incidentally the nature-based solution remedy, to these past effects would be to divert flow from the river into the upper basin. The project as implemented could preclude such future solutions or render them much more expensive.

The TSP levee may alter surge dynamics and increase surge heights on existing levees such as the HSDRRS on the West Bank as well as local (non-federal) levees, potentially threatening their 100-year standard of performance. It is not clear where this has been analyzed and whether there is an additional requirement for future lifts of existing levees.

Further, so-called optimization of the TSP increases the mitigation needs for this project considerably. We understand that a final mitigation plan is currently being developed. We suggest that if the TSP is finally selected, (or some other cross-basin levee rather than a combination of ring levees and non-structural measures), that the Corps consider the Ama Sediment Diversion as mitigation for this project, and that the project be designed with a diversion component built in.

The Ama Diversion was selected in Louisiana's 2017 Coastal Master Plan (CMP) to build and sustain land in the upper Barataria Basin. This project could not only work in conjunction with the Upper Barataria Project to reduce saltwater intrusion into the bottomland hardwood forest, cypress-tupelo swamps and freshwater marshes of the upper Barataria Basin, but we believe is a viable option for mitigating Upper Barataria impacts. The Ama Sediment Diversion is one of the CMP projects identified in the Water Resources Development Act of 2020 to be included in a comprehensive management study of the Lower Mississippi River Basin.

The Ama Sediment Diversion also has the potential to offer other benefits that would maximize the National Economic Development goal that is an integral part of the Upper Barataria Project. Wherever possible, it is critical that the Corps take advantage of opportunities to achieve efficiencies between restoration, river management and levee projects. In the past five years the Bonnet Carré Spillway has been operated five times to divert excess river floodwaters to protect downstream communities such as New Orleans. In contrast to the environmental consequences of operating the spillway, sediment diversion projects along the Mississippi River can be used to restore and sustain wetlands in Louisiana and also serve as outlets for river floodwaters. By putting water and sediment into wetlands where it can provide the most benefit and also decrease the need or magnitude of flow diverted through the Bonnet Carré Spillway, these diversion projects provide an opportunity to move towards holistic river management.

To test whether these river diversions could distribute floodwaters into degraded wetlands to provide ecological benefits and reduce the ecological impacts associated with the Spillway operation during the 2019 flood, scientists from our coalition and Tulane University designed a series of runs using the Army Corps' HEC-RAS model. Initial simulations using the Ama diversion demonstrated substantial reduction in the discharge needed to flow through the Bonnet Carré spillway. The results suggest that the 2019 Bonnet Carré spillway discharge volume could be reduced by over 40% with the operation of the Ama Diversion alone. The results point to the considerable benefits of implementing the Ama Sediment Diversion not only as a mitigation feature for the Upper Barataria Project, but to also help alleviate the pressure on the Bonnet Carré Spillway.

It is essential that the design of the Upper Barataria Basin project consider future river diversions in its design to not impede implementation of projects to address the long term needs of the coast. Since Louisiana is the local cost-share sponsor, any state investment in this project would need to be consistent with Louisiana's Coastal Master Plan, thus ensuring that the Ama Diversion, and any future Des Allemandes basin diversions, could be operated as needed so that the flow would not be restricted by the structures of the basin project. Modifications of the project design is needed to ensure these projects can work together to protect the people and the environment of the Upper Barataria Basin.

Sincerely,

Brian Moore
Vice President, Gulf of Mexico Policy
National Audubon Society

Kim Reyher,
Executive Director
Coalition to Restore Coastal Louisiana

Natalie Snider,
Senior Director, Coastal Resilience
Environmental Defense Fund

John Lopez, Ph.D.,
Coast and Community Program Director
Pontchartrain Conservancy

David Muth
Director, Gulf Program
National Wildlife Federation

Steve Cochran
Campaign Director
Restore the MRD

From:	Nicholas Matherne
To:	Keller, Danielle A CIV (USA); DLL-MVN-Upper_Barataria_FS
Cc:	Donald Henry; Sam Scholle; mlj@stcharlesgov.net; Michael Palamone; Samantha de Castro; Mike Chopin; James P. Jasmin; Henry Picard; kgalloway@gisy.com; rodney@greenupind.com; oneilm@gisy.com; Ray Bender - Greenup Industries LLC (rbender@greenupind.com)
Subject:	[Non-DoD Source] Public Comments on UBB FS EIS Reach E
Date:	Thursday, January 14, 2021 12:08:18 PM
Attachments:	UBRR_Segment 5-B 11-9-20 Public Meeting Comments.pdf

In response to concerns over the alignment of the T-Wall and Rollergate across LA Hwy 306 as part of Segment 2 of the UBRR project (Hydrologic Reach E of the UBB FS EIS), a Public Meeting was held with the residents of the area at the Paradis Fire Station on November 9, 2020. Following this public meeting, multiple emails were sent by residents of the area who were in attendance at the public meeting to Mr. Sam Scholle of St. Charles Parish Government and forwarded to the Design Team for review and submittal to the USACE team working on the UBB FS EIS. Below is a consolidated overview of the comments for USACE review, consideration, and response. The content of the original emails, along with sketches by the residents are attached to this email.

Alternative T-Wall Alignment Option #1 – Construct levee and/or concrete T-Wall geographically north along Badeaux Ln, crossing Hwy 306, routing south on the east side of Sunset Pumping Station.

Benefits:

* Noise Reduction from Pumping Station Engines
* Eliminates all potential damage to water, power, cable, phone, and sewer lines, as well as homes on Badeaux Ln and in Kerry's Pointe

Alternative T-Wall Alignment Option #2 – Construct a levee system around Simoneaux Pond with two swing gates.

Benefits:

* Protects all residents of St. Charles Parish, as well as the future growth of these areas impacted.

Other Comments

Comment: To drive 90 foot piles for the proposed option along Kerry's Pointe East there would be at least a 100-120 foot of boom on the crane. If a crane failure or mishap with a pile were to occur, our homes and personal safety will be compromised as we would be in the drop zone! There's no way around that. Hence, will we be restricted from getting into our own homes during Construction?

Comment: How will this equipment be brought into work area? Kerry's Pointe is a private subdivision and would

require a right of way on our property to access such work sites? As we do not support the option of building T Wall so close to our homes we would not grant such access without a challenge.

Comment: If a temporary construction fence is constructed during construction where will it be placed in reference to our homes? Someone needs to review this and provide an answer.

Comment: On Alternate #1 (addressed above), could you advise the purpose of the new additional access road at the east end of Kerry's Pointe connecting to the existing Badeaux Lane? With the installation of the roller gate at the existing Kerry's Pointe entrance, we are unclear as to what the purpose of this 2nd entrance might be.

Please let me know if you have any further questions regarding these public comments.

Thanks,

Nicholas Matherne, CFM

Project Manager | Highway-Structural

BURK-KLEINPETER, INC.

4176 Canal Street, New Orleans LA 70119

O. 504.486.5901 F. 504.488.1714 C. 985.856.4170

bkiusa.com

On Nov 12, 2020, at 2:05 PM, Jason Porter <jasonpporter1@gmail.com> wrote:

Mr. Sam,

We reside at119 Kerry's Pointe East, which is the red-roofed house at the east end of Kerry's Pointe adjacent to the existing levee and abutting Badeaux Lane.

I firstly wanted to thank you and the various folks that presented to and entertained ideas from the stakeholders at Monday's meeting. We all realize that there are tough decisions to be made and there are plenty of opposing views, but the group's efforts in listening to the residents and perspectives is very much appreciated.

As part of your team's review, please consider the following:

1. We strongly favor the alternate options presented by Kevin Chiasson at the meeting and in the below email. We feel that either of these options would be far less impactful to all existing residents, and would properly provide flood protection for ALL St. Charles residents, not just most. Hopefully this approach may be found to be cost-neutral with the elimination of mutliple roller gates and replacement with one additional barge gate or similar. This option #2 below as drawn also should result in a shorter span crossing Bayou Des Allemands/Mud Lake, which also should have cost benefits.

2. If neither of these prove viable, and if the original proposals are the only considerations, Alternate #1 is greatly preferred by the Porters, by the entire Kerry's Pointe community, and by the majority of Badeaux Lane residents. This original Alternate #1 proposal has the least direct impact to all of these residences (10 houses directly alongside and directly adversely impacted by the Alternate #2 proposal). The only residents to our knowledge that would oppose Alternate #1 would be the two houses that end up in the middle of the existing levee and the new levee, but certainly these are directly negatively impacted by either option. We strongly favor the installation of Alternate #1 over #2.

3. On Alternate #1, could you advise the purpose of the new additional access road at the east end of Kerry's Pointe connecting to the existing Badeaux Lane? With the installation of the roller gate at the existing Kerry's Pointe entrance, we are unclear as to what the purpose of this 2nd entrance might be.

Many thanks for your time and consideration. We look forward to hearing back from you on these points.

Respectfully,
Jason & Tammy Porter
504-908-5678

From: Chiasson, Kevin <Kevin.Chiasson@adm.com>
Sent: Wednesday, November 11, 2020 12:52 PM
To: sscholle@stcharlesgov.net
Cc: Chiasson, Kevin <Kevin.Chiasson@adm.com>; jeannemjacob@gmail.com; ronniejacobjr@gmail.com
Subject: Bayou Gauche Protection Levee options

St. Charles Parish levee protection construction Options Via
Kevin Chiasson
114 Kerry's Pointe East
Bayou Gauche Resident

In the Attachments above I'm presenting Two important options to protect the resident of Bayou Gauche.

Option #1

- Construct levee and / or concrete T-Well geographically north along Badeaux lane, crossing Hwy
  306, routing south on the east side of Sunset Pumping Station.

Benefits with Option #1:

- Noise reduction from pumping station engines.
- Eliminates all potential damage to water, power, cable, phone and sewer lines and as well as most
  Certain damage to the homes on Badeaux Lane and within Kerry's Pointe Community.

Option #2

- Construction of levee system around (Simoneaux Pond) with two swing gates or Barge blocks.

Benefits with Option #2:

- Protects all the residents of St. Charles Parish as well as the future Growth of these areas impacted.

We appreciate and pole the Parish considers our Options.

Thanks.

From: Ronald Jacob <ronniejacobjr@gmail.com>
Sent: Friday, November 13, 2020 6:17 PM
To: Sam Scholle <sscholle@stcharlesgov.net>
Cc: Kevin Chiasson <kevin.chiasson@adm.com>; Jason Porter <jasonpporter1@gmail.com>
Subject: Section 2 St Charles Parish Levee Work

Dear Mr Scholle,

We are Ronnie & Jeanne Jacob and we live at 108 Kerry's Pointe East in Bayou Gauche.

We attended the November 9th meeting with St. Charles Parish officials regarding the Segment 2 Levee improvement plan.

We very much appreciate you and the St. Charles Parish team reaching out to the affected residents and seeking our input and hearing our concerns. We do have questions we'd like answered when known. We wholeheartedly support constructing a levee system in the marsh, as Mr. Chiasson has depicted as Option 2 which is attached. This Option will protect ALL Bayou Gauche residents and leaves no one unprotected from storm surge. There's only one shot at this, so let's do the right thing and protect all residents. There are hundreds of miles of levees presently in the marsh including this project. If for some reason this can't be done, we'd want to see the levee follow the north side of Hwy. 306 towards Sunset Drainage Canal, following canal south beyond the pump station and connecting to existing levee at this point (Mr. Chiasson Option 1 attached.) This option offers much less impacts to all affected residents.

My Reasoning for rejecting your proposed T-Wall Construction some 100 feet from my front door is safety:

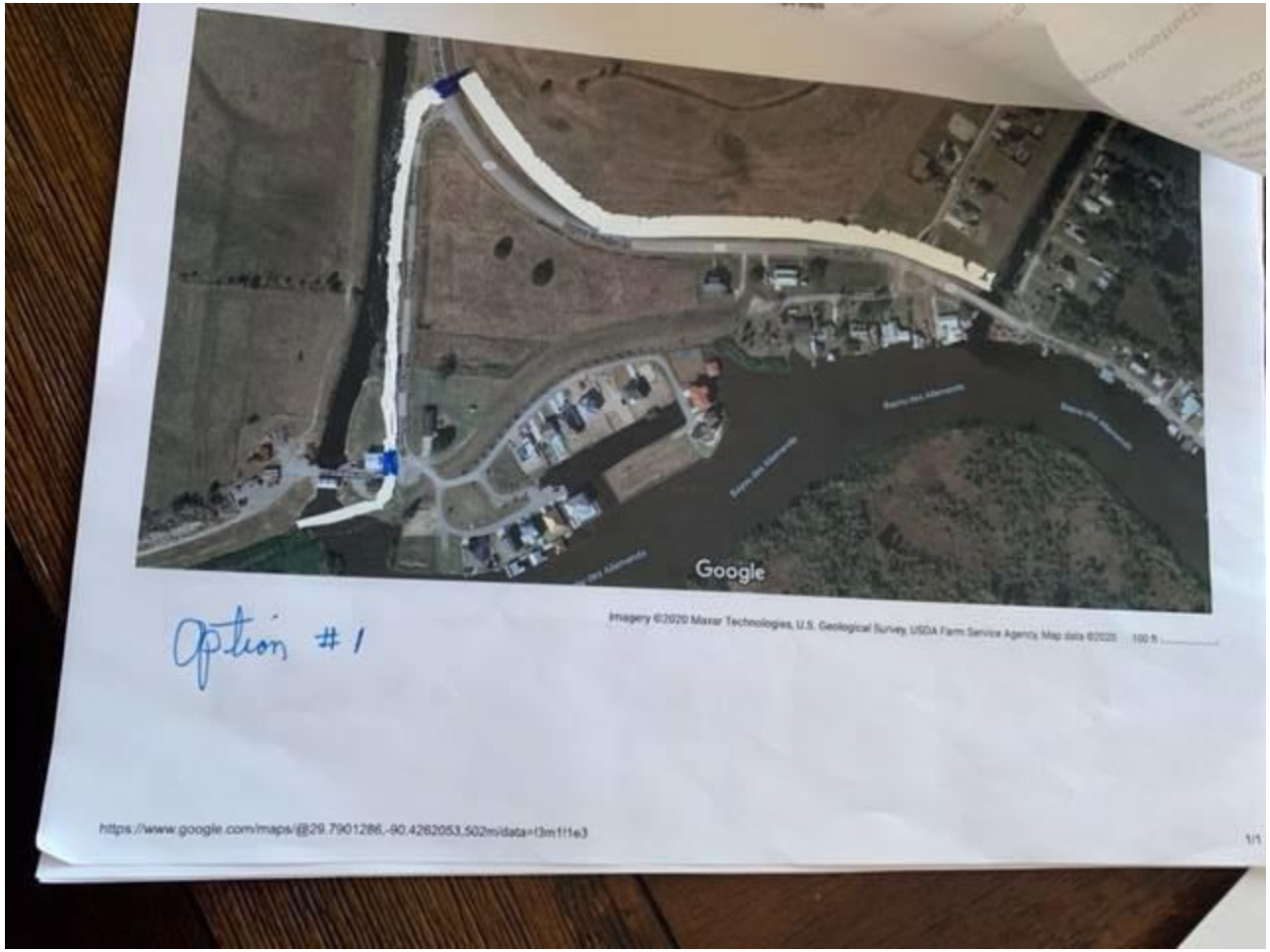
1. To drive 90 foot piles for the proposed option along Kerry's Pointe East there would be at least a 100-120 foot of boom on the crane. If a crane failure or mishap with a pile were to occur, our homes and personal safety will be compromised as we would be in the drop zone! There's no way around that. Hence, will we be restricted from getting into our own homes during Construction?

2. How will this equipment be brought into work area? Kerry's Pointe is a private subdivision and would require a right of way on our property to access such work sites? As we do not support the option of building T Wall so close to our homes we would not grant such access without a challenge.

3. If a temporary construction fence is constructed during construction where will it be placed in reference to our homes? Someone needs to review this and provide an answer.

We encourage you to take serious consideration to Mr. Chiasson's options to construct within the marsh and protect all residents or along Hwy. 306 and maintain a safe distance from Kerry's Pointe homes.

Thanks for your consideration and attention to this request.


Google
Option #1
Imagery ©2020 Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2020
https://www.google.com/maps/@29.7901286,-90.4262053,502m/data=!3m1!1e3
1/1

Thanks

Ronnie & Jeanne Jacob
108 Kerrys Pointe East
Des Allemands LA 70030

From: Susan Melancon [mailto:slm66@bellsouth.net]
Sent: Friday, November 13, 2020 10:24 AM
To: Sam Scholle <sscholle@stcharlesgov.net>
Subject: Proposed Levee in Bayou Gauche

Mr. Scholle,

I live at 121 Kerry's Pointe East. I am writing to inform you of my support of the options that Kevin Chiasson presented at the meeting on Monday. Option #1 is strongly preferred over option #2. Thank you for your consideration in this matter.

Sincerely,

Susan Melancon

From:	Nicholas Matherne
To:	Keller, Danielle A CIV (USA); DLL-MVN-Upper_Barataria_FS
Cc:	Donald Henry; Dwayne Bourgeois; mlj@stcharlesgov.net; Rechelle Champagne; Sam Scholle; Mike Chopin; Henry Picard; oneilm@gisy.com; kgalloway@gisy.com; jloeske@gisy.com; rodney@greenupind.com; Ray Bender - Greenup Industries LLC (rbender@greenupind.com); James P. Jasmin; Ignacio Harrouch; Jas Singh
Subject:	[Non-DoD Source] UBB 2nd Draft FS EIS Design Team Comments & Questions
Date:	Wednesday, January 13, 2021 4:35:09 PM
Attachments:	UBB Study 2nd Draft Comments_LBLD-NLLD.pdf

Danielle,

On behalf of the Lafourche Basin Levee District, North Lafourche Levee District, St. Charles Parish, and the Upper Barataria Risk Reduction Design Team, I wanted to thank you for your staff's time last Wednesday walking us through the updates to the UBB FS EIS Second Draft and for the opportunity to provide our collective comments and questions on the report. Attached is a memorandum from Donald Ray Henry of LBLD (collaboratively composed by the levee districts, parish, and design team) outlining our questions and concerns with various aspects of the report, its findings, and its methodologies. As mentioned during last Wednesday's WebEx meeting, we would appreciate your team taking the time to address each of our questions and comments, and we would like to offer to make ourselves available to discuss any further questions your team may have, whether in-person or virtually.

Please let me know how our Design Team can further assist your FS team to address the attached comments.

Thanks,

Nicholas Matherne, CFM

Project Manager | Highway-Structural

BURK-KLEINPETER, INC.

4176 Canal Street, New Orleans LA 70119

O. 504.486.5901 F. 504.488.1714 C. 985.856.4170

bkiusa.com

From:	Keller, Danielle A CIV (USA)
To:	Nicholas Matherne
Cc:	Bradley, Sarah C CIV USARMY CEMVN (USA); kgalloway@gisy.com; Ray Bender - Greenup Industries LLC (rbender@greenupind.com); Creel, Travis J CIV USARMY CEMVN (USA)
Subject:	RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)
Date:	Thursday, February 04, 2021 5:58:00 AM
Attachments:	UBB Study 2nd Draft Comments_LBLD-NLLD_PDT evaluation final_20210204.docx

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CLASSIFICATION: UNCLASSIFIED

Good morning Nick,
Our PDT has evaluated the comments made on the UBB Draft Report. Please see our evaluations (in red) on the attachment. Please reach out with any questions.
Thank you for your patience!
-Danielle

Danielle A Keller, PhD
Project Management, U.S. Army Corps of Engineers
7400 Leake Avenue, New Orleans, LA 70118
Danielle.a.keller@usace.army.mil
Work: (504) 862-1744

-----Original Message-----
From: Nicholas Matherne [mailto:nmatherne@bkiusa.com]
Sent: Wednesday, January 27, 2021 3:09 PM
To: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Cc: Bradley, Sarah C CIV USARMY CEMVN (USA) <Sarah.C.Bradley@usace.army.mil>; kgalloway@gisy.com; Ray Bender - Greenup Industries LLC (rbender@greenupind.com) <rbender@greenupind.com>
Subject: [Non-DoD Source] RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

Danielle,

Any update on a follow-up virtual meeting?

Nicholas Matherne, CFM
Project Manager | Highway-Structural
BURK-KLEINPETER, INC.
4176 Canal Street, New Orleans LA 70119
O. 504.486.5901 F. 504.488.1714 C. 985.856.4170 bkiusa.com

-----Original Message-----
From: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Sent: Thursday, January 21, 2021 1:40 PM
To: Nicholas Matherne <nmatherne@bkiusa.com>
Cc: Bradley, Sarah C CIV USARMY CEMVN (USA) <Sarah.C.Bradley@usace.army.mil>; Logan, John B CIV USARMY CEMVN (USA) <John.B.Logan@usace.army.mil>
Subject: RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Sounds good!

Ben Logan is our economist and he might be able to help you out (CCed here).

Danielle A Keller, PhD

Project Management, U.S. Army Corps of Engineers
7400 Leake Avenue, New Orleans, LA 70118 Danielle.a.keller@usace.army.mil
Work: (504) 862-1744

-----Original Message-----
From: Nicholas Matherne [mailto:nmatherne@bkiusa.com]
Sent: Thursday, January 21, 2021 1:25 PM
To: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Cc: Bradley, Sarah C CIV USARMY CEMVN (USA) <Sarah.C.Bradley@usace.army.mil>
Subject: [Non-DoD Source] RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

I have a meeting first thing Thursday, but I'll be available after about 9:30.

In the meantime, who would be the person to talk with about the structure inventory you guys used for your BCA? We're working on the Louisiana Watershed Initiative application, and an updated inventory would definitely be very helpful!

Nicholas Matherne, CFM
Project Manager | Highway-Structural
BURK-KLEINPETER, INC.
4176 Canal Street, New Orleans LA 70119
O. 504.486.5901 F. 504.488.1714 C. 985.856.4170 bkiusa.com

-----Original Message-----
From: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Sent: Thursday, January 21, 2021 12:23 PM
To: Nicholas Matherne <nmatherne@bkiusa.com>
Cc: Bradley, Sarah C CIV USARMY CEMVN (USA) <Sarah.C.Bradley@usace.army.mil>
Subject: RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

I'll check with our folks since we really need them there. We may be able to do it next Thursday during our PDT meeting since most have that pre-scheduled. Stay tuned.

Danielle A Keller, PhD
Project Management, U.S. Army Corps of Engineers
7400 Leake Avenue, New Orleans, LA 70118 Danielle.a.keller@usace.army.mil
Work: (504) 862-1744

-----Original Message-----
From: Nicholas Matherne [mailto:nmatherne@bkiusa.com]
Sent: Thursday, January 21, 2021 12:16 PM
To: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Cc: Bradley, Sarah C CIV USARMY CEMVN (USA) <Sarah.C.Bradley@usace.army.mil>
Subject: [Non-DoD Source] RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

With the number of people we'd need to check with on our end, I think we should just pick a time and let them either make it work or assign people to join in and take notes. Sometime Wednesday morning, maybe?

Nicholas Matherne, CFM
Project Manager | Highway-Structural
BURK-KLEINPETER, INC.
4176 Canal Street, New Orleans LA 70119
O. 504.486.5901 F. 504.488.1714 C. 985.856.4170 bkiusa.com

-----Original Message-----
From: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Sent: Thursday, January 21, 2021 11:17 AM
To: Nicholas Matherne <nmatherne@bkiusa.com>
Cc: Bradley, Sarah C CIV USARMY CEMVN (USA) <Sarah.C.Bradley@usace.army.mil>
Subject: RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Hey Nick,
Thanks for checking in! We are still working through the comments and we will plan to send out written responses and then schedule a meeting. We are in the final week of ATR and public review so our PDT is working on that right now. Our meeting will have to be sometime next week. Is there a day or time that works better for you and others?
Thanks,
Danielle

Danielle A Keller, PhD
Project Management, U.S. Army Corps of Engineers
7400 Leake Avenue, New Orleans, LA 70118 Danielle.a.keller@usace.army.mil
Work: (504) 862-1744

-----Original Message-----
From: Nicholas Matherne [mailto:nmatherne@bkiusa.com]
Sent: Thursday, January 21, 2021 8:24 AM
To: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Subject: [Non-DoD Source] Re: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

Morning Danielle, any concensus from the PDT on a follow-up meeting/webex to walk through the levee districts' and parish's questions?

Nicholas Matherne, CFM

Project Manager

BKI | Burk-Kleinpeter, Inc.

4176 Canal St.

New Orleans, LA 70119

O: (504) 486-5901

C: (985) 856-4170

Blockedwww.bkiusa.com <Blockedhttp://Blockedwww.bkiusa.com>

From: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Sent: Tuesday, January 19, 2021 5:36:42 AM
To: Nicholas Matherne <nmatherne@bkiusa.com>; DLL-MVN-Upper_Barataria_FS <UpperBaratariaFS@usace.army.mil>
Cc: Donald Henry <drhenry@lbld.us.com>; Dwayne Bourgeois <dwayneb@nlcldd.com>; mlj@stcharlesgov.net <mlj@stcharlesgov.net>; Rechelle Champagne <rchampagne@stcharlesgov.net>; Sam Scholle <sscholle@stcharlesgov.net>; Mike Chopin <mchopin@bkiusa.com>; Henry Picard <hpicard@bkiusa.com>; oneilm@gisy.com <oneilm@gisy.com>; kgalloway@gisy.com <kgalloway@gisy.com>; jloeske@gisy.com <jloeske@gisy.com>; rodney@greenupind.com <rodney@greenupind.com>; Ray Bender - Greenup Industries LLC (rbender@greenupind.com) <rbender@greenupind.com>; James P. Jasmin <jjasmin@lbld.us.com>; Ignacio Harrouch <Ignacio.Harrouch@la.gov>; Jas Singh <Jas.Singh@LA.GOV>; Bradley, Sarah C CIV USARMY CEMVN (USA) <Sarah.C.Bradley@usace.army.mil>
Subject: RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Good morning Nick,
We have a meeting at 8am this morning with the PDT. We will discuss when everyone will be available, but hoping for Thursday or Friday this week.

I will be in touch later today.

Thank you,
Danielle

Danielle A Keller, PhD
Project Management, U.S. Army Corps of Engineers
7400 Leake Avenue, New Orleans, LA 70118 Danielle.a.keller@usace.army.mil
Work: (504) 862-1744

-----Original Message-----
From: Nicholas Matherne [mailto:nmatherne@bkiusa.com]
Sent: Monday, January 18, 2021 3:02 PM
To: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>; DLL-MVN-Upper_Barataria_FS <UpperBaratariaFS@usace.army.mil>
Cc: Donald Henry <drhenry@lbld.us.com>; Dwayne Bourgeois <dwayneb@nlcldd.com>; mlj@stcharlesgov.net; Rechelle Champagne <rchampagne@stcharlesgov.net>; Sam Scholle <sscholle@stcharlesgov.net>; Mike Chopin <mchopin@bkiusa.com>; Henry Picard <hpicard@bkiusa.com>; oneilm@gisy.com; kgalloway@gisy.com; jloeske@gisy.com; rodney@greenupind.com; Ray Bender - Greenup Industries LLC (rbender@greenupind.com) <rbender@greenupind.com>; James P. Jasmin <jjasmin@lbld.us.com>; Ignacio Harrouch <Ignacio.Harrouch@la.gov>; Jas Singh <Jas.Singh@LA.GOV>; Bradley, Sarah C CIV USARMY CEMVN (USA) <Sarah.C.Bradley@usace.army.mil>
Subject: [Non-DoD Source] RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

Danielle,

Just touching base with you and the rest of the PDT on the status of the review of our questions and comments and to see when we may be able to schedule a follow-up meeting to discuss our concerns.

Thanks,

Nicholas Matherne, CFM
Project Manager | Highway-Structural
BURK-KLEINPETER, INC.
4176 Canal Street, New Orleans LA 70119
O. 504.486.5901 F. 504.488.1714 C. 985.856.4170 bkiusa.com

-----Original Message-----
From: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>
Sent: Thursday, January 14, 2021 8:03 AM
To: Nicholas Matherne <nmatherne@bkiusa.com>; DLL-MVN-Upper_Barataria_FS <UpperBaratariaFS@usace.army.mil>
Cc: Donald Henry <drhenry@lbld.us.com>; Dwayne Bourgeois <dwayneb@nlcldd.com>; mlj@stcharlesgov.net; Rechelle Champagne <rchampagne@stcharlesgov.net>; Sam Scholle <sscholle@stcharlesgov.net>; Mike Chopin <mchopin@bkiusa.com>; Henry Picard <hpicard@bkiusa.com>; oneilm@gisy.com; kgalloway@gisy.com; jloeske@gisy.com; rodney@greenupind.com; Ray Bender - Greenup Industries LLC (rbender@greenupind.com) <rbender@greenupind.com>; James P. Jasmin <jjasmin@lbld.us.com>; Ignacio Harrouch <Ignacio.Harrouch@la.gov>; Jas Singh <Jas.Singh@LA.GOV>; Bradley, Sarah C CIV USARMY CEMVN (USA) <Sarah.C.Bradley@usace.army.mil>
Subject: RE: UBB 2nd Draft FS EIS Design Team Comments & Questions (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Good morning Nick,
Thank you for your email and the document with comments and questions. I will send them out to the PDT and we will be working on addressing your concerns over the next several days/ next week. I will be back in touch with questions or a request for a meeting.
Thank you!
Danielle

Danielle A Keller, PhD
Project Management, U.S. Army Corps of Engineers
7400 Leake Avenue, New Orleans, LA 70118 Danielle.a.keller@usace.army.mil
Work: (504) 862-1744

-----Original Message-----
From: Nicholas Matherne [mailto:nmatherne@bkiusa.com]
Sent: Wednesday, January 13, 2021 4:34 PM
To: Keller, Danielle A CIV (USA) <Danielle.A.Keller@usace.army.mil>; DLL-MVN-Upper_Barataria_FS <UpperBaratariaFS@usace.army.mil>
Cc: Donald Henry <drhenry@lbld.us.com>; Dwayne Bourgeois <dwayneb@nlcldd.com>; mlj@stcharlesgov.net; Rechelle Champagne <rchampagne@stcharlesgov.net>; Sam Scholle <sscholle@stcharlesgov.net>; Mike Chopin <mchopin@bkiusa.com>; Henry Picard <hpicard@bkiusa.com>; oneilm@gisy.com; kgalloway@gisy.com; jloeske@gisy.com; rodney@greenupind.com; Ray Bender - Greenup Industries LLC (rbender@greenupind.com) <rbender@greenupind.com>; James P. Jasmin <jjasmin@lbld.us.com>; Ignacio Harrouch <Ignacio.Harrouch@la.gov>; Jas Singh <Jas.Singh@LA.GOV>
Subject: [Non-DoD Source] UBB 2nd Draft FS EIS Design Team Comments & Questions

Danielle,

On behalf of the Lafourche Basin Levee District, North Lafourche Levee District, St. Charles Parish, and the Upper Barataria Risk Reduction Design Team, I wanted to thank you for your staff's time last Wednesday walking us through the updates to the UBB FS EIS Second Draft and for the opportunity to provide our collective comments and questions on the report. Attached is a memorandum from Donald Ray Henry of LBLD (collaboratively composed by the levee districts, parish, and design team) outlining our questions and concerns with various aspects of the report, its findings, and its methodologies. As mentioned during last Wednesday's WebEx meeting, we would appreciate your team taking the time to address each of our questions and comments, and we would like to offer to make ourselves available to discuss any further questions your team may have, whether in-person or virtually.

Please let me know how our Design Team can further assist your FS team to address the attached comments.

Thanks,

Nicholas Matherne, CFM

Project Manager | Highway-Structural

BURK-KLEINPETER, INC.

4176 Canal Street, New Orleans LA 70119

O. 504.486.5901 F. 504.488.1714 C. 985.856.4170

bkiusa.com

LAFOURCHE BASIN LEVEE DISTRICT

21380 HIGHWAY 20
POST OFFICE BOX 670
VACHERIE, LOUISIANA 70090
Phone: 225-265-7545
Fax: 225-265-7648

LAFOURCHE BASIN LEVEE DISTRICT STATE OF LOUISIANA VACHERIE, LA

MEMORANDUM

DATE: January 13, 2021

TO: **Danielle Keller, PhD**
Sarah Bradley
Travis Creel
US Army Corps of Engineers (USAGE)

FROM: **Donald Ray Henry, Executive Director**
Lafourche Basin Levee District (LBLD)

SUBJECT: Technical Questions Regarding USACE's Second Draft Feasibility Report with Integrated Environmental Impact Statement for the Upper Barataria Basin

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On January 6, 2021, the USAGE held a stakeholder meeting for the referenced project. USAGE staff advised engineering consultants on the call to submit questions that are more technical in nature for discussion at a later meeting with technical staff. The Lafourche Basin Levee District's Design Team for this project has prepared the following questions and comments on behalf of LBLD and the North Lafourche Levee District {NLLD).

1. Levee and Structure Elevations

The design elevations for the second draft of this report are considerably higher than those included in the first draft. LBLD and NLLD would like to fully understand the development of these elevations and respectfully request more details on the modeling efforts used to determine the elevations.

The design elevations the USAGE developed for this report are considerably higher than those developed by the Coastal Protection and Restoration Authority (CPRA) during its planning efforts for the 2017 Master Plan. LBLD and NLLD respectfully request that the USAGE consider CPRA's analyses to determine whether they can be incorporated into the NED plan.

Alternatives 8 (Section 4.3.8 on p. 47) and 10 (Section 4.5.2 on p. 57) included the barge at "14 feet high." This elevation would be consistent with CPRA's analysis (which requires the top of gate at elevation +15 ft NAVD88). Alternative 10 also appears to require the St. Charles levees to be raised to an elevation of +12 ft NAVD88 rather than +14.5. Both of these alternatives appear to refer to the 1%

Annual Exceedance Probability (AEP) elevation, yet they are lower than the gate in the NED plan.

Recommended elevations to meet the 1% AEP elevation differ by as much as 3.5' between some adjacent hydraulic reaches. Assuming that this is not meant to convey that USACE is recommending abrupt changes in elevation requirements between reaches, LBLD and NLLD respectfully request more detail regarding how these elevations transition and taper between reaches that require different elevations to adequately reduce risk against the 1% AEP storm event, without requiring additional elevation when not necessary.

Some components of the alignment also seem to have been included in the project cost, even though those elements are either in design or construction, while others have either been constructed or already have funding allocated for their construction from local entities. We would appreciate the opportunity to review all advances in design and/or construction that have been undertaken since the commencement of efforts associated with this report.

2. Hydraulic Structures

LBLD and NLLD recommend reducing the number of hydraulic structures to reduce the cost of the project.

Eliminating the box culverts flanking the proposed flood gate is justified based on USACE's hydraulic analysis for the Donaldsonville to the Gulf Project. According to that study, "the structures were sized so that head loss through the structures would be less than 0.5 feet along the entire length of the levee." The study called for a 110-foot-wide navigational gate and eight (8) 20-foot-wide tidal interchange structures. LBLD and its consultants chose to include all of this width in the barge gate structure, which results in a more hydraulically efficient structure and provides the cross-sectional area required per the USACE's previous analysis.

Further justification for eliminating the box culverts may be found in hydraulic modeling performed in support of CPRA's Master Plan. Modeling performed by Arcadis suggests that the peak average velocity in Bayou Des Allemands for the suite of design storms[1] is less than 1 ft/s in the pre-project condition. During preliminary design of the proposed barge gate, GIS Engineering used Arcadis' modeling results to calculate a maximum velocity of 5.5 ft/s through the proposed

[1] Arcadis' suite of design storms considered the joint probability of storm surge and rainfall with recurrence intervals ranging from 10 years to 500 years.

opening. Discussion of velocities in Section 5.2.2.1.2 of USACE's report suggests that this velocity would be acceptable.

Eliminating some of the drainage structures in Reach G is justified based on the existing topography. The structures marked as feature #23 on Figure 4-13 (p. 70) are located in the alignment of an existing spoil bank that has limited hydrologic interchange for decades. These structures are not necessary to preserve the existing hydrologic regime.

3. Buy-outs in Bayou Gauche, Gheens, and Mathews

The report mentions that the Tentatively Selected Plan will potentially require the acquisition of an estimated 270 residential and 5 commercial structures due to the impacts of induced flooding as a worst-case scenario. The total estimated costs of $84.2 million was assumed for cost estimates. These buyouts would occur in the communities of Bayou Gauche, Gheens, and Mathews because of their current lack of adequate structural risk reduction to protect against the 1% AEP storm for the 2076 scenario.

NLLD is currently designing a lift of the existing levee protecting Gheens to +9.0 feet with sheet pile. While additional modeling efforts may show additional elevation necessary in this area to protect against the 1% AEP storm in this area, a higher top of wall elevation along this alignment than currently planned would incur significantly lower costs than buyouts and would be much better received by the residents of the area in question. We request that the modeling efforts used to inform project cost estimates utilize water surface elevations that include reductions provided by NLLD's planned efforts.

The community of Bayou Gauche includes several residential structures located outside the proposed levee alignment. While buyouts of these structures is a possibility, to our knowledge this method of non-structural risk reduction has not been used in coastal Louisiana. More economical and socially acceptable alternatives such as floodproofing and home elevations should be factored for a more realistic cost estimate. At the same time, we would appreciate a realistic discussion on buyouts of residential properties, as some residents are more than willing to consider accepting a complete buyout of their homes in order for them to relocate to more resilient areas that require less or no risk reduction measures.

4. Use of HSDRRS standards

The use of HSDRRS standards increases the project's cost. The Morganza to the Gulf Post-Authorization Change report and subsequent Adaptive Criteria Assessment Report recognized the storage capacity in the protected area of that project, allowing a reduced footprint and cost for the levee. A similar approach is appropriate for this project.

5. References to the Upper Barataria **Risk** Reduction Conceptual Design Report and other studies

In 2018, Burk-Kleinpeter, Inc., APTIM, and GIS Engineering prepared a conceptual report for the referenced project on behalf of LBLD and NLLD. Throughout the USACE's planning efforts for this project, this team of consultants provided information from this report through CPRA for the USACE's use. LBLD, NLLD, and the consultants are pleased that the USAGE relied on information from the report. We ask that the USAGE accurately cite the report for the benefit of future users of USACE's report.

- Section 1.5 (p. 6) and Section 2.5 (p. 9) refer to the "St. Charles Levee District," which does not exist. This comment appears to refer to LBLD and NLLD. St. Charles Parish has also been an active participant in these efforts. Section 1.5 also lists several past reports by the USAGE and others, but omits this one.
- Section 12 should also list this report.
- Appendix A, Section 1.8.2 appears to reference the report directly but is not entirely accurate in its reference. The report was prepared jointly by Burk-Kleinpeter, Inc.; GIS Engineering, LLC; and APTIM Corp. for the LBLD and NLLD (political subdivisions of the State of Louisiana).

There are several other studies that warrant inclusion in Sections 1.5 and 12.

- "Project Development and Implementation Program: Upper Barataria Risk Reduction" by ARCADIS, RAND, and The Water Institute of the Gulf, dated March 17, 2014.
- "Upper Barataria Risk Reduction Modeling: Phase 2 - Rainfall & Storm Surge Combined Effects Modeling" by ARCADIS, RAND, and The Water Institute of the Gulf, dated July 8, 2015. These two studies combined found that the project as envisioned in CPRA's Master Plan has a benefit-cost ratio of 2.3.
- St. Charles Parish sponsored an economic study to more accurately quantify potential project benefits including business disruption and disruption to Hwy 90.

6. References to Paradis, LA

Several references to Paradis, LA, the Paradis Canal, and the Paradis Canal Flood Gate are misspelled as "Paradise." While this is a minor detail, we would appreciate consistency for mapping and informational purposes.

Should you have any additional questions or comments, please do not hesitate to contact our office at (225) 265-7545, and we will be sure to have our Design Team coordinate with your staff to adequately address concerns of all parties.

Executive Director

Lafourche Basin Levee District

Cc: Mr. Dwayne Bourgeois, North Lafourche Levee District
Mr. Matthew Jewell, St. Charles Parish President
Mr. Sam Scholle, St. Charles Parish Government
Mr. Mike Chopin: BKI, Inc.
Mr. Henry Picard: BKI, Inc.
Mr. Nie Matherne: BKI, Inc.
Mr. Oneil Malbrough: GIS Engineering
Mr. Kyle Galloway; GIS Engineering
Mr. Jacob Loeske: GIS Engineering
Mr. Rodney Greenup: Greenup Industries, LLC
Mr. Ray Bender: Greenup Industries, LLC

Upper Barataria Basin, Louisiana, Feasibility Study

Appendix G – Section 3

USACE Reponses to Public Comments on 1st Draft Report

Public Comments on First Draft Report and USACE Responses

Name	Date comment issued	Comment method	Comment	Answer
Sam Scholle	1/2/2020	email	If I read the maps correctly, the alternate 1 option includes the Sunset levee from the Paradis gate structure, along the Sunset levee to the proposed barge gate structure, and then through Lafourche Parish to highway 308. Based on this assumption, Davis Pond to include the lifting of or structure on Highway 90, two railroad gates, and possible lifting of River Road would not be included. Additionally, the Davis Pond pipeline tee-wall and the (3) pipeline tee-wall structures within the 8 plus miles of levee from Davis Pond to the Paradis canal would not be included in the alternate 1 study. 1. Will the Chief's report only qualify alternate 1 sections of levee for future federal funding? If so what about the remainder of the levee system? 2. Relative to over topping and large size of the basin, does the possible 100 year protection for a levee height of elevation +7 ½ only apply to what is behind the barge gate? 3. Is it possible to include the Davis Pond structures, highway 90, and pipeline tee-walls as part of the Chief's Report? 4. Should there be major flood loss on the West bank of St. Charles, will the Alternate 1 Chief's Report benefit the entire levee system to be built to 100 year protection? There are approximately 6,000 homes behind the levee from Davis Pond to the Paradis canal. Please keep in mind the $1.6 Billion in economic impacts for loss of highway 90. I realize these impacts are not being considered, but this weighs heavily when considering how much levee construction is not being included in the study. With Lamp possibly reaching an end and adoption of flood maps, funding so much of the levee outside the of the study is a concern. Relative to answer No. 3, our understanding is the Davis Pond levee is at +7 - +7.3 from our levee tie-in to the Davis Pond pump station. The elevation of the levee from Davis Pond pump station may drop lower in spots to around a +6 - +6.5 as it reaches Hwy. 90. Our understanding it that Hwy. 90 itself is around a +6 - + 6.5 at existing levee tie-ins. The railroad crossing themselves may be below a + 6? What about the tee-walls on the 3 pipeline crossings and the tee-walls for the Cousins and Kellogg pumps station in the parishes 9 miles of levee. Are you assuming the state, levee district, and parish are building these structures at some point in the future and will be in place? This RR is the one next to River Road. The road itself was elevated when the Eastern gate was built. The road elevation drops back down as it approaches the Western guide levee. The survey of the levee we sent you stops several hundred feet short of the railroad. Our GIS group will determine the elevation between the track and the end of the guide levee and we will forward this information to you. This open area between the end of the guide levee and the tracks has several ditches cut across for drainage. Again, our concerns with the Davis Pond guide levee are the two (2) railroads and the +6 pipeline sheet pile wall. From the parish's perspective, we feel it is imperative that all of us involved in the study fully understand what is and what is not included in the Alt. 1 alternative. We understand the importance of having a win, win project. The LBLD engineering team is focused on construction of the barge gate as soon as possible. While this is of major importance, we have to look at the system as a whole and determine all the deficiencies and set priorities for what needs to be addressed and by whom. Who will be focusing on deficiencies not included in Alt. 1? The parish's goal is for FEMA to recognize the 50 year levee system and have a flood insurance rate that will allow residents to keep or purchase homes. As mentioned previously, approximately 5000 of the 8000 homes are located between the Davis Pond Guide levee and the Sunset levee. For rain events, these homes are protected by pump stations and do not drain to Lake Des Allemands.	1. The final recommended plan is a structural alignment constructed to a 1 percent AEP (100-year future design) and totaling a little over 161,300 feet (30.6 miles) in length. The system starts in Luling where it connects the Mississippi River Levee through the Davis Pond Diversion Structure West Guide Levee. Continuing south, the RP improves upon and updates deficiencies in the St. Charles Parish Levee, crosses Bayou Des Allemands with a 270-feet barge gate structure, and continues parallel to US Highway 90 before it ties into high ground across the Barataria Basin near Raceland. 2. The final RP did not consider the lower levees with overtopping. 3. The RP ties into the in Luling where it connects the Mississippi River Levee through the Davis Pond Diversion Structure West Guide Levee. 4. The final RP includes this area. In PED we will continue to work with the local levee district to verify exisitng condition servey data and also coodinate the features from the RP.
Anonymous	1/7/2020	Public meeting 1/7/2020	Why is the flood wall being built? We have not experienced any flooding and did not have high water levels until the installation of the Davis Pond Diversion. This question stems from the concern that the floodwall and levee, once closed, will induce flooding in areas that never experienced flooding before because once the protected side of the basin reaches capacity, the rainwater will have nowhere to go as long as the system is closed.	Floodwalls are used to avoid sensative areas, where levee features would not fit. The RP system incorporates the local levee district existing pump stations which currently already remove rainfall from the local existing levee system.
Anonymous	1/7/2020	Public meeting 1/7/2020	What is the Corps plan to prevent acceleration of erosion on the land and marsh on the floodside of the levee and floodwall? This question revolves around the concern that when the system is closed during a storm event, the water will build up behind the floodwall and levee and accelerate the erosion the area is experiencing. The area is currently owned and/or leased and the individuals are concerned they will lose their land.	During planning for the UBB project, measures to avoid and minimize impacts to significant resources were employed to the extent practicable. Nonetheless, unavoidable impacts to freshwater emergent marsh, swamp, and BLH habitat would occur from construction of the project and would be offset through compensatory mitigation. The RP also includes environmetal control structures to address the existing flows through the system. Hydrologic connectivity would be maintained to the extent practicable through water control structures except when those structures are closed during hurricanes or tropical storms, as the risk reduction system is only authorized to address storm surge caused by hurricane and tropical storm events.
Anonymous	1/7/2020	Public meeting 1/7/2020	What impact is the floodwall going to have on the houses and properties on the protected side? Are houses/property being purchased and when will this occur? This question came from one individual who stated his friend received a payout from the Corps on his house. The friend corrected him and stated that the payout was to his parents for the levee located on the property.	In the study phase, the RP is a general represnetation of where the final alignment may be. Floodwalls were used in some places instead of levees to minimaze impacts to homes and landowners. If the project is authorized the USACE will continue to avoid and then minimizes impacts in the planning and Engineering phase. During this time we would work with indiviual landowners to disucss impacts and compesation of impacts if needed.
Anonymous	1/7/2020	Public meeting 1/7/2020	How much room off the levee does the Corps need? There are concerns regarding the removal of 300+ year old trees as well as houses near the levee.	In the study phase, the RP is a general represnetation of where the final alignment may be. Floodwalls were used in some places instead of levees to minimaze impacts . This process will continue in the planning and engineering phase and would take into additional considerations to protect environmetal resources where approarate

Louis DeJean	1/13/2020	email	I was told to email you with any concerns around the proposed improvements to the levee system behind my house. I actually would like to know what the exact plan is. I have heard several rumors but have not seen an actual plan with specifics that I can reference here. Can you tell me: What type on construction is proposed? What is the current levee elevation? What is proposed new elevation? When will this project begin? Will you require more servitude than already established? etc... I saved my entire life to build my waterfront dream home and my largest concern is losing the use of my property in the manner in which we purchased it for. Any improvement to the current levee system that would restrict my water access, impede my scenic views, or encroach father into my back yard would be detrimental to my property and way of life. Please keep me in mind while weighing the options and allow me to voice my opinion moving forward by making the proposed changes public	Thank you for your comment. The final selected design heights and proposed construction methods can be found in the main report and engineering appendix. The RP is a general represnetation of where the final alignment may be. Floodwalls were used in some places instead of levees to minimaze impacts. If the project is authorized the USACE will continue to avoid and then minimizes impacts in the planning and Engineering phase. During this time we would work with indiviual landowners to disucss impacts and compesation of impacts if needed. The project will be sent to Congress for construction authorization in 2021. The construction start is depended on congressional actions in the future.
Walter Pilie	1/14/2020	email	Being a 33 year resident of St Charles Parish, I have heard the many difficulties that have been faced regarding hurricane protection project execution. I experienced this on the east bank of the Mississippi upon building my current home. The protection levee north of US 61 in the 1990's provided necessary "initial" protection from storm surge from hurricanes. Robust pump stations were installed as well to remove storm water rainfall, without which the best levee in the world would have stopped surge inundation, but we would have flooded from inadequate drainage of trapped water. If I recall, it took over 30 years on the east bank of St Charles parish from the start of the plans until we actually got needed protection. Thank goodness! Since Katrina, the east back levees were raised to afford needed protection, given that the levee there in 2005 was topped in some locations. I have heard for years the woes that residents and businesses face on the west bank. The parish had built levees on its own, and reinforcement by the USACE took place on some portions after much wrangling over whether the levees had sufficient foundation to be accepted by the Corps. I have also watched the machinations over Federal funding of the Flood Insurance program. I recall clearly some workmates that were in limbo for close to 2 years when the flood insurance program was being "restructured", and I heard at least 2 homeowners of new homes that might face $15,000 premium a year to insure against flooding. Fortunately, intervention at the Congressional level sorted this problem out. However, there appears to be uncertainty regarding the funding of the flood program every couple of years in Congress. Given that this nation lives from yearly Continuing Resolutions instead of solid budgets, I am not sure that the carpet may not again be pulled out from under the property owners yet again. So, I read the referenced feasibility report with interest. The fact that severe weather is becoming the norm, it is good to see recognition of the issues affected property needing to be protected face. I quote from the study below: Problem – The study area is prone to coastal storm damages from tidal surges, storm surges, and rainfall. The headwater flooding from rainfall is intensified by tidal events, resulting in flood damages to industrial, commercial, and agricultural facilities as well as residential structures and critical evacuation routes. Additionally, tidal events can create a backwater effect that does not allow rainfall to drain from within the basin. The study area has been declared a Federal disaster area nine times in the past 30 years due to flood damages from storms. I recall that it took some interaction between the USACE and local authorities when the east back levee was being planned to recognize that the hurricane protection levee was just one part of the protection, and without resulting drainage structures and active water removal means (pumps), the problem would not be solved. In essence, we would have been merely trading a headache for an upset stomach. Again, thank goodness that that recognition finally came about on the east bank. So, I feel that the options studied take into account the necessary protection – surge protection and drainage mitigation. I recognize that an enormous amount of work has been put into this study. It is evident that this issue has been given due scientific study. I understand that economic benefit has been considered throughout, and many of the Tentatively Selected Plan (TSP) alternatives were eliminated from consideration on the basis of economics. I accept that. The alternatives left standing are 1, 2, 7, and 10. My comments will be addressed toward those only. Of obvious concern for the property owners of west St Charles parish and portions of Lafourche parish will be whether future Congresses will be able to fund these necessary improvements. Should nothing be done, this area will be plagued with flooding going forward. It is imperative that some plan be adopted.	Thank you for your comment. The final recommended plan is a structural alignment constructed to a 1 percent AEP (100-year future design) and totaling a little over 161,300 feet (30.6 miles) in length. The system starts in Luling where it connects the Mississippi River Levee through the Davis Pond Diversion Structure West Guide Levee. Continuing south, the RP improves upon and updates deficiencies in the St. Charles Parish Levee, crosses Bayou Des Allemands with a 270-feet barge gate structure, and continues parallel to US Highway 90 before it ties into high ground across the Barataria Basin near Raceland. The RP system incorporates the local levee district existing pump stations which currently already remove rainfall from the local existing levee system. The RP also includes environmetal control structures to address the existing flows through the system. Hydrologic connectivity would be maintained to the extent practicable through water control structures except when those structures are closed during hurricanes or tropical storms, as the risk reduction system is only authorized to address storm surge caused by hurricane and tropical storm events. The local stakeholders would still need to operated the existing forced drainage systems for rainfall events.
Alexis Rixner			Please add Table detailing existing pump stations used in HEC-RAS model. Please provide Annex 6. 1V:4H?	Annex 6 was provided to CPRA.
Julian Madere	1/10/2020	email	I've been having flood insurance for 45 years and they're getting ready to increase the rates where we won't be able to afford it anymore. And the only reason the rates are going up so high is because they wasted the money on all the people that didn't have flood insurance. And now I have to pay to make that up. Who has the right to decide who is required to have flood insurance and who doesn't? Who has the right to give all that money to people who don't have flood insurance and how do you expect to pay out more money than you have coming in? How do you expect the program to work? I went to a meeting and they want to do a study of the levees for 2 more years and we are already living on a prayer right now. If we have to wait until they complete this study the price will be even higher and we might be flooded out. They need to start working on the levees now so they can finish them as soon as possible. The Sunset Drainage District was #1 40 years ago. Why can't we put it back to #1 again? Why do they only want to do studies? They are talking about putting 7.5 ft levees.	Thank you for your comment. The risk reduction system is only authorized to address storm surge caused by hurricane and tropical storm events. The study focused on the reduction of those existing and future without project damages. The project will be sent to Congress for construction authorization in 2021. The construction start is depended on congressional actions in the future.

Dwayne Bourgeois	1/15/2020	email	As we had discussed at this public meeting last Thursday, I wanted to provide a couple of additional comments beyond those we have collectively submitted via the Lafourche Basin Levee District. Please note that I am 100% in agreement with those comments submitted by the LBLD as they were a joint effort. I wanted to add one more suggestion for some language I hope you can include in the final report. First, let me say that I understand that there are specific guidelines that you are using in calculating benefits, design and cost estimating and all other aspects in this type of 3x3x3 study. As this type of study is used nationally, I recognize there is no way to change any of that on the fly. But, we have all learned some valuable lessons and have had a good bit of success with the Morganza to the Gulf system that I believe could eventually be applied here. I'm hoping the final version of this report opens that door for potential further evaluation. On the Morganza to the gulf project, the Post Authorization Change (PAC) report mentioned that the HSDRRS standards used in the creation of that report likely could be site adapted because those standards did not contemplate the nature of a Storm Risk Reduction System such as the Morganza to the Gulf Project. (Or the UBRR project in the TSP now.) It was this statement, along with the fact that we had considerable real world data from construction of the project by the State and locals (As is also the case with levees on the TSP for the UBBR now.) that Corps leadership at all levels realized we could and should, re-evaluate the findings of the PAC report. This lead to the Corps producing an Adaptive Criteria Assessment Report (ACAR) that has been accepted at all levels of the Corps and the ASA-CW. The ACAR greatly reduced the projected cost of the project and was able to increase the BCR to a point where the project may be feasible for congressional funding. This was a huge accomplishment that was more driven by Corps willingness to get it right than our own efforts. I can't thank the Corps enough for their work on this. I request that you take a look at the PAC and ACAR to understand how we may be able to tweak the 3x3x3 feasibility requirements (after completion) in order to site	Thank you for your comment.With the submittal of the final report a Final Chief's report will also be developed and signed, the Chief of Engineers at that time can considers items such as the ACAR.
Charles Boyer	10-Jan-20	comment card	Why is the USACE and Laf. basin levee district working independently of each other on the same levee system	The USACE is coordinating efforts through the State of Louisiana's CPRA office, which would be a co-sponsor for construction for the recommended plan.
Alvina Matherne	10-Jan-20	comment card	How do we get money to begin construction on the Barge Gate	The project will be sent to Congress for construction authorization in 2021. The construction start is depended on congressional actions in the future.
Donald Ray Henry	13-Jan-20	PDF	1. Page 12 of the report lists several relevant studies but omits some of the most recent and directly relevant studies, including: a. "Project Development an Implementation Program: Upper Barataria Risk Reduction" by ARCADIS, RAND, and The Water Institute of the Gulf, dated March 17, 2014. b. **"Upper Barataria Risk Reduction Modeling: Phase 2 - Rainfall & Storm Surge Combined Effects Modeling" by ARCADIS, RAND, and The Water Institute of the Gulf, dated July 8, 2015. These two studies combined found that the project as envisioned in CPRA's Master Plan has a benefit, cost ratio of 2.3. c. "Upper Barataria Risk Reduction: Conceptual Design Report" by Burk,Kleinpeter, Inc., GIS Engineering, LLC, and APTIM Corp. on behalf of Lafourche Basin Levee District and North Lafourche L vee District, dated December 2018. This report r presented a 10% leyel of design and planning for the project as envisioned ip CPRA's Master Plan d. St. Charles Parish sponsored an economic study to more accurately quantify potential project benefits including business disruption and disruption to Hwy 90.**	Thanks for the comment. The initial list was used for scoping the problem and objecitves of the study. The attached list was reviewed by the Eng. team to inform and guide the final design.
Donald Ray Henry	13-Jan-20	PDF	1. Page 16 of the report refers to "St. Charles Levee District," which does not exist. St. Charles Parish and the North Lafourche Levee District are local stakeholders that have been active with regards to this project.	Noted. The language was corrected
Donald Ray Henry	13-Jan-20	PDF	Page 33 34 mistakenly refers to Interstate 90, which runs from Seattle, WA to Boston, MA. US Hwy 90 is the major thoroughfare from west Texas to eastern Florida that passes through the project area. It is a vital link for commerce and emergency ingress/egress for the region	Noted. The language was corrected
Donald Ray Henry	13-Jan-20	PDF	1. The first paragraph of Section 4.7 (page 63) refers to Alternative 9 but appears to be a discussion of Alternative 10. Please clarify?	Noted. The language was corrected. The number was wrong
Donald Ray Henry	13-Jan-20	PDF	Page 74 of the report points out that the "levee design elevation is at a 2% AEP existing, but the system provides levels of risk reduction up to the 0.2% AEP future based off of capitalizing on the storage within the basin during an event." All local and State stakeholders' goal for the region is1% AEP risk reduction for the project. Please confirm armoring and capitalizing the storage capacity of the TSP provides 1% AEP risk reduction for the entire protected area.	The final recommended plan is a structural alignment constructed to a 1 percent AEP (100-year future design) and totaling a little over 161,300 feet (30.6 miles) in length. The system starts in Luling where it connects the Mississippi River Levee through the Davis Pond Diversion Structure West Guide Levee. Continuing south, the RP improves upon and updates deficiencies in the St. Charles Parish Levee, crosses Bayou Des Allemands with a 270-feet barge gate structure, and continues parallel to US Highway 90 before it ties into high ground across the Barataria Basin near Raceland.
Donald Ray Henry	13-Jan-20	PDF	1. LBLD and its consultants are pleased that USACE has relied on LBLD's 10% conceptual design report for parts of this study. Page 76 appears to reference the report directly, but mis attributes it to St. Charles Parish.	Noted. The language was corrected.
Donald Ray Henry	13-Jan-20	PDF	1. The annual rates of RSLR on page 85 appear to be totals at year 2073.	Noted : The date was corrected to say 2076, which is the final year of evaluation
Donald Ray Henry	13-Jan-20	PDF	1. The Dufresne Ponds area may be another opportunity for marsh creation for mitigation (page 88).	Noted. The final mitigation plan will be developed in PED.
Donald Ray Henry	13-Jan-20	PDF	1. None of the Mississippi River diversions identified in the 1993 CWPPRA Louisiana Coastal Wetlands Restoration Plan discharge into the protected area of the project. Thus, ...widescale hydroperiod increases" associated with these diversions are extremely unlikely. (page 90)	Future efforts for environmental remediation are not fundamentally precluded by the recommended plan. Currently there are no immediate foreseeable actions to pursue additional diversions that would directly impact the recommended plan. The recommended storm damage reduction plan, as well as the diversion plan cited, is
Donald Ray Henry	13-Jan-20	PDF	Appendix A 10.Page 2 states that the TSP provides a 2% AEP level of risk reduc on and does not point out that armoring increases the level of risk reduc on to 0.2%. All local and State stakeholders' goal for the region is1% AEP risk reduction for the project. Please confirm armoring and capitalizing the storage capacity of the TSP provides 1% AEP risk reduction for the entire protected area.	The final recommended plan is a structural alignment constructed to a 1 percent AEP (100-year future design) and totaling a little over 161,300 feet (30.6 miles) in length. The system starts in Luling where it connects the Mississippi River Levee through the Davis Pond Diversion Structure West Guide Levee. Continuing south, the RP improves upon and updates deficiencies in the St. Charles Parish Levee, crosses Bayou Des Allemands with a 270-feet barge gate structure, and continues parallel to US Highway 90 before it ties into high ground across the Barataria Basin near Raceland.
Donald Ray Henry	13-Jan-20	PDF	Appendix A 10.11."LBLD and its consultants are pleased that USACE has relied on LBLD's 10% conceptual design report for parts of this study. Pages 5 and 77 79 of Appendix A appear to reference the report directly but is not entirely accurate in its reference. The report was prepared jointly by Burk Kleinpeter, Inc., GIS Engineering, LLC, and APTIM Corp. for the Lafourche Basin Levee District (apolitical subdivision of the State of Louisiana)."	Noted.

Donald Ray Henry	13-Jan-20	PDF	12.Appendix A, page 51 shows that modeled values for the calibra on run of the HEC,RAS model were consistently lower than observed. It seems possible that this would result in an underestimation of potential damages from rainfall for the design storm and, therefore, and underestimation of the project's benefits.	The final updated model runs showed an increase in the damges and included in the final runs.
Donald Ray Henry	13-Jan-20	PDF	13.Appendix A, pages 77,78 state that Alternatives 6, 8, and 10 used an average levee elevation of +19 ft to achieve risk reduction for the 1% AEP storm. On page 41, the highest levee elevation for the future 1% AEP storm is +13 ft. This discrepancy makes it seem very likely that the costs for the alternatives providing a levee elevation for the 1% AEP storm are significantly inflated, which may have contributed to screening them out. Please reevaluate these alternatives with elevations that are consistent with future SLR analyses since they may be economically justifiable.	The final recommended plan is a structural alignment constructed to a 1 percent AEP (100-year future design) and totaling a little over 161,300 feet (30.6 miles) in length. The system starts in Luling where it connects the Mississippi River Levee through the Davis Pond Diversion Structure West Guide Levee. Continuing south, the RP improves upon and updates deficiencies in the St. Charles Parish Levee, crosses Bayou Des Allemands with a 270-feet barge gate structure, and continues parallel to US Highway 90 before it ties into high ground across the Barataria Basin near Raceland. The design will be further review in PED to ensure that the stated heights for a 1% system for each levee reach is correct inlight of futher RSLR senerios.
Donald Ray Henry	13-Jan-20	PDF	1. Appendix A, page 80 refers seven representative structures but did not consider other gaps in the St. Charles Parish levee system which includes 3 pipeline crossings (2 in Ellington Levee and 1 in Magnolia Ridge Levee area), 2 pump station frontal protections (Cousins &: Kellogg Pump Stations)	Noted, These areas were condidered and updated in the final design.
Donald Ray Henry	13-Jan-20	PDF	1. Annex 8, page 5 again states that the TSP provides risk reduction for a 2% AEP storm. Page 74 of the report body states that, with armoring," the system provides levels of risk reduction up to the 0.2% AEP future based off of capitalizing on the storage within the basin during an event." All local and State stakeholders' goal for the region is 1% AEP risk reduction for the project. Please confirm armoring and capitalizing the storage capacity of the TSP provides 1% AEP risk reduction for the entire protected area.	The final RP did not include overtopping.The final recommended plan is a structural alignment constructed to a 1 percent AEP (100-year future design) and totaling a little over 161,300 feet (30.6 miles) in length. The system starts in Luling where it connects the Mississippi River Levee through the Davis Pond Diversion Structure West Guide Levee. Continuing south, the RP improves upon and updates deficiencies in the St. Charles Parish Levee, crosses Bayou Des Allemands with a 270-feet barge gate structure, and continues parallel to US Highway 90 before it ties into high ground across the Barataria Basin near Raceland.

Upper Barataria Basin, Louisiana, Feasibility Study

Appendix G – Section 4

Public Comments on 1st Draft Report

LBLD

LAFOURCHE BASIN LEVEE DISTRICT

P.0. Box 670 - 21380 Highway 20
Vacherie, LA 70090
(225)265-7545
1-800-827-7034
FAX: (225) 265-7648

January 13, 2020

CEMVN,PMR
7400 Leake Avenue
Room 331
New Orlef1ns, LA 70118

Reference: Upper Barataria Basin, Louisiana Feasibility Study with Integrated Environmental Impact Statement

Dear Sir/Madam,

Lafourche Basin Levee District (LBLD) in collaboratioμ with the Louisiana C astal Protection and Restoration Authority (CPRA), the North Lafourche Conservation, Levee, and Drainage District (commonly known as North Lafourche Levee District or NLLD) and St. Charles Parish have been working on the "Upper Barataria Risk Reduction" (UBRR) project. Th goal of this project is to provide 1% level of protection and lower the Ilo d insurance costs to the community.

We are excited to see that USACE has taken initiative to study the Upper Barataria Basin on the federal level and the recent draft report with title "Upper Barataria Basin, Louisiana Feasibility Study with Integrated Environmental Impact Statement" dated November 19, 2019. We have the following comments/concerns on this study report.

Report Body:

1. Page 12 of the report lists several relevant studies but omits some of the most recent and directly relevant studies, including:

a. "Project Development and Implementation Program: Upper Barataria Risk Reduction" by ARCADIS, RAND, and The Water Institute of the Gulf, dated Match 17, 2014.

b. "Upper Barataria Risk Reduction Modeling: Phase 2 - Rainfall & Storm Surge Combined Effects Modeling" by ARCADIS, RAND, and The Water Institute of the Gulf, dated July 8, 2015. These two studies combined found that the project as envisioned in CPRA's Master Plan has a benefit, cost ratio of 2.3.

c. "Upper Barataria Risk Reduction: Conceptual Design Report" by Burk,Kleinpeter, Inc., GIS Engineering, LLC, and APTIM Corp. on behalf of Lafourche Basin Levee District and North Lafourche L vee District, dated December 2018. This report q::presented a 10% leyel of design and planning for the project as envisioned ip. CPRA's Master Plan.

d. St. Charles Parish sponsored an economic study to more accurately quantify potential project benefits including business disruption and disruption to Hwy 90.

2. Page 16 of the report refers to "St. Charles Levee District," which does not exist. St. Charles Parish and the North Lafourche Levee District are local stakeholders that have been active with regards to this project.

3. Page 33 34 mistakenly refers to Interstate 90, which runs from Seattle, WA to Boston, MA. US Hwy 90 is the major thoroughfare from west Texas to eastern Florida that passes through the project area. It is a vital link for commerce and emergency ingress/egress for the region.

4. The first paragraph of Section 4.7 (page 63) refers to Alternative 9 but appears to be a discussion of Alternative 10. Please clarify?

5. Page 74 of the report points out that the "levee design elevation is at a 2% AEP existing, but the system provides levels of risk reduction up to the 0.2% AEP future based off of capitalizing on the storage within the basin during an event." All local and State stakeholders' goal for the region is1% AEP risk reduction for the project. Please confirm armoring and capitalizing the storage capacity of the TSP provides 1% AEP risk reduction for the entire protected area.

6. LBLD and its consultants are pleased that USACE has relied on LBLD's 10% conceptual design report for parts of this study. Page 76 appears to reference the report directly, but mis attributes it to St. Charles Parish.

7. The annual rates of RSLR on page 85 appear to be totals at year 2073.

8. The Dufresne Ponds area may be another opportunity for marsh creation for mitigation (page 88).

9. None of the Mississippi River diversions identified in the 1993 CWPPRA Louisiana Coastal Wetlands Restoration Plan discharge into the protected area of the project. Thus, ...widescale hydroperiod increases" associated with these diversions are extremely unlikely. (page 90)

Appendix A Engineering

10. Page 2 states that the TSP provides a 2% AEP level of risk reduction and does not point out that armoring increases the level of risk reduction to 0.2%. All local and State stakeholders' goal for the region is1% AEP risk reduction for the project. Please confirm armoring and capitalizing the storage capacity of the TSP provides 1% AEP risk reduction for the entire protected area.

11. "LBLD and its consultants are pleased that USACE has relied on LBLD's 10% conceptual design report for parts of this study. Pages 5 and 77 79 of Appendix A appear to reference the report directly but is not entirely accurate in its reference. The report was prepared jointly by Burk

Kleinpeter, Inc., GIS Engineering, LLC, and APTIM Corp. for the Lafourche Basin Levee District (apolitical subdivision of the State of Louisiana)."

12. Appendix A, page 51 shows that modeled values for the calibration run of the HEC,RAS model were consistently lower than observed. It seems possible that this would result in an underestimation of potential damages from rainfall for the design storm and, therefore, and underestimation of the project's benefits.

13. Appendix A, pages 77,78 state that Alternatives 6, 8, and 10 used an average levee elevation of +19 ft to achieve risk reduction for the 1% AEP storm. On page 41, the highest levee elevation for the future 1% AEP storm is +13 ft. This discrepancy makes it seem very likely that the costs for the alternatives providing a levee elevation for the 1% AEP storm are significantly inflated, which may have contributed to screening them out. Please reevaluate these alternatives with elevations that are consistent with future SLR analyses since they may be economically justifiable.

14. Appendix A, page 80 refers seven representative structures but did not consider other gaps in the St. Charles Parish levee system which includes 3 pipeline crossings (2 in Ellington Levee and 1 in Magnolia Ridge Levee area), 2 pump station frontal protections (Cousins &: Kellogg Pump Stations)

15. Annex 8, page 5 again states that the TSP provides risk reduction for a 2% AEP storm. Page 74 of the report body states that, with armoring," the system provides levels of risk reduction up to the 0.2% AEP future based off of capitalizing on the storage within the basin during an event." All local and State stakeholders' goal for the region is 1% AEP risk reduction for the project. Please confirm armoring and capitalizing the storage capacity of the TSP provides 1% AEP risk reduction for the entire protected area.

Should you have any questions or need clarification, please do not hesitate to contact me.

Yours truly,

LAFOURCHE BASIN LEVEE DISTRICT

Donald Ray Henry, Executive Director

The U.S. Army Corps of Engineers, New Orleans District would like gather public input on the Upper Barataria Louisiana Feasibility Study Feasibility Study. If you would like your comment added to the public registry please fill outthis card and drop it in the mail postage free

Comment Card

Comments -22 Gee

Name

Affiliation

Street

Phone

City, St Zip

Fax

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The U.S. Army Corps of Engineers, New Orleans District would like gather public input on the Upper Barataria Louisiana Feasibility Study Feasibility Study. I f you would like your comment added to the public registry please fill outthiscard and drop it in the mail postage free

Comment Card

Comments: Why is the U.S. Army Corps of Engineers and the Lafourche Basin Levee District working independently of each other on the same levee system?

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Upper Barataria Basin, Louisiana, Feasibility Study

Appendix G – Annex 1

July 2021

Annex 1 USACE Responses to RESTORE Letter

RE: Upper Barataria Basin, Louisiana: Draft Feasibility Report with Integrated Environmental Impact Statement Second Draft

Dear U.S. Army Corps of Engineers,

We appreciate this opportunity to provide comments on the 2nd Draft Feasibility Report with Integrated Environmental Impact Statement (DFRIEIS) of the Upper Barataria Basin (UBB) project. We support providing storm risk reduction for coastal communities. For communities in Louisiana's upper estuarine areas such as the UBB, threats are increasing because of past government policies and are now accelerating because of climate change.

The optimization of the tentatively selected plan (TSP) doubled the height of levees needed for the project and considerably increased the environmental impact of the project, making it necessary to go back out for public review. One thing to note is that while the federal register lists the closing date for comments as January 25, 2021, the report lists the closing date as January 29, 2021. In the interest of clarity and transparency, all comments submitted by the 29th must be considered.

As matters of law and policy:

1. The Corps must comply with the National Water Resources Planning Policy which requires that all water resources projects protect and restore the environment, including by protecting and restoring the functions of natural systems. (42 USC 1962–3). The TSP does not meet these requirements. The DFRIEIS purpose and need statement also does not adequately account for these requirements, despite the offhand reference to a claim that the project will decrease saltwater intrusion from increased storm surge.

2. The Corps should analyze this project under the Principles, Requirements, and Guidelines (PR&G). Proper reliance on the PR&G will ensure that the Corps fully accounts for all project costs and benefits, including the costs and benefits to the environment and public welfare.[1] At a minimum, the Corps should be fully evaluating the Environmental Quality (EQ) account as part of its analysis of project costs and benefits, and as a driver for project selection.

USACE Response #1 & 2: The report and supporting documents have undergone multiple reviews that include specific legal and policy consideration and have been determined to be compliant. They will undergo an additional review for statutory and policy compliance once transmitted in final form. Environmental Quality account benefits are a consideration in plan comparison. However, for the specified project purposes of flood and storm damage risk reduction, Net NED Benefits are the required primary metric for supporting justification and identification of a preferred Federal Plan.

3. The Corps should put an immediate pause on the NEPA/feasibility study processes pursuant to the January 20, 2021 Executive Order on Protecting Health and the Environment and Restoring Science to Tackle the Climate Crisis. See https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to- tackle-climate-crisis/. This Executive Order directs all federal agencies to immediately review and address the promulgation of federal regulations and other federal actions during the past four years to ensure that those actions confront the climate crisis including by, among other things, "listening to science to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides; to bolster resilience to the impacts of climate change; and to prioritize both environmental justice.

USACE Response:

While the specific guidance regarding methods of compliance for this Executive Order has not yet been distributed, the fundamental tenants outlined were considered and applied in the development of alternative plans during this study. All of the processes listed in item 3 are identified in existing statues and policies, all of which have been in force during the course of this effort. It should be noted that the BBA18 authority under which the study was conducted necessitates that all of these considerations be focused around the authorized project purposes of flood and storm damage risk reduction.

Specific Comments

Restore the Mississippi River Delta Campaign (MRD) is a coalition of the National Audubon Society, the Coalition to Restore Coastal Louisiana, Environmental Defense Fund, National Wildlife Federation, and the Pontchartrain Conservancy. Together we advocate for science-based restoration in coastal Louisiana. We represent thousands of Louisiana members and supporters. MRD is dedicated to large-scale, ecosystem restoration in the Mississippi River Delta. As organizations with long-standing interest in risk reduction and restoration projects along Louisiana's coast, we would like to provide the following comments on the Draft Feasibility Report with Integrate Environmental Impact Statement (DFRIEIS) of the Upper Barataria Basin project.

We are disappointed that this DFRIEIS fails to adequately address obvious questions about the viability of this project in the face of climate change and near certain future relative sea level rise (RSLR). Instead of taking a realistic and wholistic view of the problem and examining innovative ways to cope in a climate constrained future, the proposal is to revert to form once again and fall back on the same failed gray infrastructure solutions. This proposal promises to create a public expectation of action and relief that will very likely not be delivered in a timely manner.

USACE: The time to construct a project is a planning consideration, and is reflected in both the costs and benefits considered. However, the potential timeliness of implementation of any project can be highly speculative and is not a planning criteria. Significant factors influencing ultimate timeliness are in fact outside the direct control of the planning team and project sponsoring organizations.

The grey infrastructure proposed is very expensive and will take decades to finalize engineering and design, secure funding and construct. During that time, communities and ecosystems are continuously exposed to flood threats. Using natural infrastructure and non-structural projects can reduce the risk more quickly with lower costs to taxpayers, protect against multiple flood threats and provide multiple ecosystem service benefits.

USACE: The range of considered alternatives included non-structural options, which independently did not compete effectively. However, non-structural features were retained as an effective method of reducing distributed residual flood risks. Nature Based solutions are highly desirable, provide systemic synergy, and are typically considered as integrated features whenever practicable. However, in the context of storm or flood damage risk reduction they are required to be measured by the gauge of NED damages reduced to ultimately be justified. This also requires that they be reliable and can be maintained to a measurable level of damage reduction based performance. The magnitude of impact being addressed in this environment severely limits the effectiveness and reliability of these measures.

The DFRIEIS cumulative effects analysis does not address the "big picture" effects or what the Corps' own RSLR projections envision, much less the range of possible RSLR projections adopted by the local sponsors' 2017 Coastal Master Plan. There is no discussion of the future frequency of flood gate and culvert closures at Bayou des Allemandes and elsewhere along the alignment, what ecological harm an increasing frequency of closures might

cause, or what effects those closures will have on rainfall inundation of communities. It is indisputably true that as sea levels rises interior communities will be forced to adapt by building interior ring levees and drainage capacity, or by adopting non-structural flood risk reduction measures, begging the question of why that is not being proposed as an alternative in the first place.

USACE: The operation of the recommended plan would be for the project purpose of storm damage risk reduction. As such the closure of flood gates and culverts would be regulated by the occurrence of stages driven by extra-tropical events. While it is anticipated that relative storm intensities and stages will occur over time, there is no definitive projection regarding whether the number and temporal distribution of these weather events will change. The more reliably forecast future condition is that RSLR will result in increasing exterior and interior stages, and/or salinities, during the extended periods in which the project is not operated.

As the DFREIES acknowledges the swamps to be enclosed behind the levee already suffer from the effects of past engineering, especially the leveeing of the Mississippi River which cut off inflow of sediment, freshwater and nutrients, as well as the hydrological disruption caused by roads and canals. The only possible remedy, incidentally the nature-based solution remedy, to these past effects would be to divert flow from the river into the upper basin. The project as implemented could preclude such future solutions or render them much more expensive.

The TSP levee may alter surge dynamics and increase surge heights on existing levees such as the HSDRRS on the West Bank as well as local (non-federal) levees, potentially threatening their 100-year standard of performance. It is not clear where this has been analyzed and whether there is an additional requirement for future lifts of existing levees.

USACE: As part of the USACE's H&H evaluations for the feasibility level efforts, difference plots for the various return periods were reviewed and it was determined that there was limited risk to the performance of the Westbank and Vicinity (WBV) project. The WBV was designed for the 1% AEP stillwater and wave overtopping then checked for resiliency for the 0.2% AEP stillwater elevation. In addition there is currently an ongoing study "West Bank and Vicinity General Re-evaluation Report" reviewing the performance of the WBV project given the combined effects of consolidation, settlement, subsidence, sea-level rise, and new datum over time.

The UBB also reports out on the inducement risk to other local levees and structures outside of the proposed system. As discussed in the final report (Section 6.8.1 "Risk of Induced Flooding Outside the Project"), a risk to changes in performance to local levees were seen in the Gheens and Mathews area. Mitigation options such as improvements to existing local levees (Gheens and Mathews) were reviewed, but due to the vast scope of this project and the limited amount of available information at this time, the existing local levees or each of the affected parcels behind these systems could not be assessed to determine what the level of impact would be and whether that impact would be categorized as a taking of property rights. The potential induced damages and mitigation for economic damages would be further addressed during PED, including options to make improvements to the existing local levees (Gheens and Mathews) as a mitigation measure. The cost for the mitigation options discussed in the report has already been incorporated into the RP.

Further, so-called optimization of the TSP increases the mitigation needs for this project considerably. We understand that a final mitigation plan is currently being developed. We suggest that if the TSP is finally selected, (or some other cross-basin levee rather than a combination of ring levees and non-structural measures), that the Corps consider the Ama Sediment Diversion as mitigation for this project, and that the project be designed with a diversion component built in.

USACE: The comment is noted, however, projects are only allowed to expend funds for the magnitude of mitigation as determined to be require as a result of the recommended action. The BBA18 also limits the purposes of project features under the authority to flood or storm risk reduction.

The Ama Diversion was selected in Louisiana's 2017 Coastal Master Plan (CMP) to build and sustain land in the upper Barataria Basin. This project could not only work in conjunction with the Upper Barataria Project to reduce saltwater intrusion into the bottomland hardwood forest, cypress-tupelo swamps and freshwater marshes of the upper Barataria Basin, but we believe is a viable option for mitigating Upper Barataria impacts. The Ama Sediment Diversion is one of the CMP projects identified in the Water Resources Development Act of 2020 to be included in a comprehensive management study of the Lower Mississippi River Basin.

The Ama Sediment Diversion also has the potential to offer other benefits that would maximize the National Economic Development goal that is an integral part of the Upper Barataria Project. Wherever possible, it is critical that the Corps take advantage of opportunities to achieve efficiencies between restoration, river management and levee projects. In the past five years the Bonnet Carré Spillway has been operated five times to divert excess river floodwaters to protect downstream communities such as New Orleans. In contrast to the environmental consequences of operating the spillway, sediment diversion projects along the Mississippi River can be used to restore and sustain wetlands in Louisiana and also serve as outlets for river floodwaters. By putting water and sediment into wetlands where it can provide the most benefit and also decrease the need or magnitude of flow diverted through the Bonnet Carré Spillway, these diversion projects provide an opportunity to move towards holistic river management.

To test whether these river diversions could distribute floodwaters into degraded wetlands to provide ecological benefits and reduce the ecological impacts associated with the Spillway operation during the 2019 flood, scientists from our coalition and Tulane University designed a series of runs using the Army Corps' HEC-RAS model. Initial simulations using the Ama diversion demonstrated substantial reduction in the discharge needed to flow through the Bonnet Carré spillway. The results suggest that the 2019 Bonnet Carré spillway discharge volume could be reduced by over 40% with the operation of the Ama Diversion alone. The results point to the considerable benefits of implementing the Ama Sediment Diversion not only as a mitigation feature for the Upper Barataria Project, but to also help alleviate the pressure on the Bonnet Carré Spillway.

It is essential that the design of the Upper Barataria Basin project consider future river diversions in its design to not impede implementation of projects to address the long term needs of the coast. Since Louisiana is the local cost-share sponsor, any state investment in this project would need to be consistent with Louisiana's Coastal Master Plan, thus ensuring that the Ama Diversion, and any future Des Allemandes basin diversions, could be operated as needed so that the flow would not be restricted by the structures of the basin project. Modifications of the project design is needed to ensure these projects can work together to protect the people and the environment of the Upper Barataria Basin.

USACE: Future efforts for environmental remediation are not fundamentally precluded by the recommended plan. Currently there are no immediate foreseeable actions to pursue additional diversions that would directly impact the recommended plan. The recommended storm damage reduction plan, as well as the diversion plan cited, is recognized as part of the project sponsors comprehensive plan. If in the future other efforts are pursued to develop additional actions such as those cited, they would be considered in the context of all prior development, as well as any Federally authorized and locally sponsored projects, to ensure that completely compatible functions and operation would be achievable.

Upper Barataria Basin, Louisiana, Feasibility Study

Appendix G – Annex 2

July 2021

Annex 2
USACE PDT Responses to LBLD and NLLD (in RED)
04 FEB 2021

1. Levee and Structure Elevations

The design elevations for the second draft of this report are considerably higher than those included in the first draft. LBLD and NLLD would like to fully understand the development of these elevations and respectfully request more details on the modeling efforts used to determine the elevations.

Elevations in the first draft report were based on only WOP project modeling.

For the surge hazard analysis, we ran a suite of storms for with and without project for existing and future conditions. This suite gives us an estimate of impacts to exterior stage frequency for a range of return periods. Once we have exterior surge and wave frequency, we can design the levee heights using the HSDRRS levee design tool, which is a tool that determines the design elevation that limits overtopping to 0.1cfs/ft with 90% confidence. There are more details in the H&H Annex 10.

The design elevations the USAGE developed for this report are considerably higher than those developed by the Coastal Protection and Restoration Authority (CPRA) during its planning efforts for the 2017 Master Plan. LBLD and NLLD respectfully request that the USAGE consider CPRA's analyses to determine whether they can be incorporated into the NED plan.

We did use the CPRA ADCIRC mesh because it is the most efficient and up-to-date mesh available for this area. That does not mean we used the entire CPRA analysis, only the ADCIRC grid. Down the road we could compare water levels and waves to any previous analysis and determine why they might be different. It could be the CPRA analysis used a different source for water levels and waves or assumed different design criteria.

Alternatives 8 (Section 4.3.8 on p. 47) and 10 (Section 4.5.2 on p. 57) included the barge at "14 feet high." This elevation would be consistent with CPRA's analysis (which requires the top of gate at elevation +15 ft NAVD88). Alternative 10 also appears to require the St. Charles levees to be raised to an elevation of +12 ft NAVD88 rather than +14.5. Both of these alternatives appear to refer to the 1% Annual Exceedance Probability (AEP) elevation, yet they are lower than the gate in the NED plan.

The elevations for Alternative 8 and Alternative 10 in the main report mentioned above were the results of older modeling efforts. At that time, the ADCIRC model had a 7.5 ft levee in-place. The PDT was hoping to use lower levees with increased overtopping and use the storage

capacity of the basin. That idea was determined not to be feasible by the PDT. Later, the model was updated with a non-overtopping levee which resulted in higher design elevations including the 1% frequency. That's why those elevations are different from what was ultimately used for the TSP alignment which incorporated the newer modeling.

Recommended elevations to meet the 1% AEP elevation differ by as much as 3.5' between some adjacent hydraulic reaches. Assuming that this is not meant to convey that USACE is recommending abrupt changes in elevation requirements between reaches, LBLD and NLLD respectfully request more detail regarding how these elevations transition and taper between reaches that require different elevations to adequately reduce risk against the 1% AEP storm event, without requiring additional elevation when not necessary.

There will not be any abrupt changes in elevation requirements since our standard is a 1:10 transition between levee heights. The 1% surge and waves vary along the length of the alignment, thus requiring different elevations. An overtopping threshold of 0.1 cfs/ft was used to determine the final levee elevations. The 500-yr still water design check was performed for added resiliency to the system.

Some components of the alignment also seem to have been included in the project cost, even though those elements are either in design or construction, while others have either been constructed or already have funding allocated for their construction from local entities. We would appreciate the opportunity to review all advances in design and/or construction that have been undertaken since the commencement of efforts associated with this report.

For the first draft TSP we included the Sunset Levee in our economic analysis. During feasibility design, it was discovered that the Sunset levee, a 100-year old, unarmored, uncertified local levee, was modelled with an effective elevation that was over 2 feet too high and could withstand unlimited overtopping. In the current iteration of the analysis, this levee was removed from the ADCRC model and was instead modelled within HEC-FDA at its correct effective elevation and without unrealistic resiliency. This change led to a significant increase in without-project damages.

We did not include the Gheens Levee in our analysis since it was outside of the study area.

If there have been updates to projects that are currently being constructed, then you may provide a list of these projects so that we can adjust accordingly, if we can, in PED. If we're showing construction where it's not needed, we could potentially reduce cost later on.

2. Hydraulic Structures

LBLD and NLLD recommend reducing the number of hydraulic structures to reduce the cost of the project.

Eliminating the box culverts flanking the proposed flood gate is justified based on USACE's hydraulic analysis for the Donaldsonville to the Gulf Project. According to that study, "the

structures were sized so that head loss through the structures would be less than 0.5 feet along the entire length of the levee." The study called for a 110-foot-wide navigational gate and eight (8) 20-foot-wide tidal interchange structures. LBLD and its consultants chose to include all of this width in the barge gate structure, which results in a more hydraulically efficient structure and provides the cross-sectional area required per the USACE's previous analysis.

Further justification for eliminating the box culverts may be found in hydraulic modeling performed in support of CPRA's Master Plan. Modeling performed by Arcadis suggests that the peak average velocity in Bayou Des Allemands for the suite of design storms[1] is less than 1 ft/s in the pre-project condition. During preliminary design of the proposed barge gate, GIS Engineering used Arcadis' modeling results to calculate a maximum velocity of 5.5 ft/s through the proposed opening. Discussion of velocities in Section 5.2.2.1.2 of USACE's report suggests that this velocity would be acceptable.

Eliminating some of the drainage structures in Reach G is justified based on the existing topography. The structures marked as feature #23 on Figure 4-13 (p. 70) are located in the alignment of an existing spoil bank that has limited hydrologic interchange for decades. These structures are not necessary to preserve the existing hydrologic regime.

CPRA recommended a gate opening of 270 ft in the 10% Conceptual Design Report. H&H was tasked with matching the flow conveyance capacity at the Railroad crossing to the Barge Gate. Additional sluice gates were needed to match the conveyance capacity. Additional modeling will be done during PED to optimize the number of sluice gates needed.

3. Buy-outs in Bayou Gauche, Gheens, and Mathews

The report mentions that the Tentatively Selected Plan will potentially require the acquisition of an estimated 270 residential and 5 commercial structures due tothe impacts of induced flooding as a worst-case scenario. The total estimated costs of $84.2 million was assumed for cost estimates. These buyouts would occur in the communities of Bayou Gauche, Gheens, and Mathews because of their current lack of adequate structural risk reduction to protect against the 1% AEP storm for the 2076 scenario.

NLLD is currently designing a lift of the existing levee protecting Gheens to +9.0 feet with sheet pile. While additional modeling efforts may show additional elevation necessary in this area to protect against the 1% AEP storm in this area, a higher top of wall elevation along this alignment than currently planned would incur significantly lower costs than buyouts and would be much better received by the residents of the area in question. We request that the modeling efforts used to inform project cost estimates utilize water surface elevations that include reductions provided by NLLD's planned efforts.

The community of Bayou Gauche includes several residential structures located outside the

proposed levee alignment. While buyouts of these structures is a possibility, to our knowledge this method of non-structural risk reduction has not been used in coastal Louisiana. More economical and socially acceptable alternatives such as floodproofing and home elevations should be factored for a more realistic cost estimate. At the same time, we would appreciate a realistic discussion on buyouts of residential properties, as some residents are more than willing to consider accepting a complete buyout of their homes in order for them to relocate to more resilient areas that require less or no risk reduction measures.

Planned efforts should be permitted and funded for the reductions in water surface elevations to be incorporated into the FWOP conditions. For FWOP, we did not include the St. Charles Levee in the HEC-FDA model. The existing section of that levee isn't closed off, so it shouldn't be effective.

Buyouts of homes was included to ensure a conservative authorized cost as it is the most expensive option. All options will be thoroughly examined in PED and coordinated with the locals.

We have changed the language in the main report from "nonstructural plan" to "mitigation measures." We recognized the language used "flowage easement" and we also wanted to recognize that the future plans could also include improvements to the existing local levees (e.g., Mathews and Gheens). Those future options are not really nonstructural measures.

4. Use of HSDRRS standards

The use of HSDRRS standards increases the project's cost. The Morganza to the Gulf Post-Authorization Change report and subsequent Adaptive Criteria Assessment Report recognized the storage capacity in the protected area of that project, allowing a reduced footprint and cost for the levee. A similar approach is appropriate for this project.
Increased overtopping rates were looked at by the PDT, but that plan was decided against because of the cost to armor the levees. The PDT also decided against the increased overtopping rates because of the close proximity of the population to the levee alignment.

We concur that the use of site-adapted criteria for Morganza to the Gulf was the right approach for that project. It is important to note that the Morganza criteria is not the Corps standard at this time. The opportunity to determine whether site-adapted criteria applies for UBB will be in the PED phase. We can use a similar process by performing a risk assessment for UBB during design phase.

5. References to the Upper Barataria **Risk** Reduction Conceptual Design Report and other studies

In 2018, Burk-Kleinpeter, Inc., APTIM, and GIS Engineering prepared a conceptual report for

the referenced project on behalf of LBLD and NLLD. Throughout the USACE's planning efforts for this project, this team of consultants provided information from this report through CPRA for the USACE's use. LBLD, NLLD, and the consultants are pleased that the USAGE relied on information from the report. We ask that the USAGE accurately cite the report for the benefit of future users of USACE's report.

- Section 1.5 (p. 6) and Section 2.5 (p. 9) refer to the "St. Charles Levee District," which does not exist. This comment appears to refer to LBLD and NLLD. St. Charles Parish has also been an active participant in these efforts. Section 1.5 also lists several past reports by the USAGE and others, but omits this one.
- Section 12 should also list this report.
- Appendix A, Section 1.8.2 appears to reference the report directly but is not entirely accurate in its reference. The report was prepared jointly by Burk-Kleinpeter, Inc.; GIS Engineering, LLC; and APTIM Corp. for the LBLD and NLLD (political subdivisions of the State of Louisiana).

There are several other studies that warrant inclusion in Sections 1.5 and 12.

- "Project Development and Implementation Program: Upper Barataria Risk Reduction" by ARCADIS, RAND, and The Water Institute of the Gulf, dated March 17, 2014.
- "Upper Barataria Risk Reduction Modeling: Phase 2 - Rainfall & Storm Surge Combined Effects Modeling" by ARCADIS, RAND, and The Water Institute of the Gulf, dated July 8, 2015. These two studies combined found that the project as envisioned in CPRA's Master Plan has a benefit- cost ratio of 2.3.
- St. Charles Parish sponsored an economic study to more accurately quantify potential project benefits including business disruption and disruption to Hwy 90.
-

These have been changed in the main report and in the Engineering Appendix A.

6. References to Paradis, LA

Several references to Paradis, LA, the Paradis Canal, and the Paradis Canal Flood Gate are misspelled as "Paradise." While this is a minor detail, we would appreciate consistency for mapping and informational purposes.

All references to "Paradise" in the report were changed to "Paradis". We apologize for the misspelling.

Upper Barataria Basin, Louisiana, Feasibility Study

Appendix G – Annex 3

July 2021

ANNEX 3

UPPER BARATARIA PUBLIC MEETING ON WEBEX & FACEBOOK 1.12.21 CHAT NOTES

from Jamie Mobley to everyone: 9:57 AM

Thank you for joining us. We will begin the meeting shortly after 10 a.m.

from Jamie Mobley to everyone: 10:00 AM

https://www.youtube.com/watch?v=_hbghDDzBzY&feature=youtu.be

from Jamie Mobley to everyone: 10:01 AM

You can see the presentation with subtitles on YouTube anytime at the above link.

from Jamie Mobley to everyone: 10:05 AM

Please feel free to type your questions and comments into the chat at any time during the presentation.

from Jamie Mobley to everyone: 10:09 AM

You may also call (318) 467-8350 to leave a voicemail or text us your question or comment. (This number is for voicemail or text only).

from Jamie Mobley to everyone: 10:18 AM

Question from Facebook: Can you elaborate on the type of material that will be used to construct the levees? Particularly where inland fishing will be affected? Will this dramatically reduce tidal movement in the areas to the West of the proposed project?

from Mark Schleifstein to everyone: 10:20 AM

Why is armoring not included? What happens if overtoppping occurs with no armoring with this design? Who pays for rebuilding if elevation compromised without armoring? How quickly would compromised portions be restored?

from Jamie Mobley to everyone: 10:24 AM

Question from Facebook: Can you comment on review and consideration of the alternative proposals submitted to include all portions of Bayou Gauche, including Bayou Gauche island itself and Kerry's Pointe community?

from Bich Quach to everyone: 10:24 AM

Our design standard for levee embankment is Clay in accordance with ASTM D2487 as CL or CH with less than 35% natural occurring sand

from Danielle Keller to everyone: 10:26 AM

ANNEX 3

UPPER BARATARIA PUBLIC MEETING ON WEBEX & FACEBOOK 1.12.21 CHAT NOTES

Hydraulic structures are planned and intended to maintain flow regime outside of storm events. The system will only be closed during storm events so, theoretically it will not affect the normal tidal regime.

from Alisha Renfro to everyone: 10:26 AM

In the Feasibility report it says the official closing date for comments is January 29, 2021, but it's really the 25th?

from Jamie Mobley to everyone: 10:27 AM

Comment from Facebook: So earthen in structure, thank you! I'm familiar with the different types.

from Jamie Mobley to everyone: 10:32 AM

Question from Facebook: Has CPRA given this proposed project a code designation yet? I understand this is still in the feasibility study phase.

from Jamie Mobley to everyone: 10:35 AM

Don't forget, you can text or leave a voicemail question or comment to (318) 467-8350, or by email to UpperBaratariaFS@usace.army.mil at any time until the end of the project comment period on January 25, 2021.

from Jamie Mobley to everyone: 10:40 AM

Comment from Facebook: Y'all talk about coastal erosion. But what y'all are doing with this levee. Tbere will be no lower Louisiana. It will wash away from storm surge from Hurricanes. That's so sad to lose Louisiana because of y'all actions

from Jamie Mobley to everyone: 10:40 AM

Comment from Facebook: Thank you for your response! Good job.

from Wes LeBlanc to everyone: 10:41 AM

CPRA project number is BA-0211

from Jamie Mobley to everyone: 10:42 AM

For more information about the project, see the webpage: https://www.mvn.usace.army.mil/About/Projects/BBA-2018/studies/Upper-Barataria-Louisiana/

from Jamie Mobley to everyone: 10:43 AM

ANNEX 3

UPPER BARATARIA PUBLIC MEETING ON WEBEX & FACEBOOK 1.12.21 CHAT NOTES

Comment from Facebook: Excellent, thank you for the CRPA Project No. That's all from me, thank you for your time. I'm reading the report now on your website. Have a good day, stay warm!

from Jamie Mobley to everyone: 10:44 AM

Question from Facebook: How long can I expect to live in my house on Bayou Gauche Island, before I flood and can no longer live with water up to my roof. I'm in limbo right now. I can't do anything are make any changes in my house. When will I get money to buy a house somewhere else.

from Jamie Mobley to everyone: 10:48 AM

Hi Mark, the Public Affairs team will follow up with you after this presentation. Thank you for your questions.

from Jamie Mobley to everyone: 10:49 AM

Comment from Facebook: Reminds me of my days at HPO. Thank you for continuing to do the right thing. Over build, in time and under budget!!

from Jamie Mobley to everyone: 10:51 AM

https://www.youtube.com/watch?v=_hbghDDzBzY&feature=youtu.be