INTEGRATED DRAFT FEASIBILITY REPORT

APPENDIX J
PUBLIC INVOLVEMENT AND SCOPING

U.S. Army Corps of Engineers
Mississippi Valley Division
New Orleans District
7400 Leake Avenue
New Orleans, Louisiana 70118

November 2019

I. Initial Information Exchange Meetings (Week of November 5th-9th)

II. Meeting Distribution Execution

a. INVITE DISTRIBUTION
   i. Resource Agencies - Distributed on October 17th, 2018
   ii. Interested Parties - Distributed on October 25th, 2018

b. DISTRIBUTION LIST
   i. Parish Planning Boards
      Invitees: *Rachel Godeaux (Project Manager), Tammy Luke, and Heath Babineaux*
   ii. Emergency Managers
      Invitees: *Duval H. Arthur Jr. (Director), LTC. Terry E. Guidry, (Director), and Prescott Marshall (Director)*
   iii. Non-Profit Interest Groups
      Invitees: *Harold Schoeffler, and Donald Sagrera*
   iv. Levee Boards
      Invitees: *Mr. Bill Hidalgo (President), Mike Brocato, Ray Fremin, and including contacts from Red River – Atchafalya & Bayou Boeuf Levee District*
   v. Parish Engineers and Councilmembers
      Invitees: *David Hanagriff (President), M. Larry Richard (President), Chester R. Cedars (President), and Thayer Jones (Civil Engineer)*
   vi. Cities and Towns Coordination
      Invitees: *Ricky Calais (Mayor), Melinda Mitchell (Mayor), Mike Fuselier (Mayor Pro tem), Freddie DeCourt (Mayor), Dan Doerle (Mayor Pro Tem), April Foulcard (Mayor), Brad Clifton (Mayor), Frank P. Grizzaffi III, Louis Ratcliff, Rodney A. Grogan (Mayor), Eugene P. Foulcard (Mayor), Lester Levine (Mayor Pro Tem), and including contacts from Baldwin and Delcambre*
   vii. Industry Coordination
      Invitees: *Duane Lodrigue, Craig F. Romero (Executive Director), Roy A. Pontiff (President), and including contacts from Port of West St. Mary, Harry P. Williams Memorial Airport, Bayou Boeuf Lock, and Berwick Lock*
   viii. Tribal Coordination
      Invitees: *Rachel Watson, Charles R. McGimsey, Nicole Hobson-Morris, Andrea McCarthy, Kimberly Walden*

III. PUBLICATIONS

a. PRESS RELEASES
   i. Posted 11/07/2018: *"South Central Coast Study on Display"- Dredging Today*
   ii. Posted 11/06/2018: *"Corps to host public meetings in St. Martin, St. Mary parishes"- KATC*
b. PUBLIC NOTICES
   i. Posted 11/06/2018:*"Corps to host public meetings to discuss South Central Coast Study"-MVN Webpage*
   ii. Advertisement of Meetings - *Daily Iberian*
   iii. Advertisement of Meetings - *Acadiana Advocate*
c. PUBLICATION PARTICIPANTS (INDIVIDUAL NEWS/PAPER AGENCIES)
   i. Dredging Today
      https://www.dredgingtoday.com/2018/11/07/south-central-coast-study-on-display/
   ii. KATC
      https://katc.com/news/around-acadiana/2018/11/06/corps-to-host-public-meetings-in-st-martin-st-mary-parishes/

iii. Daily Iberian *(print)*
iv. Acadiana Advocate *(print)*

IV. MEETINGS #1

i. INTRODUCTORY INFORMATION

PDT meeting with Resource and Permitting Agencies

- When: *Tuesday, November 6, 2018, 1230-1400*
- Location: *MVN District Office, Conference Room 125*

ii. ATTENDANCE

Joe Jordan, Karla Sparks, Brian Johnson, Carrie Schott, Jeremiah Kaplain, Jason Emory, Haydell Collins, Elizabeth Behrens, Bill Klein, Marshall Plumley; Craig Gothreaux; Dave Walther, Ronald Paille; Gary Zimmerer; Michelle Meyers

iii. SUMMARY OF DISCUSSION

Introduction

Project Environmental Lead, Joe Jordan conducted introductions, and presented a project overview PowerPoint presentation, the presentation addressed project authority, schedule, existing data, and data gaps.

Discussion Topics:

1. FWS- Critical Habitat
   There is designated critical habitat in the study area for the gulf sturgeon.
2. Endangered Species
   The USFWS could provide a Planning Aid Letter discussing the potential federally listed species in the study area.
   - *Follow-up: Mr. Paille provided a draft PAL on November 20, 2018 (attached)).*
3. Land loss
   USGS has the most up to date information.
   - *Follow-up: Ms. Meyers provided additional data sources on November 7, 2018.*
4. Invasive Specie data source
   Terrebonne estuary website
5. Clean Water Act 404(c) lands
   Check with USEPA for any designated 404(c) lands.
6. Wetland Value Assessment
   Corps POCs are Patrick Smith and Daniel Meden. The USFWS may conduct the effort however.
   - *Follow-up: The MVN provided Fish and Wildlife Coordination Act funds to the USFWS. Part of this funding included the field work and WVA evaluation.*
7. Nature-based Alternatives
   Consensus from the groups supported nature based alternatives but wind, water, and storm surge could require more substantive alternatives. We could investigate using native grass seed rather than turf grass for any alternative requiring a grass cover. Lake Pontchartrain Foundation may be an example to follow. For nature based solutions. The resource agencies preferred levee placement as much as possible agricultural fields rather than wetlands for any levee alignment.
8. Group consensus was salinity may not be a problem in the study area.
9. Louisiana's Coast wide Reference Monitoring System (CRMS) (USGS) website has existing water quality monitoring data.
   https://www.usgs.gov/centers/wetland-and-aquatic-research-center/science/louisiana%E2%80%99s-coastwide-reference-monitoring?qt-science_center_objects=0#qt-science_center_objects
10. GIS

The MVN GIS team could provide state lands; FWS website has FWS refuge lands such as the Bayou Teche SE NWR complex real estate layers.

11. The Coastal Protection and Restoration Authority's website has a lot of data including the current State Masterplan with GIS information
12. Aerial photography - The final product may not be ready until August 2019. CRMA is flying the 2018 routes now.
13. High Impact mapping (from flooding and storms): FEMA has these maps.
14. Constraints

    Constraint 1: Proposed flood walls should allow wildlife passages every 3 miles.
    Constraint2: Keep water flowing; avoid stagnation.
15. Risk and Uncertainty

    Risk and uncertainty 1: Sizing outlets large enough for interior drainage versus using holding areas/smaller outlets for habitat value. This may not be acceptable to farmers and land owners.
    Risk and uncertainty 2: Induced flooding outside the planning area, particularly to the west.
    Risk and uncertainty 3: The report should articulate coastal storm surge, overland river flooding, and interior rain flooding to the public.

b. **MEETING #2-3**

i. INTRODUCTORY INFORMATION

Stakeholder Meeting

- When: *Wednesday, November 7, 2018, 1300-1500*
- Location: *St Peter Street Branch Library, 1111 W Saint Peter Street, New Iberia, LA 70560*

Public Meeting

- When: *Wednesday, November 7, 2018, 1800-2000*
- Location: *Cade Community Center, 1688 Smede Highway, St. Martinsville, LA. 70582*
- A court reporter documented this meeting in writing. This record is included at the end of this appendix.

ii. ATTENDANCE

Karla Sparks, Brad Inman, Carrie Schott, Joe Jordan, Jeremiah Kaplan, Brian Maestri, Britt Corley, Stacey Frost, Justin Merrifield, Wes LeBlanc, Kristen Ramsey, Alexis Ritner, Harold Schoeffler, Benson J Langlinias, Donald Segrera, Dave Dixon, Brent Logan, Woody Anderson

iii. SUMMARY OF DISCUSSION

Discussion Topics:

1. 2016 event and river flooding. - Will this be part of the study?
2. Ben Langlinias Iberia LD:

   Vermillion Bay the biggest storm surge and wanted to be a part of the SW study. Political boundaries don't work. (Encourage study to look broader when modeling water.)
3. SW and SC study need to be put together.

   CPRA study has it all. Master Plan.
4. Need models to help flood way and regional flooding, not just hurricane surge.

   FEMA requires certification for both.
5. Vermillion was cut in half based on the SW study
6. Need to study watersheds

   Not parish boundaries, Authority is just for the parishes (Brad), Wasting time not looking at hydraulic units not parish boundaries.
7. Our analysis has the obligation to not move flood risk outside the study area

   Add: Stacey Frost – H&H will done at the watershed level but actions will be limited to within boundaries.
8. Harold Schoeffler, Sierra Club:

Highway 90 route was under water for 10 days. Potential options include: Going to raise the land, Build bridges, Hurricane evacuation – not rain events (Brad)

9. Wes LaBlanc:
   Dollar value for highway 90 effectiveness. Brian M. says benefits are time/costs in getting back to the area. CPRA will help gather delay costs (to traffic and industry restart up)
10. Henry Hub property is the most expensive property and should be part of the project area (west of the project area)
11. We look at 1% for surge. 10% for rainfall regardless of when the rain falls
12. Ben Langlinias, Iberia LD
    Likes the idea of a locally preferred plan. We can do this right, we just need the money to do it.
13. Harold Schoeffler, Sierra club
    Will you model the Atchafalaya - can't handle the flood? The depth is insufficient to handle a flood will the study look at riverine flooding?
    1. *MRC is studying this along the Atchafalaya (Brad)*
    2. *Another study old river control study, not this one.*
14. Are probabilities of floods increasing? - *Yes (Stacey)*
    We have current probability curves.
15. Rainfall occurrences are increasing. - *Yes*
16. FEMA numbers show areas where damages (Brit)
    The group needs to help us show where the damages are too.
17. Long discussion on flood insurance who has it who does not.
18. Infrastructure in place could a small portion.
    There is accelerate building now. They presented some of this data to the corps before. Use existing lock to release water. Is there a system wide flood control project and run by the corps?
    1. *Could be an alternative? (Stacey) – System Operation Optimization could be an alternative.*
    2. *May need additional authority. (Stacey)*
    3. *Mark Wingate and Nick Simmshas have been given a study concerning this.*
    4. *Brad will ask them about it.*
19. Rita, Isaac, Audrey are the worst hurricanes to hit Iberia
20. Sea level rise
    Answered how it is calculated (Stacey), Sierra Club says 1 foot per century at Venice LA gauge. USACE will evaluate see level rise in project.
21. Sierra Club – riverine, hurricane, rainfall.
    All occur at the same time or can these be separated
22. Projects only found in the 2017 masterplan can be considered.
23. Sierra club – had a project dismissed –Charitan Cut - a closure/dredge project.
    St Mary Parish was trying to do this project for many other parishes.
24. Will FEMA be part of this study? – *Yes, FEMA will be invited to participate as a cooperating agency.*

c. **MEETING #4-5**

i. INTRODUCTORY INFORMATION

Stakeholder Meeting

- When: *Thursday, November 8, 2018, 1300-1500*
- Location: *St. Mary Parish Library West End Branch, 100 Chitimacha Trail, Baldwin, LA 70514*

Public Meeting

- When: *Thursday, November 8, 2018, 1800-2000*
- Location: *Morgan City Municipal Auditorium, 728 Myrtle Street, Morgan City, LA 70380*

- A court reporter documented this meeting in writing. This record is included at the end of this appendix.

ii. ATTENDANCE

Karla Sparks, Jason Emery, Carrie Schott, Joe Jordan, Jeremiah Kaplan, Brian Maestri, Britt Corley, Sarah Bradley, Stacey Frost, Wes LeBlanc, Kristen Ramsey, Alexis Ritner, Jay Vicknair, Cindy Cutrera, Michael Elay, Tim Matte

iii. SUMMARY OF DISCUSSION (See Court Reporter's notes)

Discussion Topics:

1. Two agencies
   ST Mary homeland security & parish district need to be consulted.
2. Bayou Shane's control structure is coming on line
   St. Mary and St. Martin parishes design stage and waiting for funding.
3. WRDA supposed to be looking at the old river lock
   70/30 split bet Miss and Atchafalaya needs to be looked at.
4. Delta at the Wax Lake
   Funnels water if flooding - then Morgan City gets it. Shallow areas in the bay nowhere for the water to go - needs to be looked at. There is economic loss from this work loss. Temp structure - can't afford to put it back in. Not a national loss since the work was picked up somewhere else in the country. Can use the cost of added O&M to the businesses affected.
5. Would help as a reference to look at claims.
6. Arcadia planning commission is modelling on the watershed
7. Governor has a commission for state watershed modelling.
   Maybe DOT - LA watershed data exchange Nov 15, Cindy O'Neail State floodplain manager may have data.
8. Bayou Shane permit may have a lot of information.
   Cost benefit will dictate the level of protection. St Mary MP have additional levee alternatives.
   1. *Plus Morgan City has a local levee system at 1% that is not reflected in corps information.*
   2. *West of Chariton canal there is certain levee alternatives St Mary is looking at.*
9. Cedar Ray study
   Cost estimate was geared to 1% if there is something different they can readjust to get a good BC ratio.
10. SW coastal levee to Delcambre was costly it should go straight east because of study area limitation
    We may hear about this from the public.
11. FEMA has a map of every structure damaged from the last flood
12. Some companies need to be in the unprotected zone, they have a higher OM cost no one is measuring.
13. Old River complex
    High water spending a lot on this.
14. Fuel docks 2011 flood – they had to empty the fuel tanks prior to damage, may be added cost for economic impact.
15. Carbon black plants may have environmental costs if damaged
16. SW coast industry survey low response.
    Industry doesn't like to share info, maybe talk to chamber of commerce to encourage info sharing.
17. Stakeholder group – business along shore.
    Can encourage them to fill out any survey. Suggested having regular stakeholders meetings – maybe monthly webinars.

d. **MEETING #6**

i. INTRODUCTORY INFORMATION

Chitimacha Tribe of Louisiana South Central Coastal Louisiana Flood Risk Management Feasibility Study THPO Coordination Meeting

- When: *November 8th, 2018*
- Where: *3289 Chitimacha Trail, Charenton, LA 70523*

ii. ATTENDANCE

Kimberly S. Walden, Tribal Historic Preservation Officer (THPO), Chitimacha Tribe of Louisiana (CTL); Jason A. Emery, RPA -MVD Cultural Resources RTS and MVN District Tribal Liaison Cultural & Social Resources Analysis Section (CEMVN-PDP-CSR) Regional Planning and Environment Division, South; Jeremiah Kaplan, RPA - Cultural & Social Resources Section (CEMVN-PDP-CSR), United States Army Corps of Engineers, New Orleans District Regional Planning and Environment Division, South.

iii. SUMMARY OF DISCUSSION

Purpose:

Scoping meeting to introduce and provide the CTL THPO with a description and overview of the South Central Coastal Louisiana Flood Risk Management Feasibility Study Project (SCCL) in an effort to include the input of the CTL in the planning and development stage of the project.

Discussion Topics:

1. CEMVN provided Public Scoping Meeting handout materials for distribution on reservation and provided a brief overview of key points regarding the SCCL project and its framework including:

   CEMVN is preparing a feasibility report investigating hurricane protection, storm damage reduction and related purposes along the southern Louisiana coast. Specifically, the study authorization is tasking the District to survey the coast of Louisiana in Iberia, St. Martin, and St. Mary parishes to determine the feasibility of providing hurricane protection, storm damage reduction, and related purposes. CEMVN is investigating potential solutions including levees and floodwalls, hydraulic and salinity control structures, non-structural efforts, and shoreline stabilization measures. CEMVN will not be considering ecosystem restoration as was done in the 2016 Southwest Coastal Louisiana Multi-Purpose Study. The Coastal Protection and Restoration Authority Board (CPRA), is the project's non-Federal sponsor. The study's constraints under the "one agency, one decision" review structure including expedited project schedule. CEMVN is requesting feedback from CTL on where there are specific opportunities to reduce damages, risk, and increase life safety. Additionally, CTL was asked to identify any potential conflicts that CEMVN needed to be aware of during the development of alternatives. CTL's participation and comments will contribute to the project thorough alternative analysis and environmental evaluation.

2. Specific feedback from CTL included:

   Charenton Floodgate Funding for two-way water control: hosted a couple of meetings on this and there is no money for the work at this time, but this feature is recognized as really risky for Tribes and others in the "Teche" (Bayou Teche).
   Cote Blanche Freshwater and Sediment Introduction, and Shoreline Protection Project, St. Mary Parish, Louisiana (Attachment 1): identified by CTL as a potential component for SCCL. Joint USACE/NCRS project. Already designed. Focuses on shoreline restoration and marsh creation (multiple lines of defense model-integration of naturally engineered features). Project not have been implemented due to the results of Hazard Magnetometer survey which showed numerous abandoned pipelines. Brad Inman (Senior Project Manager at US Army Corps of Engineers) was supporter of project. Potential problems to solve: 1) numerous abandoned pipelines; 2) funding approval; 3) may focus too much on ecosystem restoration. Cutting off Charenton Drainage Canal – may be good for Franklin but may cause problems for others on the west side of the Teche.

The SCCL project has the potential to affect the Lake Fausse Pointe, Dauterive Lake, and Grand Avoille Cove Ecosystem Plan (Attachment 2; Figure 1). This project aims to control extensive sedimentation/vegetative overgrowth affecting fish and wildlife habitat in the study area. Excerpt from letter to Col. Edward R. Fleming, District Engineer, USACE, from David Walther, USFWS, August 31, 2011:

The goal of the Lake Fausse Pointe Restoration Project is also to improve the natural fisheries habitat quality of the lake by reducing sedimentation of the lake and providing habitat for commercial and sport fish species…A system-wide approach to reduce sedimentation is needed to effectively improve fisheries habitat in the lake…The overall planning goal should incorporate the co-equal needs for continued drainage of storm-water runoff, sediment control, and fish and wildlife conservation.

3. Other discussion points of interest:

The location marked as "Flood Area" in Figure 1 is subject to repetitive flooding. It is suspected that a private landowner is responsible for these releases.
The CTL is interested in participating in the development of this study and is able to call a meeting with tribal community members and resource agency partners to provide additional feedback and direction during the development of alternatives. It was discussed that one of the major challenges to this study is that runoff (riverine and non-riverine) due to increasing flow from outside the project area (upstream and neighboring parishes) is presently one of the major factors impacting the study area.<u>CTL has concerns that a structural solution that focuses on coastal levees has a high potential to impact a large number of cultural resources of tribal interest.</u> Any land-based structure would likely be focused in areas that the Chitimacha have ancestral ties to. Levee alignments placed on the landward side of mounds have the potential to be especially problematic as do any backwater conditions created by levees during storm events that may impact tribal cultural resources. The CTL is willing to participate in the development of a programmatic agreement as a consulting party, but is very concerned about the treatment of cultural resources. USGS sea level rise projection specifically for the CTL was provided and should be addressed.

e. **<u>MEETING #7</u>**

i. <u>INTRODUCTORY INFORMATION</u>

PDT Second Iteration

- When: *Friday, November 09, 2018, 0830-1230.*
- Where: *U.S. Army Corps of Engineers New Orleans District Office.*

ii. <u>ATTENDANCE</u>

Carrie Schott, Joe Jordan, Jeremiah Kaplan, Brian Maestri, Britt Corley, Chris Talbert, J. Haydell Collins ,Dave Beck, Karla Sparks, Marshall Plumley, Sarah Bradley, Evan Stewart, Bill Klein, Justin Merrifield, Wes LeBlanc, Kristen Ramsey, Alexis Ritner, Ricky Brouillette

iii. <u>SUMMARY OF DISCUSSION</u>

Discussion Topics:

1. <u>Problems & Opportunities</u>

a. *Remove "by providing non-structural solution's"*

b. *Hwy 90 flooding (I-90 evacuation route (remove reliable as it isn't reliable currently) Where is the flooding occurring first?/Check with DOT to see if they have updated plans for Hwy 90.)*

c. *Flood Risk Statement will need to separate out rain fall events impacts and interior drainage issues from riverine and backwater flooding*

d. *Sea Level Rise (Team will need to look at low, med, and high scenario. - Haydel will check the differences between sea level rise projections within project area and make a recommendation which future scenario team should adopt., CPRA and Corps rates are different. - PDT to determine which one we will use, typically Corps medium estimate.)*

e. *Trends in water quality and salinity (Salt water intrusion issues and occurrence is not an everyday issue but with storm events it is an issue. Following Storm surge events, salt gets on the fields and then can't get back out.)*
f. *Improve drainage could have negative consequences because it will generally increase the elevation the storm surge is able to go.*
g. *Existing levees in flood area were designed for riverine flooding do not provide storm damage reduction to the 1% hurricane criteria. (Planning team is not limited to the 1% reduction. Team will optimize level of protection based on impacts and consequences. - Remove percent in the hurricane and storm and damage risk reduction statement, need to assess flood risk to public utilities and services, hospitals, and critical infrastructure.)*
h. *Need to add statements about Oil and Gas infrastructure, Ports of Iberia and contributions to the nation*
i. *HTRW (Phase 1 will need to be complete when team gets more of a focused array or potentially after TSP. Dave Beck will check on who will be assigned to SCCL to complete HTRW assessment, prevention.)*
j. *Separate interior drainage problems (Need pumps to decrease interior flooding when gates are closed – Interior damage is induced flood damages behind levees.)*
k. *Have to pass design flows - (What is the design flow/what is the existing condition design flow, is this a constraint, and is this a salinity barrier?)*
l. *Locals want the 1% level of protection to reduce flood insurance*

2. Goals and Objectives
   a. *Objective 1b change to interior and flooding to riverine and back-water flooding.*
   b. *Natural based feature won't prevent storm surge but will reduce the wave height.*
   c. *Concern with objective 2 given the limitation in payment authorization. (This objective is meant to capture WRDA 16 Sec 1184. - This guidance defines natural features and nature-based features and requires USACE to consider natural features, nature-based features, non-structural measures and structural measures as appropriate with studying the flood risk management, hurricane and storm damage reduction, and ecosystem restoration.)*
   d. *Inventory and Forecasting Refinement*
   e. *Marsh loss over the last 50-60 years needs to be combined with sea level rise. (Can we reasonably quantify the impacts of marsh creation vs. levee raises? - Comparison of costs, every mile of marsh a foot reduction of surge (1960's USACE report), duration of storm can greatly effect this, hurricanes in 4 and 5 are expected to increase in number. (These types of measures are less able to with stand these types of storms.).) NOTE: Wave height and storm surge increase may use this matrix as a proxy of how these measures would perform.*
   f. *Goal 2 - Reduce impact of feature marsh loss over the last 50 years and suture and sea level rise. (Can you quantify the FRM loss and tie this to levee height needs?)*
3. Constraints
   a. *Consistent with the LA Master plan. May be able to deviate if levee was in same corridor. However would not be able to support a total non-structural alternative.*
   b. *Move north alignment to reduce leveed area*
   c. *Ring levees in the certain areas would likely not be supported by CPRA.*
   d. *Mandatory relocation- non consistent with CPRA LA Master Plan and not able to support.*
   e. *Non-mandatory relocation would align with CPRA LA Master Plan.*
   f. *Locally Preferred Plan option*
   g. *LA Master Plan will be updated in 2023. This sponsor will need to support an alternative that aligns with the intent of the 2017 Master Plan*
   h. *Ag Mac - channel deepening to Port of Iberia (study about 12-15 years ago)*

i. *GIWW spoil banks- have been falling in and widening the channel. (GIWW seemed to provide a level of protection.)*

4. Measure Identification and Alternative Formulation
   a. *State levee alignment (Arcadis report) (could be minor variation in alignment; for example smooth out 90 degree corners)*
   b. *Railroad alignment, this alignment would reduce the leveed protected area and length of the levee*
   c. *Ring levees around New Iberia and Delcambre Franklin, Jeanerette, etc. This measure would focus on the communities experiencing the reoccurring damages epicenters. CPRA stated would likely not be able to support this measure as it isn't in alignment with LA Master Plan.*
   d. *Levee raise on existing riverine authorized levees; lake wax, bayou teche, sale, ridge to protection from storm surge and hurricane*
   e. *Shoreline protection feature (Northern Vermillion Bay Rim) feature would reduce erosion and storm surge impact in that location. Part of this feature alignment in LA Master Plan is outside of the Project area.*
   f. *Road Raises- elevate critical infrastructure for evacuation purposes. St. Mary levee POC can provide specific location where I-90 goes under water quickly.*
   g. *Marsh creation would serve to reduce storm surge impacts. (ADCERC runs on what type of protection this specific features provides. Measure will need to be justified on what FRM damages it can prevent as project funding authorization is limited to flood risk management.*
5. Potential Measures
   a. *Regular measures*
      1. *Masterplan has proposed levee raises in the Morgan City area*
      2. *Use ARCADAS report for structural and 2 levels of protection*
      3. *Move levees out of the marsh into farmland*
      4. *Look at all if all are required (so we don't flood others – Dependency) Dependency vs segments, ring levees around specific areas (New Iberia)*
      5. *Combination of structure/nonstructural features*
      6. *Pump station vs retention areas*
      7. *Mash lake Area, Rabbit Key, Duck Key restoration for wave attenuation*
      8. *Road raises or levees in the road ROWs*
      9. *Nonstructural only*
      10. *Consolidated water management across all entities and existing facilities – hydrology is inconsistent and the plumbing is all different. State MP may be able to do this – Federal navigation may contribute to this also.*
      11. *Shoreline protection may have storm surge marsh island protection since Marsh Island will be lost in 50 years*
   b. *Non-Structural Measures*
      1. *Marsh Island inlet closure would serve to reduce storm surge and wave heights.*
      2. *Retention features on the inside of the leveed area (instead of pump) would serve to reduce the cost of pumps*
      3. *Retention features on the inside of the leveed area to reduce size of pumps*
      4. *Marsh Island wave attenuation structures*
      5. *Restore Rabbit key would serve to reduce storm surge and wave heights.*
      6. *Restore Duck Key would serve to reduce storm surge and wave heights.*
      7. *Wave break structures off the coast would serve to reduce fetch.*
      8. *Operational Optimization use existing structures and pumps and reevaluation systemic operations per event types to reduce impact*

9. *Non-structural scenario identified in LA State Master Plan. Summary is structures that are 0-3 ft. in elevation are wet/dry proofing ; 3-14 ft. elevation of structures are elevated; structures that would need to be elevated more than 14 feet would include voluntary acquisition*
10. *Managed overtopping of new levees which would serve to reduce elevation of hptrm. Overtopping locations would be designed with high performance turf reinforced mat*
11. *Reduction of factor of safety or specific criteria for a levee or segment of levee. This would reduce the leveed height and cost of mitigation and construction costs.*

6. Alternative Formulation Notes
   a. *Formulation of Sea Level Rise for low med and high scenarios is the new H&H guidance. Team will need to evaluation all 3, select a most likely and communicate residual risk. Other studies have then combined subsidence with sea level rise in the Future without Project.*
   b. *CPRA would prefer the team selected the high scenario as there is discrepancy between USACE and state estimates.*
   c. *Team will tentatively plan to utilize the levee segments in the State (Arcadis) report.*
7. Additional Questions?
   a. *Something for the Risk Register?*
   b. *Are we assuming the HISRIS levee safety standard or something less (could conserve money)?*

f. **MEETING #8**

i. Public Meeting
- When: *Thursday, May 14, 2019, 1800-2100*
- Location: *14 MAY 2019, Cade Community Center, 1688 Smede Hwy, St. Martinsville,* LA *70582 6-9 p.m.*

ii. ATTENDANCE – (Figures 1 & 2)

g. **MEETING #9**

i. Public Meeting

- When: *Wednesday, May 15, 2019, 1800-2100*
- Location: *Morgan City Municipal Auditorium, 728 Myrtle Street, Morgan City, LA 70380*

ii. ATTENDANCE – (Figures 3 & 4)

h. **SUMMARY OF DISCUSSION FROM BOTH MEETINGS**

General Comments:

- Residents in St. Mary want to dredge the canals to allow for faster gravity drainage. SMLD has explained that will assist with drainage but will also allow storm surge to come into the fields farther and make salt intrusion conditions worse.
- Chitimacha Tribe is pushing to get the Charenton flood gate replaced. Feature will not be considered under South Central Coast
- Public member on 15-May meeting stated that several local businesses and residents on Front Street, Morgan City would consider relocation.
- Railroad alignment SMLD suspects will be a ROW issue. Farmers have previously stated they are not willing to give up property.

Potential New Features:

- Mike Brocato, St. Mary Levee District (SMLD) mentioned some new features. Speed bumps/culverts by park we need to look at. Bay features that one individual mentioned. Action Item: Discuss feature options with PDT.

- Site specific coastal storm reduction measures at Lake Front, Lakeside Subdivision, in Morgan City needs to be taken into consideration. Mike said there was no funding to further design but does have preliminary alignments and pump station features. Action Item: Discuss feature options with PDT.
- Verdunville haul road may be an additional evacuation route. Partially paved and partially gravel. Haul road could possibly be used as a levee alignment. Action Item: Discuss feature options with PDT.
- Amelia has river flooding. Confirm Bayou Buff currently in P&S would address flooding. If not consider new feature. If yes, ensure inclusion in existing condition and FWOP. Action Item: Haydel Collins, Evan Stewart, and Chris Talbert confirm inclusion into existing conditions and future without project (FWOP).
- Highway 70 has flooding. Specifically public member on 15-May, Wanda, stated approximately ½ mile of road has been under water for 2 weeks. Requires a large truck for commute back and forth to work. It is a main evacuation route for study area residence and New Orleans area. Action Item: Discuss feature options with PDT.
- Salt water tolerant cypress tree species studies have been on –going at LSU for several years. Public member suggested USACE look into using this species to plant in mitigation to improve success of survival. Action Item: Joe Jordan will look into water tolerant cypress trees for inclusion into mitigation plan.
- Morgan City Port, POC Mac, stated they spend too much in dredging. Stated they would like levees near Bayou Chene. There is a barge in Bayou Chene now slowing flow. Action Item: Discuss feature options with PDT.
- •Lake Fausse has backwater flooding of structures during large events. Could be a location for site specific measure. Action Item: Discuss feature options with PDT.

Existing Conditions and Future without Project (FWOP):

- Ring levee around Baldwin (Bayou Shoe Pick) is in construction and funded. Funding is coming from DOT Grant Funds. Action Item: Haydel Collins, Evan Stewart, and Chris Talbert confirm inclusion into existing conditions and future without project (FWOP). If need follow up can contact Mike Brocato with St. Mary Levee District (SMLD)
- Bayou Chiupiqu is currently in construction. Action Item: Haydel Collins, Evan Stewart, and Chris Talbert confirm inclusion into existing conditions and future without project (FWOP).
- Bayou Chene Flood Protection- Will be permitted in June of 2019 and completed in 2023. Action Item: Haydel Collins, Evan Stewart, and Chris Talbert confirm inclusion into existing conditions and future without project (FWOP).
- West of Teche Ridge levee is in bad condition seems to affected by subsidence more. Action Item: Carlos Hernandez and Chris Talbert confirm inclusion into existing conditions and future without project (FWOP).
- Yockley extension Project is permitted and in construction. This is a $12.5 million investment. Action Item: Haydel Collins, Evan Stewart, and Chris Talbert confirm inclusion into existing conditions and future without project (FWOP).
- Bayou Teche Floodgate on the eastside will be in place. Action Item: Haydel Collins, Evan Stewart, and Chris Talbert confirm inclusion into existing conditions and future without project (FWOP).

V. UTILIZATION OF GATHERED INFORMATION

Information collected during the agency coordination meeting, interested parties, and project sponsor will be utilized to identify problems and opportunities, project specific objectives and constraints, and alternatives. This coordination summary will be included in this appendix for the report and a section will be added that describes how information was utilized during the study process.

VI. FEEDBACK AND ADDITIONAL PUBLIC COMMENT (See Attached)

ADD COURT REPORTER"S REPORT

ADD ATTENDEE LIST FROM Nov MTgs

Add all comment cards

ATTENDANCE RECORD

US Army Corps of Engineers
New Orleans District

Date: 14 May 2019 | South Central Coast Public Meeting | Location: St. Martinville

PLEASE PRINT CLEARLY

	Name	Address City State Zip	Email	Phone
1	Joel Dugas	1117 Edward Provost New Iberia La 70563	Joel.Dugas@faussepont.com	337 352 0101
2	Gerald Bodin	1035 Mable Lane St. Martinville LA 70582		" 394-3796
3	Marty Trahan	5107 Creighton Dr. New Iberia	marty.[illegible]	337-380-3866
4	Brandon Bernis	3737 Catahoula Hwy St Martinville 70582	BBernis2@Hotmail	
5	Benson J. Langlinais	4701 Railroad Rd; New Iberia, LA. 70560	ben-langlinais@delcambre.net	337-322-1214
6	Joseph Berlin	7989 Florida Baton Rouge, LA	joseph.berlin@aecom.com	225-231-6796
7	[illegible]	[illegible]		[illegible]
8	David Poirier	1817 Cypress Island Hwy ST. Martinville La 70582		(337) 680-1405
9	Wes LeBlanc	CPRA	joseph.leblanc@la.gov	225 342-4127
10	Justin Merrifield	CPRA	Justin.Merrifield@LA.gov	225 342 4629
11	Alexis Rixner	CPRA	alexis.rixner@la.gov	—
12	Jeanella Ledet	1144 Bridgetowne Lane, Breaux Bridge LA	Nellabean0710@gmail.com	(337) 254-0471
13	Howard Ledet	1144 Bridgetowne, Breaux Bridge	Nellabean0710@gmail.com	(337) 654-5564
14	Robert Hester	178 Catherine St Lafayette, La 70503	hesterrjb@gmail.com	
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Figure 1

ATTENDANCE RECORD

US Army Corps of Engineers
New Orleans District

Date: 14 May 2019	South Central Coast Public Meeting	Location: St. Martinville

PLEASE PRINT CLEARLY

	Name	Address City State Zip	Email	Phone
1	James Landry	5319 Coteau Rd. New Iberia LA 70560	jlandry@cityofnewiberia.com	337-380-9904
2	Scott Saunier	300 Iberia Street Suite 400 New Iberia LA 70560	ssaunier@iberiagov.net	337 256 1210
3	ALFRED ROBERTSON	233 ELMER street St. MARTINVILLE		337-519-0214
4	Joseph T. Meyers	6619 Doyance Rd. New Iberia, LA 70560	Kwlmeyers@bellsouth.net	337-380-2803
5	PAUL E LANDRY	140 PLANTATION DR N I, LA	PLANDRY7@BELLSOUTH.NET	337-256-0980
6	Byron Fuselier	1254 Builder Plantation Dr, St. Martinville	ByronFuselier@yahoo.com	337-277-1487
7	Ricky Melancon	1680 Section 28 Rd St. Martinville	RickyProtest@gmail.com	337-552-5730
8	Michael Eby	5555 Hilton Ave. Ste 100, B.R. LA 70808	michael-eby@cassidy.senate.gov	(225) 929-7711
9	Simone Domingue	1076 Lafayette LA 70506	sjdomingue@gmail.com	337-322-8911
10	Danny Walet	13914 Rodrigue Rd, Loreauville LA 70552	dannywalet@yahoo.com	337-789-1622
11	Clint Bergeron	1879 Cypress Island Hwy 70582		337 280 4600
12	Ronald Gonsoulin	4804 Jefferson Isl New Iberia La 70560	rgonsoulin1@gmail.com	337 658 5574
13	Jon Bridgeman	150 Terrace Ave Baton Rouge LA 70801	jonathan.bridgeman@la.gov	
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Figure 1

ATTENDANCE RECORD

US Army Corps of Engineers
New Orleans District

Date: 15 May 2019 | South Central Coast Public Meeting | Location: Morgan City

PLEASE PRINT CLEARLY

	Name	Address / City / State / Zip	Email	Phone
1	DONOVAN GARCIA	P.O Box 249 Jeanerette LA 70544	Needtopaddle@yahoo.com	337-923-9718
2	P Cum	P.O Box 866		
3		JAMES PHENY		
4	PAUL NAQUIN	P.O. Box ~~249~~ 317 Baldwin 70514	paulnaquin~~fs~~@gmail.com	337-230-0374
5	Sandra Naquin	" "		337-923-2521
6	Mike Pugh	3706 Napoleon AV NOLA 70125	mpugh@royalengineering.net	
7	WILLIAM CENAC II	207 S. LOCKSLEY DR. LAFAYETTE 70508	wcenac@ducks.org	337 277 4781
8	Ricky Mayon	920 Sycamore St MC LA 70380		
9	Roy Bergeron	803 PINE ST. M.C. LA. 70380	ROY@ELECTRONICSCORNER.COM	985-385-1818
10	RONNIE SHAW	123 ROCAGE HOUMA 70360	RSHAW @ [illegible] NB	985-209-0791
11	Will Terry	14268 Hwy 182W Jeanerette 70544	wt3747@gmail.com	337-578-3276
12	Michael Brocato	7327 Hwy 182 East MorganCity 70392	michael.brocato@smld.org	985.380.5500
13	John Kahl	PO BOX 571 Franklin, LA 70538	Kahl@stmaryso.com	
14	Butch Flanclin	1013 Park Estates Ct. Pierre Part 70339	butch@HLLAWS.COM	
15	Jack Vilas	1012 Pauline Ct MC LA	jackvilas@att.net	985-519-0993
16	Chris Jackson	1005 Francis Ct Morgancity LA 70380	Jackson122884@Gmail.com	985-397-4517
17				
18				
19				

Figure 2

US Army Corps of Engineers
New Orleans District

ATTENDANCE RECORD

Date: 15 May 2019	South Central Coast Public Meeting	Location: Morgan City

PLEASE PRINT CLEARLY

	Name	Address	City	State	Zip	Email	Phone
1	Jana B. Guidry	300 Chateau Place	Lafayette	LA	70503	jbguidry@hotmail.com	337-704-1942
2	Zach Fitzgerald	The Daily Review, Morgan City				news@dailyreview.com	985-384-8370
3	Wanda Robicheaux	814 3rd St	Morgan City,	LA		wrobicheaux@bellsouth.net	985-518-7510
4	STEVE BERGERON	16009 VICTOR II BLVD	M.C.	LA		STEVE@ELECTRONICSCORNER.COM	985-385-1818
5	MAC WADE	POM				MAC@portofmc.com	9854989337
6	Cindy Cutrera	Port of Morgan City				Cindy@portofmc.com	985-312-2596
7	Lou Tamporello	CITY/PT MC				rella@dtvei.net	985-518-5576
8	Glen J HIDALGO	1211 COLUMBUS AVE	MORGAN CITY	LA		ghidalgo@cox.NET	985-518-4757
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Figure 2

January 22, 2019

Acadiana Citizens for Flood Prevention
Lafayette, LA

Colonel Michael Clancy
Commander and District Engineer USACE New Orleans District

Re: Flood Protection for Acadiana

Dear Colonel Clancy,

We have furthered our research regarding potentially utilizing the Keystone lock on Bayou Teche in St. Martin Parish as an emergency flood gate. We believe opening the lock would aid in reducing flooding on the Vermillion River, Bayou Teche, and 4 related parishes. We discovered that the authority to manage pool stages in Bayou Teche north of the Keystone dam remained with the USACE when the lock operation was transferred to St Martin Parish back in 2010. Included is the related document with this language highlighted for your reference.

Regarding the risk of a major flood in our watershed we note the below data analysis.

We have updated our frequency of flooding on the Vermilion to include the last 2 year's worth of data. We have experienced 5 additional 12' flood events in the last 24 months which is an annual increase of 200% over the frequency during the earlier years of the current decade . The annual frequency of these 12' flood events is now 1.5 per year for the current decade. Please see the attached trend graph of these flood events.

We believe this flood frequency increase to be attributed to the local parishes successful efforts to improve local drainage after the 2016 flood event which increases water volume in the Vermillion more quickly.

Additionally, pool stages in both the Teche and Vermilion have remained excessively high after the above flood events for an extended period even though we had north winds and very low tides in the Vermilion Bay. This indicates that the known shoaling in the Vermilion as per the USACE survey conducted in May 2017 is greatly hindering drainage.

Considering the recent increased risk we ask the USACE to consider the following 2 requests:
1. Conduct a Maintenance Dredge project of the Vermilion River to restore the river to the authorized channel dimensions.
2. Determine the feasibility of using the Keystone Lock as an emergency flood control resource until the Vermilion Dredge Project is completed.

Please note there was a precedent of utilizing the Keystone Lock as an Emergency Flood control resource during the great flood of 1927.

We request your prompt consideration of the 2 above items.
Regards
Acadiana Citizens for Flood Prevention

Dave Dixon

Harold Schoeffler

Brent Logan

Darrell Fontenot

Cc: Mr. Mark Wingate USACE Deputy District Engineer
Ms. Tracy Falk USACE Supervisory Civil Engineer
Mr. Nick Sims USACE Project Manager
Mr. Bill Fontenot President Acadiana Planning Commission and St. Landry Parish
Mr. Joel Robideaux President Lafayette Parish
Mr. Kevin Sagrera President Vermilion Parish
Mr. Chester Cedars President St. Martin Parish
Mr. Larry Richard President Iberia Parish
Mr. David Hanagriff President St. Mary Parish
Ms. Monique Boulet CEO Acadiana Planning Commission
Mr. Donald Sagrera President Teche-Vermilion Freshwater District
Mr. David Cheramie President Bayou Vermilion District
US REPRESENTATIVE CLAY HIGGINS
US REPRESENTATIVE RALPH ABRAHAM

December 4, 2018

Comments on South Central Coast Feasibility Study

1. Study must consider flooding caused by
    a. River floods
    b. Hurricane storm surge
    c. High rainfall events
    d. Flood tides caused by high winds combined with local rains
2. Issues to consider in reducing flood levels
    a. Initiate and put in place a plan to use existing gates and locks to lower flood stages (Key Stone, Henderson and Catableau)
    b. Dredge the Jaws to restore flows to Charenton Canal Outlet into West Cote Blanche Bay
    c. Use dredge spoils from deepening of the Atchafalaya River to restore Point Au Fer Peninsula and to reduce channel capacity between Point Au Fer and South Point Marsh Island
    d. Restore Channel Capacity to authorized depth in the Vermilion River System
    e. Build permanent levees and gates at Amelia to reduce backwater flooding into St. Martin Parish and surrounding area

Harold Schoeffler

Harold Schoeffler

Chair Acadian Group Sierra Club

Recd 12/21/18 ns

U. S. ARMY CORPS OF ENGINEERS

NEW ORLEANS DIVISION

PUBLIC MEETING

HELD WEDNESDAY, NOVEMBER 7th, 2018

IN RE: PUBLIC INPUT ON FEASIBILITY STUDY FOR

HURRICANE AND STORM PROTECTION AND STORM DAMAGE REDUCTION

FOR THE SOUTH CENTRAL COAST OF LOUISIANA

COMMENCING AT 6 O'CLOCK P.M.

CADE COMMUNITY CENTER

1688 SMEDE HWY

CADE, LOUISIANA 70582

23

24

25

APPEARANCES:

Officer with the Corps 3

Carla Sparks, Civilian Engineer

21

22

23

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INDEX

PROCEEDINGS:

(Meeting is caiied to order.)

OFFICER: Tonight is a two-part meeting. One is we want to give you some information about the South Central Coastal Louisiana Flood Protect ion Project. We are going to key in on information that is needed before any study or project takes off and we want to get your feedback. There are many, many things we consider. More often that not, nobody knows this areaas well as the people who live there. And quite often the old saying is true. We don't know what we don't know. And so your input, your feedback will help really get this started in the right direction.

So there are several ways to do this. We can take the comments tonight and there are also several other ways to submit your comments on the cards on the table in the back. We are not necessarily asking you to comment tonight, though we do appreciate if you do. We have comment cards in the back. They are pre-postage paid. So if you wanted to take it in a little anddigest it a little bit and let it sink in, you know, I canguess you can have, and by all means, please you cando so. We might not do as you are probably used to. We are not setting a "Comments are due by 8:00 PM.) That will come later. So right now there is kind of an opening mic and

The project's name is South Central Costal Louisiana Flood Protection and Storm Risk Management Feasibility Study. So tonight we what we plan to do is introduce the project, talk about the authority's study area, as well as the coordination that we intend to do the planning project, the project schedule, and the planning process that we will use. Public Agencies hold Public Meetings where we can scope out all of the existing information. This information is gathered in what we call scoping meetings. After we finish the scoping meetings, we go and do research, develop and package alternatives. We will being that over the next year, developing those alternatives, evaluating those alternatives, and approximately a year from now we will be corning out to you again with our plan. That plan will be our team's recommendation and our findings and why we recommend the plan we should implement. So that would be next fall approximately. At that point, we would do another scoping meeting and you will have the opportunity to respond and counter on that tentatively selected plan.

Then, once we incorporate you guys' feedback, we can actually make a final plan and do a final plan selection. That will then be transmitted to our headquarters in approximately 2020, with a final report approval in September of '21.

Because of this -- This is provided by supplemental funding. There is a lot of pressure in the Corps to maintain that three (3) year schedule. So that is part of the reason why there is a big rush right in the beginning. Typically they start a little slower than that. So that's why we are here, generally to give a little more information to present to you. But in this case, part of the team's approach is (...unintelligible.) three (3) years along.

Alright, so we are going to go through what we call the 6-step planning process. The first step is to identify problems facing our team. So the team is using existing map plans and other diagrams to develop a draft list of problems and other issues that we would like to get feedback on tonight.

So the first problem we have identified is that flood risk is generally in this area followed by a storm surge and riverene flooding. Additionally, there are some existing levees within the project area. Those existing levees were generally designed for riverene flooding and not the one (1%) percent hurricane protection level. So that can also be a challenge.

And then additionally there are environmentalists that spoke on the human environment and

the natural environment area. Within the project area,

as you know, there have been multiple storm events that have led to infrastructure damages. I'd like to look at the infrastructure damages one at a time and show some of the data we have thus far on the damages.

Within the frontal area, we are seeing land loss, as well as (...unintelligible.) delta formation on the eastern side of the boundary. There is really a line for each there. And then of course, (...unintelligible.)

Some of the opportunities that we have within the project area for the Corps, whose objective is to make state public safety is always a top priority, and we have an opportunity here to really focus on public safety. We had an opportunity to reduce flood damages and risk land and property by building both structural and non-structural features. We really have an opportunity here to gather local, state, and federal plans and funding. We are really trying to get everybody flowing in the same direction. I am really counting on *(...unintelligible.)*

The first goal we identified was to increase the sustainability and resiliency of communities to flood event. What we are really trying to get out there is we recognize that there is an opportunity to reduce those recurring damages. It is also important for us to communicate that there is always going to be flood risks

within these project areas. So we can't completely abate that risk as a result of this project, but we certainly can look to reduce it.

The second goal then is to maintain and sustain the resiliency of natural eco-systems to reduce flood damages. What this goal is really trying to get at is: Across the United States on Corps's project that are flood risk management, we have seen communities deal best with re-occurring flood and coastal storm impacts when they have multiple lines of defense. When that natural eco-system is in play, and it is healthy, and it is absorbing as much of the water as it possibly can, that is when there are all kinds of structural and non-structural elements all kind of playing together. And that's what -- We really think we have an opportunity here to insure that is working for you guys as well.

So with every Corps's Project, there needs to be a non-federal sponsor. In this case it is the "Louisiana Coastal Protection and Restoration Authority, or CPRA. Throughout the project we anticipate coordinating however with quite a few other agencies. This list is not by any means exhaustive, but does just kind of give a flavor for all the entities that we plan to coordinate with and get feedback from as we move

through the process. Others would include FEMA, National

Marine & Fisheries Service, Louisiana State Homeland Security, those folks. Additionally, within that project area there is cargo interests, and so we will coordinate with interested travel parties as well.

So, the project schedule. You know, we just kicked this off approximately thirty (30) days ago. We really wanted to get out and get feedback from the public and from agencies and really try to gather that information that you guys already have in these areas as quickly as possible. So that is we were are here today.

After these meetings, what we are going to do is go back as a team and start developing alternatives. Over the next several months, nine (9) months or so, we will be developing those alternatives and then evaluating those alternatives. We anticipate being back out to you guys in the next year with a tentatively selected plan. So about this time next year we will be presenting again to the public and asking of input on a draft plan. Once we incorporate the public's input into that draft plan, then we make a final recommendation and transmit that up to our higher quarters. So we were are looking for a final report in September of 2021.

So there are two (2) stars that need to align for the Corps to start a project. The first is the

authority. For this project, we actually received the

authority back in 2006. Here, you can see -- I am going to call your attention to this part here. (Indicating.) That starts with "The Secretary of the Army is requested to survey the coast of Louisiana in Iberia, St. Martin, and St. Mary Parishes with a view to determine the feasibility of providing hurricane protection and storm damage reduction and related purposes." So the Secretary of the Amy is the Corps of Engineers. Essentially, this tells us what we need to study and where we need to study it. I would note there was a name change. The original authorizations said "Southeast Coastal Louisiana". There is another study that also had a very similar name; so it was changed to 'South Central Coastal Louisiana". So that is the study authority.

We understand that Hwy 90 is an evacuation route when a hurricane events. And we believe that presents an opportunity for our project to extend that coastal land and wetland loss and thereby reduce flood risk damages.

So the second step in our plan process is to inventory your existing conditions, meaning both the natural land and the built-up land, and then forecast out fifty (50) years into the future. So we will do for a variety of things and we will show you some examples of

information that our team was gathered thus far.

Here, we have the storm surge elevation with levees that aren't designed to elevation, so you can see it. (Indicating.) What this is showing you is that there is some protection that is also being provided from storm surge. So the 11.5' there is the elevation of the levee. These are really small *(...unintelligible.)* So about a half a foot here would really help with storm surge. You can see up here where you don't have flood protection where it is come in. So this wasn't specifically designed for coastal storm surge. It was designed for riverene flooding.

In this diagram you can see just a little more of the existing flood infrastructure. Here it is a little bit more certain and shows the different levels that are actually in place right now. And these little "circleu areas are the existing pumps. So we are looking at the existing pumping capacity, another level of protection *(...unintelligible.)* *(Speaker moving around and away from mic/podium throughout thus far.)*

AUDIENCE MEMBER: Can you repeat that last sentence? Starting back about the "circles.

CARLA SPARKS: Sure. The dots here are your existing pumps.

AUDIENCE MEMBER: Pumps?

CARLA SPARKS: Pumps, yes. So part of what we

will look at right now are the existing conditions and we will determine how much is the pumping capacity you have right now, as well as the overall flood protection.

And the inventory for the past is somereally critical stuff. That's the reason that inventory and forecast are important. We forecast out forty (40) years into the future and we use the forecastto determine *(...unintelligible.)* objectives. So for example, if your storm surge is showing that you have a conflict here, to project out into the future what we are anticipating with all of the data, the wave action, the sea level rise, all of the things that can playinto storm surge, and we would then look at all of the alternatives and how those alternatives abate storm surge. And that is always compared to ourexisting conditions of our inventory. So it is essential that the inventory is correct because it is really critical to planning and forecast.

Some of the other data that we havegathered thus far within the project area, and, you know, over here (Indicating.), and you are well aware of some of the damages that have occurred in the communities. But what we have seen so far there are approximately 177,000 people. There is about 75,000 structures and thevalue of this area (Indicating.) is about $18.6 billion. And

that breaks down to each parish. This is Iberia Parish with approximately 72,000 folks livingthat area. The approximate value is $7.8 billion. You see both residential and non-residentialstructures here. Most of those structures appear to be raised to up to two(2') feet. And that is pretty common for all of the parishes *(...unintelligible.)* This is St. Martin' s Parish. You have a value of approximately $5 million and 22,000 structures. And here's St. Mary's Parish where there is 23,000 structures and a value assigned of *(...unintelligible.)*

So in terms of some the damages that have been incurred in these project areas, these are the *(...unintelligible.)* and received the most damages. These are just preliminary numbers where we know ofthe hazard. We, right now, are going to evaluate thispoint; but this just kind of gives you a sense of what weknow are minimal damages and how they occurred.

AUDIENCE MEMBER: Speak into the mic.

CARLA SPARKS: Is that better?

MEMBER: Much better.

CARLA SPARKS: So in Iberia Parish there has been a total of $94 million in the last forty (40) years paidon non-FEMA plans. What that represents, just to give youa

scale of this number, this is approximately We know

that this is the only looking at those individuals that have flood insurance in the project area. Approximately twenty (20%) percent of the people in the project area have flood insurance. So we know that this number is higher, but it is still valued at $94,000 million. The figure in St. Martin's Parish over the last forty (40) years has been about $19 million worth of damages. And in St. Mary Parish we know that there has been at least $31 million worth of damages.

Also in the study area, just looking at when this -- a large percentage of the area is holding longer, were already wetlands. It is about seventy (70%) percent of the project area. The next largest land area where we have in the study area is cultivating crops. And then we have *(...unintelligible.),* mostly sugar cane in Iberia.

With each one of our projects we are required what they call a "no action alternative". That 'no action" requirement is essentially saying, "What would happen to the human resources and the natural resources in this area if nothing was done?" And that is, again, projected over fifty (50) years.

So this isn't an all-inclusive list. These are some of the things that we will look at that would influence our future forecasting. We are conceding this area has an increased flood risk due to sea level rise,

an there is an increased frequency and intensities of storms. There is subsidence in some of the areas as well as delta formations in the area. So that is going to make a difference in terms of elevations between those.

So as we formulate for our actual alternatives, we will have to consider a variety of things. So there is always some constraint that we have to take into account when we formulate our alternatives. These are some of the ones that we anticipate having to take into account on this project area. Certain *(...unintelligible .)* loss. If we do structural *(...unintelligible.* *Speaker has turned and moved away from mic.)* In this study, the appropriation for this specifically *(...unintelligible.)* Originally, we had hoped that we would be able to move forward toward coastal restoration. Very similar to Southwest Coastal. Many of you are familiar with that study. This project authorization, or funding authorization, unfortunately eliminated that *(...unintelligible.* *Turning away fro mic again.)*

We will, of course, to consider any design constraints for local infrastructure (...unintelligible.) minimizing any transfer and avoiding a transfer risk to any of the outlying communities. And if there is any

hazardous waste within the project area, we will have to

take that into consideration for our designs and alternatives.

So we are really just scratching the surface of getting and collecting all those data. Some of the information we are going to be collecting and the where we are thinking we can get that information from is vital. What I would like to know is -- There is a few of these that we would really like to come up with *(...unintelligible.)* that we did work on.

We talked about earlier what communities have experienced. So we really need your guidance and input to help us focus in on the right areas.

Specifically we are looking at -- We looked and there were flood damages from past storms *(...unintelligible. People next to me talking over the speaker's recording.)* and where those damages were occurring. That would be very helpful to us. We also would like to know there are additional commercial or industrial facilities in the project area that are partnered for master plans for things that you know we need to have *(...unintelligible. People next to* me *talking again.)* over the next couple of years. And we'd really like to know that information as well so that we don't propose anything that would potentially impact those projects. So if anything that is going to affect

the design or work, we need to know that now. So that is just a look at how we formulate out plans.

Our project sponsor, CPRA, funded a study through Arcadis that we intend to use in this project and we will look at it. That study was largely structural, so we will certainly look at that as an alternative.

Additionally, we will look at non-structural alternatives, and any combination thereof. We will also look at a few ways of capturing and focusing in on those damage areas and where we really need to get a handle on how to best provide these communities to protect them.

So many of you are familiar with non-structural alternatives. Generally I think what comes to most people's mind is voluntary buy-outs, structural raises. But there is also other things that we can consider like evacuation planning, what wet-proofing and dry-proofing and those types of things. And so we will consider all of those things for this project on the table.

So once we have our alternatives kind of packaged, then we have to evaluate and compare them to one another to really see where we are getting the best bang for our buck. And so we are interested in hearing from you if there is anything that you would like us to evaluate, any kind of valuation criteria. But the

criteria that I have here on the slides are just some of

those kind of general criteria that we are required to look at the Corps Of Engineers. So we always look at average annual damages reduction, reduction of risk to life loss, reduction in the primary costs. Those costs would include any mitigation costs as well as full operation and maintenance costs over the project life cycle. So that would be over the fifty (50) years and that would all be included in those packages.

So once we have our alternative packages developed, then we will have to evaluate and compare them to one another to really see where we are getting the best bang for our buck. And so we are interested in hearing from you if there is anything that you would like us to evaluate, any kind of valuation criteria. But the criteria that I have here on the slides are just some of those kind of general criteria that we are required to look at the Corps Of Engineers. So we always look at average annual damages reduction, reduction of risk to life loss, reduction in the primary costs based on flood frequencies. But first, we look at costs.

Another thing we need to explain and about in terms of costs: Those costs would include any mitigation costs as well as full operation and maintenance costs over the project life cycle. So that would be over the fifty (50) years and that would all be included in those packages.

So what we really need from you folks: We really would like some input tonight on our draft problems and opportunities to better understand are we capturing those problems and opportunities that are within the project area? Are there additional problems that we need to add? What flood event did your community see the most damages? And was that flood event storm surge? Was it riverene flooding? Was it back-water flooding? What type of flooding was that? Are there alternative strategies that would better address the problems that we have in the project area? Are there additional constraints in our future development or things that we should consider as we are developing alternatives? And finally, is there any data or studies that the project team should know about and information that we can use so that we don't have to re-create the way and hopefully move a little faster in this project? We'd really appreciate that.

So we don't have a formal comment like "ending period", which is probably not as familiar for folks.

We are currently accepting public comments. At some point in the future, we will put out a formal nebo scoping request and then give a final date for comments in this initial phase. And we will make sure you guys

25 are all notified ofthat.

But if you do have public comments, we can either take them tonight, we do have cards that you can send in later, and/or you can write down the Project Manager, Carrie Schott. And you can send your public comments to her. And now we will accept public comments tonight.

I'd like to say thank you for coming out tonight. We really appreciate it. And we look forward to hearing from you.

OFFICER: I'd like to take over and then say thanks to Carla Sparks. We also have Joe Latore (phonetically) in the back, the man from Rock Island (...unintelligible. Speaker is not using the mic at this time.)

There is a couple of things before we get into comments that have been stressed. First is, you know, when we are looking at -- kind of coming to us as (...unintelligible.) As you all know, within (...unintelligible.) we have to have a finance division and a *(...unintelligible.)* In other words, whatever damages there are, the word I am hearing is the cost of, when we are reducing damages, has to be *(...unintelligible.)* So what that means is, whatever it takes to implement and maintain, must be considered with

25 the amount of damages reduced.

With that, we welcome your comments. Would you speak into microphone. The reason why is we have a court reporter and want to capture your comments.

HAROLD SCHOEFFLER: Harold Schoeffler with the Sierra Club in Lafayette. This is the area I lived in and fished in all my life. I know all of these waterways and have used them.

When you speak in terms of storm surge protection, the first thing that comes to is the Pointe Au Fer reef. From Pointe Au Fer, the south point, it is roughly thirty-three (33) miles and roughly three (3) miles wide. It is supposed to be one of the biggest natural shell reefs on earth. I was very involved in the legal effort to stop the removal of that system.

But first, let me address this hydrologists from the University of Florida. He said that removal of the reef is such a threat from the area from Bayou Lafourche to the Calcasieu that its impact should be done on an emergency basis computer model to show how much higher the storm surge would be expected in that region. In his testament, *it* was eight (8') feet higher. And he was expressing this announcement at a news conference at the Point of Iberia. As he was giving his report from

the floor, one of the reporters asked, "How deep would it

be at the Port?‖ And he put his hand over the door in the conference room and said, "It would be abouteight (8') inches over this dooru He missed by a mere inch. It was nine (9") inches. And his intention was thatthat could possibly be destroyed and there was moreprotection with the levees.

Items like Shell Keys Wildlife & Refuge,the defender of the wetlands, was *(...unintelligible.)* was out the water and was about two (2) miles long andabout one hundred (100) yards wide, and had an elevation of about six (6') feet abovesea level. They dredged one hundred (100) yards from it thirty (30') feetdeep removing shells. And of course the big waves cameand the whole Shell Keys Refuge ended updestroyed.

The same thing happened atEugene Island. It was a white shell reef. And the Rabbit Island. All of those were destroyed. Rabbit Island was about one hundred (100) acres and had reef allover it. They removed the shell reefs south of it, and in a year itwas all gone. The story of that reef and the abatementof that land, and *(...unintelligible.)*

When we took a storm surge in Iberia Parishit only affects the area mostly south of Hwy 90from Delcambre to New Iberia. *(...unintelligible)* from

25 Jeanerette in St. Mary Parish to the Baldwin Canal isthe

area very affected. The rest is pretty much covered with levees at one point or another all the way through St. Mary Parish. The Bayou Sale reef, that system typically was inundated by storm surge. Now they have put pumps, so that is a big help.

The riverene impacts on this area, for the most part, was this area from *(...unintelligible)* St. Martin Parish and lower St. Martin Parish. I don't think the storm surge hit the upper part of St. Martin at all.

We are threatened by flooding post-Katrina in '16. There was lots of flooding in New Iberia and St. Martin Parish flooding. I just wanted you to consider the wave environment out there.

The enormous oilfields that have wells and rigs left behind, that is quite a hazard or is about to be.

Water quality issues. Basically they have gone done quickly. The "low oxu (low oxygen) in the water from the swamps and the Gulf ended up killing oysters and clams. And that impacts the whole eco-system, the marshes and all of that included.

We will send in written complaint of these claims that we think are the fault and possible ways to resolve this.

We thank you all for putting this together. I think it is really important to our area of Acadiana to

give us some good direction in surviving big flood events and big hurricane events.

OFFICER: Thank you. Thank you very much, sir. We always look at that and give you feedback and rely on the feedback you give us. We **will** be responding to you through that mail.

Anybody else?

TROY COMEAUX: Troy Comeaux from New Iberia. In addition to the storm surge that he was just commenting on, we have other people who are people in Iberia Parish that are also concerned about this day-to-day flood control. Due to many of the factors I am sure were just stated, just on a day when we get three (3) or four (4) hours of south wind, the water is penetratingso far up north into our drainage system. A rain event like today, at high tide with a south wind, it will shut down 7 the Port of Iberia.

So when we talk about economic development, it is the impact that, not only responds to a storm surge, but just a rainy day with a south wind at high tide. I mean look at, look at -- Pleaseconsider how that impacts the Hwy 90 south and the industry that *(...unintelligible.)* and all of the coastal area. So that's important to us as well. We have been fortunate to dodge a few bullets with some hurricanes that have

come our way in Iberia for quite some time. But our businesses are struggling along that Hwy 90 becausethe rainwater has no place to go. It is just stacking up near Hwy 90 and *(...unintelligible).*

OFFICER: And just for my clarification, you are looking at, you are looking at torrential rainas well as basically the winds stacking the water upthrough this area.

TROY COMEAUX: I belie ve, and I might have some -- a little bit of inputor encouragement. I think our drainage system was built at an elevation inrelationship to Vermillion Bay and Weeks Bay. When that rises, it is two (2 ') (feet) or three (3 ') feet above our drainage system going south. So yeah, the water is stacking up. It is going under Hwy 90 into the city of NewIberia.

What is happening in addition to just thePort of Iberia, it is also creating flood maps to expand mandatory flood insurance. So it is having a continuing impact on our real estate industry and those peoplewhere there are mandates. People cannot afford, or hope to afford, property. I passed on some propertymyself because they couldn't give me a quote on what theflood insurance would be until I ownedthe property. That is happening in multiples and is affectingour industry. It

25 is affecting our real estate industry andour

agricultural industry. So we are very involved, and not with just the storm surge.

OFFICER: Thank you, sir. Absolutely. And one of the challenges that we are going to have with this, in looking at it, you have to model it to understand the causes for all flooding. Then maybe we can see what this hearing here is bringing to us and what is actually happening with drainage issues. And I will say that, no matter what we do, we can't really do any drainage work anywhere, although the information is valuable overall. But the authorization is for surge and riverene based flooding. So it is something that we'11 have to look to understand.

We get to come back out to you guys and kind of see what we are looking at, and you let us know in feedback.

TROY COMEAUX: When you speak about riverene flooding, you are talking about over time type flooding?

OFFICER: And like the backwater flooding area where it is coming basically north of the Atchafalaya River in the Basin. That we will be able to look at, including the force of the surge and the water coming in.

Rain would be something you'd have to understand *(...unintelligible.)* is a Parish issue.

25 **TROY COMEAUX:** Yeah. My point to that is:Obviously

you can't address the area of thedrainage issue. I understand that inevery community. My point is is that the economy says it is the barriers that were destroyed, there is a lot of salt water intrusion, which impedes with the rainwater, from having a placeto go. We have a commercial canal that comes right up through to thePort of Iberia on one of the main thoroughfares of the Cityof New Iberia. It a commercial canal. And it goes all the way into the middle of the town. A lot of this is not culverted and underground, but it goes all the way into the city and directly into the Portof Iberia. Since the barriers have been destroyed, as waswell-often explained, the intrusion of salt water penetration corning to the north is affecting a lot more industry than what we might necessarily get. We need to get a lobbyist's reaction to this or a feel for it. It is not just a coastal thing. It is corning into and affectingthe community.

OFFICER: Is it some sort of chain reaction?

TROY COMEAUX: Correct. Because the FEMA flood maps are growing with higher flood insurance ratesare growing, the cost of living isgrowing. The real estate industry is suffering. The crops are suffering because of the infiltration and for many other reasons thatMr.

25 Schoeffler just spoke about.

OFFICER: Thank you.

Yes, sir?

MARTY TRAHAN: Yes, Marty Trahan, Iberia Parish Council. I represent District 13. Corning up from the Declarnbre area , like Mr. Schoef fler said, the Poi nt au Fer reef, I remember that as a kid when Shell Keyswas sticking way up out the water. Okay? *(...unintelligible)* felt the surge corning in when it is high tide. Because if you come up to Delcambre, youcome upto Lake Peigneur and you have pumps A and Ball draining into that basin right there right on the west side of the SouthCentral Study. Okay? That is another point we've got to look at. That goes back all the way into Lafayette, Youngsville, Broussard,Lafayette. That all has to drain back into there.

In fact that phone call that went off awhile ago, is a Hwy 90 business that is, just with the rainwe had today, and we had a massive amount of rainfall,they are about to get water into their businesses. Okay? So we are looking at the drainage canal being dug outto *(...unintelligible. His voice is trailing off.)* you know, some other places. And we are working on that drainage. I think it needs to be looked on the most west part of it. Like Mr. Schoeffler said, it is going back

into Lafayette. We get this from rain events, notno

sto rm surge.

TROY COMEAUX: Right. Especially if the tides If it is high arelo w. tide, a high tide will bring *(...unintelligible.)* from what I saw. This is the fourth (4th) time we' ve seen this flooding of businesses since 6 2016.

OFFICER: Thank you very much.

BILL DUNCAN: My name is Bill Duncan. I have a business at the Port of Iberia. I have been there nineteen (19) years and I have been flooded about three (3) times.

When I first bought the business, I paid probably about $8,000 a year for flood insurance and FEMA did provide and rebuild for me. I used the money as best I could to rebuild my business, but also do things for in the future if I had another flood event and I could get my equipment out and so on and so forth.

What has happened to a lot of businesses in our area is that my flood insurance went up the next year twenty-five (25%) percent. I think it went up to $12,000. This last year it went to $19,000 with a $20,000 deductible. And with the down-turn in the industry, the oil industry, happening in this area, at least at the Port, I couldn't afford flood insurance. I think that is what has happened to a lot of communities.

In Broussard, an area that was never in a flood plain, due to the fact everything you have said in defense of tidal surges, it keeps the drains from going out. It has put everybody in Broussard, in Youngsville that are now in flood plain areas now, that they are not meeting their needs. The bank requires them to have flood insurance that is going up faster than they can pay off their house and get out of there. This is the large thing with people from Youngsville too. And all I have ever been told, we have some areas where the entire subdivision is now in a flood plain, but they have a 30-year mortgage and they are being required to pay for flood insurance that is going up so quick. You know, it might be $2,000-something a year, or something like. But for my business, I can't even survive, you know, being there.

Y'all are welcome to the Port of Iberia tomorrow. I have a business that provides food and services to support the Port. But what I'm kind of seeing from the studies, what all y'all claim to propose is about a 5-year plan. You said three (3) years. But none of this is even put out to bid yet. And with that, we need help now. We need -- Just like Parish Council Member said, that is happening on a more and more regular basis and we are having just like this year -- I think

this winter we are expecting a harsher winter weather according to Service. Which means, you know, if we have a higher than normal surge and we have a lot of rain, everybody is vulnerable. And I really the sense of urgency, if there was a lot of people here tonight, they would say that the government is moving too slowly with, with, what we need help from.

On that, we are going -- all these gentlemen here with the Port and whatever, the Levee District, we can't afford our levees because our economy is so far down and over-taxed, we can't build levees and we can't put structures in. And one of the main things that was told to us by the Parish why they didn't pass the levee tax was that the federal government needs to be a bigger part of this.

And my whole thing is, if you look at what they have done to the east of us, is, is down in Thibodaux and these places, that is valuable and protecting those people with the structures and pump stations and things like that. But it also takes into consideration of the eco-system that allows the water to come and go as it needs to be to take care of estuaries and keep on surviving.

So to me, it seems like all of this information

25 you already have available. It needs to be fine-tuned

some more, but if you've got to five (5) years to six (6) years to study, and by the time you get thestructures put in place, or whatever is needs, even dredging the Vermillion River and things like that, and I think it is their plans, by that time my business won't be there.

Thank you.

OFFICER: And *(...unintelligible. Speaker has no mic.)*

MARTY TRAHAN: Marty Trahan, again. What I see needs to happen is for it to be a regional, Iberia, Vermillion, St. Landry, Lafayette, St. Martin, St. Mary, and expand it a little more what drains into us. The Parish Presidents, the whole of the Presidents needsto get a hold of this, and do a studyon it. We have *(...unintelligible.)* now; but we are also going toneed the federals to come on. I think it needs to be a combined effort of everybody and see what needs tohappen and at what speed it can happen.

Where I live is four (4) miles -- Well, Petitance is about three (3) from my house. The Avery is about four (4) miles. And for RITA. It came up tomy door of my house. It didn't get into my house, butit continued to the door. So I know the next time I am flooded. I am going to loose my house. Okay? But I really think this needs to go regional and have theinput

City/Berwick/Bayou Vista of St. Mary Parish. We have lived in Iberia Parish for fifty-three (53) years, and we are property owners here in St. Martin Parish. So all three (3) of the parishes focused on, we are involved in things that are going on.

When you did the presentation you identified flooding as a result of storm surges, as well as river flooding. A lot of the same areas are flooded as a result of those two (2) impacts; but there are different perspectives and different methods that you are going to have to look at dealing with storm surge versus river flooding.

You also identified wanting to make sure that Hwy 90/I-49 was accessible for evacuations. In the Billeaud exit off of Hwy 90, that one goes under every time we have a storm surge, as well as around Coteau. Even though Coteau in Iberia and St. Martin Parish is a ridge, the highway there goes underwater. And right up here as (LA) 92 crosses both 182 and 90, those areas flood. So we can't even keep the highways open now. What is going to happen further down the road?

The other aspect is that Chapin Minlen, LLC (phonetically) did the study -- did a map and study of where the open water from the coast would be in fifty

(50) years and in one hundred (100) years. The fifty

(50) year one was in 2030 or2033.

An individual, who was a technical person from the experimental farm in Iberia Parish, went and did the elevations of storm surge after KATRINA/RITA. All of that mapping showed that the open waters in fifty (50) years that Chapin had projected as flooded as a result of KATRINA/RITA. So when you start looking at what are you going to do to protect both the estuaries and the people from the flooding, you have to remember that a lot of that land is going to be underwater within the time you are going to be doing the planning. So please take that into consideration and actually plan for what will be conditions as we move forward.

Thank you.

OFFICER: Absolutely. Thank you very much.

Do you have any -- If I can get to anybody who hasn't spoken yet and then we will get back to you guys who already have. So anyone who hasn't spoken want to speak?

(None indicated.)

HAROLD SCHOEFFLER: In relation to the higher tide levels, when Dr. Christiansen was here, he pointed out the Point au fer reef, in its natural structure, had a channel capacity about the same as Southwest Pass, roughly about sixty thousand (60,000') feet. Now it is

over 2 million square feet. That's why the salinity is high and storm surge is weak. These tide surges are much quicker and much higher. If you would restore that, you would reduce significantly the level that it comes and how high it was and the salinity level would be lower.

OFFICER: Thank you very much, sir.

MARTY TRAHAN: Just one more point here? (Indicating.)

OFFICER: Absolutely.

TROY COMEAUX: Troy Comeaux from New Iberia. We are also concerned about the plans that St. Mary has that deals with their part of the coastal master plan levee and how that is going to affect a storm to the east of us in Iberia and how that water is going to be blocked in Terrebonne and Lafourche and St. Mary and how it is going to affect that extra water that is not going them. It going to come to New Iberia.

OFFICER: Yeah. You know, there is a difference there we will have consider. Even if it is a localized plans, we need to study the impacts of it as we are moving forward. Our meeting next will be in St. Mary Parish, the same as we have had with Iberia Parish and St. Martin Parish.

MR. DUNCAN: We are extremely fearful that Amelia and then Iberia will be defunct.

OFFICER: Right now I would say I have confidence on the federal side and they willconsider that and the reduced flooding component. But we do have to consider what the locals are planning on their ownas well.

TROY COMEAUX: Even if Hwy 90 at (LA) 329Avery Island Road, my house is exactly three (3) miles tothe Hwy 14 and I had water past my house up the LewisStreet Road. So you are talking 90 as a corridor to get out? In years to come, (HWY) 90 will not be there at allto get out.

OFFICER: That is definitely something thatwe always say we can't run the risk. So they have never eliminated evacuations from the plans..... *unintelligible. Moves away fromthemic.)* I am just saying that Point au Fer is in the master planas well. I think some you have had a discussion between yourselves of that.

HAROLD SCHOEFFLER: It is a proposed project. I don't know where it ranks in being done; but Dr. Lynn Barr and Dr. Paul Ken, I have been hearing all three(3) agree that that would be a very significantprotective feat. It would build up more than levees and protecta much larger area all the way from the Calcasieu toBayou Lafourche.

25 **BILL DUNCAN:** I think living here all our

lives, what we have seen, and if you have been here since childhood, you can always remember there was flooding of some types in some certain areas; but not as wide an area when we have a storm surge. And just like they are saying about these reefs and these areas that -- If you could point to the Marsh Island with your pointer? Where the line goes through? (Complies.) That is basically a choke point that Mr. Schoeffler was talking about that at one time really slowed down storm surge coming to the north. And these reefs were the protection that we had that slowed down the storm surges. You might have had flooding, but it took longer for the water to go through these passes and choke points. And basically, that is a natural protection that everybody understands that was there years and years ago.

You know, the point is: Now that those are not there, the storm surge comes a lot faster and it hits a lot bigger area a lot quicker and the water stays. Once it packs up into the marshes and then all the way into the canals and areas, it takes that much longer to go back out. And goes back out -- Each time it goes back out, it opens up an even wider path because of the erosion that it is doing to the reefs and the choke points that are natural.

OFFICER: Do we have anyone else?

(All indicate "no".)

OFFICER: If possible, I think I am going togo ahead and close the meeting. Our RPM's and our planners will be here if you want to discuss anything withthem. We are going to stick around for a little while andbreak it down. But if it is okay with you guys, I'll go ahead and close the meeting itself.

Thank you very much. Thank you very much for your comments and your insight. It will prove greatly valuable to us as we move forward in a veryexpedited manner.

Thank you all very much for coming out. I appreciate it.

(REPORTER'S NOTE: For the next hearing, this needs to be held in a smaller meeting room. The auditorium was much too large and the sound quality was greatly diminishedin spite of the latest in audio equipment.)

* * * * * *

STATEOFLOUISIANA **(Rev. 1/1/2013)**

PARISH OF ST MARY

REPORTER'S CERTIFICATE

I, ELIZABETH RHODES McCLEARY, Official Court Reporter for the 16th Judicial District Court,Parishes of St. Mary, Iberia, and St. Martin, of the State of Louisiana, employed as a court reporter for the 16th Judicial District Court, State of Louisia na, as the officer before whom this testimony was taken, dohereby certify that this testimony was reported by me was prepared and transcribed by me or under my directionand supervision, and is a true and correct transcript tothe best of my abilityand understanding, that thetranscript has been prepared in compliance with the transcript format guidelines required by statute or by the rulesof the board or by the Supreme Court of Louisiana andthe Federal Rules, and that I am not related to counsel orto the parties herein, nor am I otherwise interested inthe outcome of this matter.

This certificate is valid only for atranscript accompanied by my original signature andofficial required seal on this page.

IN WITNESS WHEREOF, I have affixed myofficial signature this **28th** day of **August, 2018** atPatterson,St. Mary Parish, Louisiana.

/signed/

Elizabeth Rhodes McCleary, #91325

Official Court Reporter

16th Judicial District Court

U.S. ARMY CORPS OFENGINEERS

NEW ORLEANS DIVISION

PUBLIC MEETING

HELD THURSDAY, NOVEMBER 8th, 2018

IN RE: PUBLIC INPUT ON FEASIBILITY STUDY FOR

HURRICANE AND STORM PROTECTION AND STORM DAMAGEREDUCTION

FOR THE SOUTH CENTRAL COAST OFLOUISIANA

COMMENCING AT 6 O'CLOCK P.M.

MORGAN CITY MUNICIPALAUDITORIUM

728 MYRTLE STREET

MORGAN CITY, LA 70380

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APPEARANCES:

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I N D E X

PROCEEDINGS:

(Meeting is called to order.)

OFFICER: Tonight is a two-part meeting. One is we want to give you some information about the South Central Coastal Louisiana flood Protection Project. We are going to key in on information that is needed before any study or project takes off and we want to get your feedback. More often that not, nobody knows this area as well as the people who live there. And so your input, your feedback will help really get this started in the right direction.

There are several ways to do this. We can take the comments tonight and there are also several other ways to submit your comments on the cards on the table in the back. We are not necessarily asking you to comment tonight, though we do appreciate if you do. We have comment cards in the back. They are pre-postage paid. So if you wanted to take it in a little and let it sink in, you know, you can do that and send in it, or your can make comments. By all means, please you can do so. (...unintelligible. Moving away from the mic.)

Right now is kind of an opening time period where we want to get out as much information as we possibly we can. We will make an announcement later on after have established the collected information. So we

will take comments from today until next time.

But if I can, I will turn my pointer over to Carla Sparks and she will be able to kind of give you what we do. Our steps and processes may be a little different than what you are used to from our traditional way (...unintelligible.) time. So we will give a little bit of data and what you know about the area.

At this time I turn the meeting over to Carla Sparks.

CARLA SPARKS: My name is Carla Sparks. I am the Corps's rep and I am soon to be the plan formulator on this project. We thank you for coming out tonight. We know the weather is bad.

The project's name is South Central Costal Louisiana Flood Protection and Storm Risk Management Feasibility Study. So tonight we what we plan to do is introduce the project, talk about the authority's study area, as well as the coordination that we intend to do the planning project, the project schedule, and the planning process that we will use.

So the two (2) stars that need to align for the Corps to start a project, the first is the authority. For this project, we actually received the authority back in 2006. Here, you can see -- I am going to call your attention to this part here. (Indicating.) That starts

with "The Secretary of the Army is requested tosurvey the coast of Louisiana in Iberia, St. Martin, and St. Mary Parishes with a view to determ ine the feasib ility of providing hurricane protection and storm damagereduction and related purposes." So the Secretary of the Amy is the Corps of Engineers. Essentially, this tells us what we need to study and where we need to studyit.

I would note there was a name change. The original authorizations said "SoutheastCoastal Louisiana". There is another study that also had avery similar name; so it was changed to "South CentralCoastal Louisiana". So that is the study authority.

The second star that needs to align isthe Appropriations. So we need the financial element ofit. Although we have been submitting budget packages since 2006 to gain that funding, we finally gotthat opportunity in 2018 with the BipartisanBudget Act. This Act did limit the scope of the study to bespecifically flood risk management and we will talk about thata little bit more.

So again, the study area is St. Martin, St. Mary, and Iberia Parishes, and we have it outlinedhere, the total study area inthe pink. (Indicating.)

So as you are introducing yourselves, there has been a lot, as you mentioned, there has been a lotof

studies and information and master plans. So when we kicked this study off on October 9th -- so a little less than thirty (30) days ago -- the team has been scouring those documents and developed some draft goals and objectives.

The first goal we identified was to increase the sustainability and resiliency of communities to flood event. What we are really trying to get out there is we recognize that there is an opportunity to reduce those recurring damages. It is also important for us to communicate that there is always going to be flood risks within these project areas. So we can't completely abate that risk as a result of this project, but we certainly can look to reduce it.

The second goal then is to maintain and sustain the resiliency of natural eco-systems to reduce flood damages. What this goal is really trying to get at is: Across the United States on Corps's project that are flood risk management, we have seen communities deal best with re-occurring flood and coastal storm impacts when they have multiple lines of defense. When that natural eco-system is in play, and it is healthy, and it is absorbing as much of the water as it possibly can, that is when there are all kinds of structural and non-

25 structural elements all kind of playing together. And

that's what -- We really think we have an opportunity here to insure that is working for you guys as well.

So with every Corps's Project, there needs to be a non-federal sponsor. In this case it is the "Louisiana Coastal Protection and Restoration Authority", or CPRA. Throughout the project we anticipate coordinating however with quite a few other agencies. This list is not by any means exhaustive, but does just kind of give a flavor for all the entities that we plan to coordinate with and get feedback from as we move through the process. Others would include FEMA, National Marine & Fisheries Service, Louisiana State Homeland Security, those folks. Additionally, within that project area there is cargo interests, and so we will coordinate with interested travel parties as well.

So, the project schedule. You know, we just kicked this off approximately thirty (30) days ago. We really wanted to get out and get feedback from the public and from agencies and really try to gather that information that you guys already have in these areas as quickly as possible. So that is we were are here today.

After these meetings, what we are going to do is go back as a team and start developing alternatives. Over the next several months, nine (9) months or so, we will be developing those alternatives and then evaluating

those alternatives. We anticipate being back out to you guys in the next year with a tentatively selected plan. So about this time next year we will be presenting again to the public and asking of input on a draft plan. Once we incorporate the public's input into that draft plan, then we make a final recommendation and transmit that up to our higher quarters. So we were are looking for a final report in September of 2021.

There is, with all the studies that were funded under the Bipartisan Budget Act of 2018, there is an immense push to get those done in three (3) years. We really had looked really hard at our resources and anticipate we have a great team on this project. So I really do anticipate meeting that schedule.

When we do feasibility studies, we generally start with our 6-Step Planning Process. So the first step of the planning process is Identification of Problem and Opportunities. So again, the team used those master plans and scoured those and developed some initial draft problems and opportunities that we would like public feedback on.

The first one is what type of flood risk you receiving in this area. Right now, based on those documents, it seems largely related to storm surge and riverene flooding.

The second element, you do have existing infrastructure within the area, especially around Morgan City there are several levees. They were designed for riverene flooding, not for the one percent (1%) hurricane protection level; but they are providing some storm surge protection. I'11 kind of show that here in a little bit. But we do have an opportunity there.

Additionally in the project area we do have some environmental challenges that we will have to consider as we are developing alternatives. We know that you guys have had economic impacts from multiple storms in the past and infrastructure damages. There is both land loss and delta formation that *is* occurring within the project area and sea level rise. So all of those things will have to be taken into account when we are developing alternatives.

In terms of opportunities, the Corps's top priority is always public safety. So we really do have an opportunity in this study to look at public safety and optimize. Additionally, we believe there is an opportunity to reduce those flood damages by providing both structural and non-structural solutions.

We understand there has also been a variety of planning projects, a variety of design projects as of

late; and we think there is a real opportunity to

leverage local, state, and federal efforts and get usall kind of pushing in the same direction.

Additionally, we also understand that Hwy 90is an evacuation route and that there is current issueswith flooding getting over that highway. So we will be looking at maintaining that evacuation route as a non-structural alternative as well.

So the second stop in the 6-stepplanning process is to look at inventoryand forecasts. So essentially, you look at your project area and say,"What is the current condition of both those humanresources and the natural resources for the new projectarea?u It is a really important step. You also can forecastthose conditions out fifty (50) years into the future. That step is really important because it essentially servesas your baseline condition and you compare all of your alternatives to that baseline condition. So it is really important that we get that as accurate as possible.

And here, in terms of inventory, our team has developed, or pulling information and data, fromexisting models. This one, you can see is storm surge. And it has been clipped to theproject area. The model actually goes out further than this. We can see here the 11.5 is actually the design height of some of these MorganCity levees. And you can see the storm surge is kindof

coming up quite a bit further into the landscape here (Indicating.) than over here on the Morgan City side. (Indicating.) So it is providing some storm surge protection, even though that is not what it was originally designed for.

In terms of other infrastructure, these kind of small dot here represent the existing pumps. So that is one thing that we may need to look at. Are there operational optimizations that we can look at or to in this project area? And so one of those things that we are looking at is: What is the pumping capacity of the existing system. So hydrology certainly drives these flood risk management projects, but so does the economics. So, one of the things that we are required to do is look at a federal investment.

The federal government wants to say, "For every dollar we spend doing flood risk management projects, our expectation is that we are saving a dollar worth of damages." So we have at least a .1% ratio -- or 1.0% excuse me. So in this project area, we are starting to gather some initial economic data. The population within the project area is approximately 177,000 people with approximately 75,000 structures, estimated at $18.6 billion.

25 And then we have that broken down per parish

area. So this is Iberia Parish with approximately 72,000 people. One of things to note is through each of the parishes, the residential and non-residentialstructures are generally raised by about two (2') feet -- one(l') foot to two (2') feet. So that's good because in most cases it is already done.

This is St. Martin Parish. Approximately 54,000 people and 22,000 structures.

And then St. Mary's Parish with 51,000 people and 23,000 structures. And again, you can see thattwo (2') foot height of foundation on residential and one (1') foot height on non-residential.

So the other thing we have looked at was we pulled some FEMA flood statistics and FEMA claims statistics. Per parish, we looked at: What are thetop five (5) areas, or communities, that are havingthose most damages? Here on this graphic you can see thetop five (5) citieshere. (Indicating.) These are the estimated damages, or total claims, that we paid outfor those overthe last forty (40)years. So in Iberia Parish $94 million has been claimed andpaid out. In St. Martin Parish $20 million has beenpaid out. In St. Mary Parish approximately $31 million. These numbers, we recognize, are generally lower than the actual damages because what this captures is those individuals that have

flood insurance. We know that there is a large percentage of people in the project area that do nothave flood insurance, and data they wouldn't be captured here. So that is one of the things that we going to belooking for in the future to get better data on.

Other types of forecasts: So again, we look at the natural environment as well and what is the condition of those resources. Some of the information that we have been pulling together is the land usewithin in the project area is approximately seventy (70%)either open water or wetland, with the next highestpercentage being cultivated crops. As you guys know, within those cultivated crops, the larger percentage is sugarcane within the project area.

So getting back to our alternatives, we are required to have a no-action alternative. Essentially what that mean is: What happens in the project area ifwe do nothing? And we look at that from both the human environment and the naturalenvironment. Again, this is the part where we look at fifty (50) years into the future; and in that future forecast, here we have a few of the elements that we will consider. (Indicating.) We understand that there is increased flood risk in this area due to increased storm surges which increasestorm

25 damages as a result of increased frequency and intensity

of those storms. Again, we gather tidal, subsidence, and land gains in the area. So we will be projecting all of those different elements and using that baseline to compare to our alternatives.

Every project has constraints, and we have those, of course, in our project. We will be required to comply with all environmental laws; if there is any mitigation costs, we will need to include that into our alternatives cost and compare those.

Again, back to the appropriation authority, we will not be able to formulate for eco-system restoration. We will formulate only for flood risk damage.

Another key constraint that I want to mention is: We will have to minimize any transfer of flood risks. So getting back to that graphic where you saw the project area outlined in pink, although that is the project area and that will confine where we can take action, when we do our analysis, our analysis will actually go out farther than that. It will actually have to consider the watersheds that are feeding into this area. And that is really aimed at insuring that we are not transferring flood risks.

Other things that we will need to consider is any local infrastructure or transportation corridors. If

you have any projects that are going to be designed, or

in design right now, or are going to be implemented here in the near future, we'd really like to know about that so we can take that into account in our planning.

The other thing that we will have to do is: We will have to avoid any impacts to the Gulf Intercoastal Waterway because that is within the project area.

So we have been going out and starting to collect all this information. With only thirty (30) days, we haven't gotten all the information that we would like. But what I wanted to show here on the graph and this table is that we do have a plan for getting some of the information that we are going to need to do the study. There are some key holes though that we need the pubic and participating agencies to assist us with. And specifically those things are: What are those damage impacts from past storms? Where did those damages occur? And was it wind? Was it storm surge? What was the cause of those damages? Because as I showed earlier in those FEMA statistics, we know that those are not capturing all of the damages that you saw.

Other elements that we would need your help on, we know that our data sets, the economic sets and data sets that we are showing you, they are not very good at estimating the cost or impacts and value of industrial

25 areas which we know that you have in the project area.

And so we would be looking to get more information on those industrial areas as well.

So that brings up to Step 3. So in Step 3 we start formulating alternatives. Essentially, that is just how we package the various ways that we can address the problems and opportunities within the project area. So of course, again, we will look at a no-action strategy. We will also look at a structural alternative. Our project sponsor, CPRA, funded a study through Arcadis that we intend to use in this project and we will look at it. That study was largely structural, so we will certainly look at that as an alternative. Additionally, we will look at non-structural alternatives, and any combination thereof.

So that is how we would address the problems and opportunities I the project area. But we would also look at where we would address those problems and opportunities. So we will look at, you know, those damages as we understand tend to be clustered. And so we will start to look at how those areas were clustered and formulate alternatives on those vario uslocations.

So many of you are familiar with non-structural alternatives. Generally I think what comes to most people's mind is voluntary buy-outs, structural raises.

But there is also other things that we can consider like

evacuation planning, what wet-proofing and dry-proofing and those types of things. And so we will consider all of those things for this project on the table.

So once we have our alternatives kind of packaged, then we have to evaluate and compare them to one another to really see where we are getting the best bang for our buck. And so we are interested in hearing from you if there is anything that you would like us to evaluate, any kind of valuation criteria. But the criteria that I have here on the slides are just some of those kind of general criteria that we are required to look at the Corps Of Engineers. So we always look at average annual damages reduction, reduction of risk to life loss, reduction in the primary costs. Those costs would include any mitigation costs as well as full operation and maintenance costs over the project life cycle. So that would be over the fifty (50) years and that would all be included in those packages.

So again, what we need from you: We need to better understand are we capturing those problems and opportunities that are within the project area? Are there additional problems that we need to add? What flood event did your community see the most damages? O And was that flood event storm surge? Was it riverene

25 flooding? Was it back-water flooding? What type of

flooding was that? Are there alternative strategies that would better address the problems that we have in the project area? Are there additional constraints in our future development or things that we should consider as we are developing alternatives? And finally, is there any data or studies that the project team should know about and information that we can use so that we don't have to re-create the way and hopefully move a little/ faster in this project? We'd really appreciate that.

So with that -- Just keep going?

AUDIENCE MEMBER: Yeah.

CARLA SPARKS:

So we don't have a formal comment like "ending period", which is probably not as familiar for folks.

We are currently accepting public comments. At some point in the future, we will put out a formal nebo-scoping request and then give a final date for comments in this initial phase. And we will make sure you guys are all notified of that.

But if you do have public comments, we can either take them tonight, we do have cards that you can send in later, and/or you can write down the Project Manager, Carrier (Schott), here. And you can send your

public comments to her.

And on the back table, if you want to grab a card, it has how to submit comments. But you know, again, we are welcome to take your comments tonight. Anyone, by all means? Or if you have any questions on what we weren't clear on or anything, by all means that is why we are here.

JOHN LOMBARDO: Again, we have tons of data. We have tons of information on anything in this District which are welcome to. The gaps that we have, we have information on them , we have plans, we've got alternatives. You know, we've got tons of information (...unintelligible.) You are more than welcome to it. I mean you can just go to out website and get it. There is an inter-active map on the website that has elevation points through our current levee system.

The majority of our system is a riverene system. Now some of the areas we have raised to get them within that one (1%) percent storm surge elevation. Other areas -- It is just a lot. We haven't gotten there yet. We are trying to get our system closed first, and then we will starting getting them to those points throughout.

But we do have -- I know Tim was with y'all

this afternoon. We do have the area of Lakeside and the

levees west of the Charenton Canal where there is nothing.

I spent a couple of months a while back surveying (...unintelligible.) trying to get a feel for the area, looking at what's down there -- farmland, structures, houses -- just getting a feel for it. So we have a lot of information we are wiling to share with insight. You know, the locals know what they want and what they need.

CARLA SPARKS: That's right.

JOHN LOMBARDO: It is a pleasing game. So give me a heads up if y'all want to come down for a day and we can share information all day long and pass on surveys and all kinds of stuff.

CARLA SPARKS: That would be great. Yes, that would be very helpful.

JOHN LOMBARDO: So we are here to help any way we can.

OFFICER: Do we have anyone else that wants to comment? I don't know, I don't want to keep y'all longer than we need. But, you know, again, we are only in the beginning. We've got a lot to go, or I guess to say the formal comment period time hasn't even begun. So out of the thirty (30) day period we have, we will make that announcement to the public and to the press and ask that

you are aware of it. If anybody has any kind of words?

MONICA MANCUSO: (...unintelligible.) point of (...unintelligible.)

COURT REPORTER: Can you bring her the mic, please, because I cannot hear behind me.

OFFICER: Sure. I am going to ask you to talk loudly.

MONICA MANCUSO: From what I understand, LSU has listed Morgan City as (...unintelligible.)

CARLA SPARKS: Great. But did you say you were involved in some sort of economic studies?

MONICA MANCUSO: The Urban Land Institute.

CARLA SPARKS: Okay. I've heard of it.

MONICA MANCUSO: T(...unintelligible.) September (...unintelligible.)

CARLA SPARKS: Is there some document that came out of that?

MONICA MANCUSO: Yes, (...unintelligible.)

CARLA SPARKS: Okay. Great.

MICHAEL BROCATO: The Urban Land Institute.

MONICA MANCUSO and ANOTHER LADY: (...unintelligible. Talking over each other.)... the coastal resiliency at Simmesport ... Future land use and development plan that

was done for the City. It is on the City's website under

"Planning and Zoningu. The structures there are current as of 2012. I know that sounds like a long time ago, but we haven't had a lot of growth here.

MICHAEL BROCATO: Actually a lot of this is in the works (...unintelligible.) two (2) years or three (3) years ago itstarted. So there are a lot (...unintelligible.)

LADY IN AUDIENCE: Yeah, Mr. Matte talked about three (3) different projects.

MICHAEL BROCATO: Yeah. Did he mention Bayou Chene, Bayou Teche, Yokley Levee Extension, Yokley Levee Improvement -- I mean the list goes on or andon.

And again, if you look at our website SMLD.org, there is tons of information on it. There inter-active map will probably give you 90% of what you want.

Also, I'll brag on Dr. Mancuso. She is a former educator and is retired and is now doing what she can volunteering on the economic development of the area. So we really appreciateher.

OFFICER: Thank you, sir.

Anyone? I'm going once? (No response.) Going twice? (No response.)

Thank you very much for coming out and we will see you guys all again in what -- a year -- a year anda

half and we will have our ideas and our approach to

present to you guys and get the feedback on it.

But thank you all. If you have any questions, do not hesitate to call any one of the Corps people in this room and we will be happy to help you all we can.

Thank you very much for coming.

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STATE OF LOUISIANA **(Rev. 1/1/2013)**

PARISH OF ST MARY

REPORTER'S CERTIFICATE

I, ELIZABETH RHODES McCLEARY, Official Court Reporter for the 16th Judicial District Court, Parishes of St. Mary, Iberia, and St. Martin, of the State of Louisiana, employed as a court reporter for the 16th Judicial District Court, State of Louisiana, asthe officer before whom this testimony was taken, dohereby certify that this testimony was reported by me was prepared and transcribed by me or under my directionand supervision, and is a true and correct transcript to the best of my ability and understanding, that the transcript has been prepared in compliance with the transcript format guidelines required by statute or by the rulesof the board or by the Supreme Court of Louisiana andthe Federal Rules, and that I am not related to counsel orto the parties herein, nor am I otherwise interested inthe outcome of this matter.

This certificate is valid only for atranscript accompanied by my original signature and official required seal on this page.

IN WITNESS WHEREOF, I have affixed myofficial signature this **28th** day of **August, 2018** at Patterson,St. Mary Parish, Louisiana.

Elizabeth Rhodes McCleary

Eli McCleary, #91325
Official Court Reporter
16th Judicial District Court