

## MEMORANDUM FOR RECORD

SUBJECT: Regional Planning Team (RPT) Region 1, New Orleans, LA, 28 Jan 10, 1:00 pm

1. Agenda Item #1, Welcome and Introductions. Ms. Kelley Templet, RPT Region 1 Leader, opened the meeting, welcomed the attendees, and had the attendees introduce themselves.
2. Agenda Item #2, PPL 20 Selection Process Brief Overview and Ground Rules for Today's PPL 20 Nomination Meeting. Ms. Melanie Goodman, CWPPRA Program Manager, provided a PowerPoint presentation, which is available online at the CWPPRA website. She stated that the purpose of the meeting was to accept project nominations and hear public comments for developing the 20<sup>th</sup> Priority Project List (PPL), as well as nominations for demonstration projects.

Anyone can propose a project for the region. Proposals should be consistent with the Coast 2050 strategies. A project can be nominated from only one basin. If a project crosses into other basin(s), it should be nominated from the basin where primarily located. If the project could apply coast-wide (to any basin), it can be proposed from any basin. Public comments on project proposals will be accepted orally during the meeting and in writing by February 12, 2010.

A coast-wide voting meeting will be held on February 24, 2010, in the Louisiana Room at the Louisiana Department of Wildlife and Fisheries in Baton Rouge. The RPTs will select three projects in the Terrebonne, Barataria, and Pontchartrain basins; two projects in the Breton Sound, Teche-Vermilion, Mermentau, Calcasieu-Sabine, and Mississippi River Delta basins; and one project in the Atchafalaya Basin. If only one project is presented at the RPT meeting for the Mississippi River Delta Basin, an additional nominee will be selected for the Breton Sound Basin. In addition, the RPTs will select six demonstration projects for further evaluation.

In covering the ground rules for the meeting, Ms. Templet requested that each proposer submit a fact sheet. Projects that are similar can be combined at the request of the proposers. Public comments on the proposals should be as constructive as possible.

3. Agenda Item # 3, Brief Overview of Coast 2050 Regional Strategies. Ms. Templet indicated that the proposals should be consistent with the Coast 2050 Regional Ecosystem or Coast-Wide Strategies and briefly reviewed the strategies for Region 1 under the headings of restore swamps, restore and sustain marshes, protect bay and lake shorelines, restore and maintain barrier islands, maintain critical landforms, and resolve the MRGO problem. The specifics under each heading can be seen in the PowerPoint presentation for the Region 1 meeting on the CWPPRA website.
4. Agenda Item #4, PPL 20 Project Nominations.
  - a. Ms. Templet opened the floor for nominations in the Lake Pontchartrain Basin.

*#1 – Unknown Pass to Rigolets Shoreline Protection.* This project was presented by Mr. John Jurgensen with NRCS. The area along Lake Borgne between Unknown Pass and the Rigolets contains a majority of the remaining contiguous wetland acres located in Orleans Parish. The area has experienced continued loss of shoreline, and inland ponds have widened. The project would be constituted by a four-mile foreshore rock dike along the Lake Borgne shoreline from Unknown Pass to the Rigolets and would cost \$9 to \$10 million.

*#2 – New Orleans Land Bridge Shoreline Stabilization and Marsh Creation Project (Hospital Wall Area).* This project was presented by Ms. Susan Hennington with USACE. The area along the east shore of Lake Pontchartrain between Hospital Road and Greens Ditch has experienced shoreline retreat and wetland loss. The project would reverse these trends by the installation of 1,783 linear feet of rock along the northwestern shoreline of the New Orleans Land Bridge and by the use of dedicated dredge materials to create, restore, nourish, and protect 70 acres of wetlands. The cost of the project would be \$13.65 million (including 25% contingency).

*#3- Bayou Bonfouca Marsh Creation Project.* This project was introduced by Mr. Brian Fortson with St. Tammany Parish and presented by Mr. Robert Dubois with USFWS. The area along the north shore of Lake Pontchartrain in the vicinity of Bayou Bonfouca was fairly stable prior to Hurricane Katrina. The hurricane moved many acres of marsh, producing a situation in which marsh loss will accelerate with the recent increase in open water areas. Although shoreline erosion rates in the area are low, there is one large breach and a few impending ones that could expose the interior marshes to Lake Pontchartrain waters. The purpose of the project is to create and/or nourish 460 acres of low salinity brackish marsh and to repair any breaches on the lake rim. The project, which would cost \$14 to \$18 million, consists of placing sediment dredged from Lake Pontchartrain into the open water areas.

*#4 – North Shore Marsh Restoration Project.* This project was introduced by Mr. Brian Fortson with St. Tammany Parish and presented by Ms. Angela Trahan with USFWS. The project area is located on the north shore of Lake Pontchartrain within the Big Branch Marsh NWR and Fontainebleau State Park. Interior ponding and, to a lesser extent shoreline erosion, are the major causes of wetland loss in the project area. Large ponds have formed, and a narrow strip of land separates these ponds from Lake Pontchartrain. Although the shoreline erosion rates are relatively low, the shoreline is already breached in several areas, and marsh loss in the interior is expected to increase with additional breaches. The project, which would cost \$16 million, would involve the placement in designated areas within the ponds of sediment hydraulically dredged from Lake Pontchartrain to create 450 acres of emergent marsh and nourish 300 acres of marsh. In all of the ponds, marsh would be created to widen the shoreline so that the ponds would not be breached during the course of normal shoreline retreat.

*#5 – Fritchie Marsh Terracing and Marsh Creation.* This project was presented by Ms. Cheryl Brodnax with NOAA. The CWPPRA PO-06 project was completed in 2001 and resulted in improved hydrology and marsh restoration throughout the area. However, a significant portion of the Fritchie Marsh bordering Highway 90 was lost as a result of Hurricane Katrina. These marshes cannot recover without the replacement of lost sediments. The project, which would cost \$25 million, would entail the construction of 400 acres of marsh platform, with 270 acres south of Salt Bayou and 130 acres north of Salt Bayou. Additionally, 130,000 linear feet of

earthen terraces occupying 1,200 acres of open water would be constructed just north of Salt Bayou. Two million cubic yards of material would be dredged from Lake Pontchartrain to build the marsh. Danny Miller with the Big Branch NWR expressed support for the project.

*#6 – Proctor Point Shoreline Stabilization Project.* This project was presented by Mr. Gregory Miller with USACE. Proctor Point is on the southwest shoreline of Lake Borgne. Hurricane Katrina caused significant erosion on the end of the point and on both of its flanks. As a result, several interior ponds have opened directly into Lake Borgne, furthering the deterioration of interior marshes. This is the only area along the southwestern shoreline of Lake Borgne that has not been stabilized or planned for stabilization under various authorities. The project would consist of the construction of 8.4 miles of continuous nearshore breakwaters in a manner similar to nearby CWPPRA projects (PO-30, PO-32) in Lake Borgne. Costs have not been determined. Mr. William McCartney with St. Bernard Parish fully supports the project because it is the last remaining piece in the protection of Lake Borgne.

*#7 – Kenner Effluent Discharge to Restore/Sustain LaBranche Marsh and Wetlands.* This project was presented by Ms. Rachael Hunter of Comite Resources, Inc. The cypress swamps and freshwater marshes in the eastern portion of the LaBranche wetlands have been severely degraded by saltwater intrusion and subsidence. The City of Kenner, Louisiana, is evaluating options related to the discharge of secondarily treated municipal effluent into the LaBranche wetlands. Wetland assimilation of treated effluent would provide the most economical approach to meet the city's water quality objectives while contributing to the restoration of the LaBranche marsh. This procedure has proved successful in other cities in Louisiana, and landowner concerns have been overcome. The cost of the project would be \$4 million for 17 MGD wastewater treatment. Marnie Winter with Jefferson Parish supports the project for its multiple advantages, including infrastructure protection.

*#8 – Northern Chandeleur Islands Restoration.* This project was presented by Ms. Kimberly Clements with NOAA. The 50-mile arc of the Chandeleur Islands has played a historic role in attenuating storm impacts, regulating the estuarine gradient, supporting recreation and tourism, and providing diverse fisheries assemblages and wildlife habitat. The size of the islands has decreased dramatically since the mid-1850s, and the islands are expected to be converted to a system of submerged shoals within 25 years. A sand borrow source has been identified at the northern end of the islands. The project would use 2.4 million cubic yards of sand via dedicated dredging in a semi-confined discharge to restore 15,150 feet of the beach and 365 acres of back barrier platform. The cost would be \$37 million. Mr. William McCartney with St. Bernard Parish strongly supports the project and would like to see it extended.

*#9 – Northwest Lake Pontchartrain Shoreline Protection.* This project was presented by Mr. John Jurgensen with NRCS. High wave energy, sea level rise, and subsidence levels are impacting the wetland shorelines and inland marshes of Lake Pontchartrain. Erosion rates have been measured to be 18 feet of shoreline loss per year. The northwest shoreline of Lake Pontchartrain between Stinking Bayou and the Tchefuncta River is unprotected and is experiencing dramatic problems. The project would involve a five to seven mile foreshore rock dike in critical areas with high erosion rates. The dike will be designed to allow fisheries access

to the marshes in the interior. Any material dredged for access would be used beneficially to create marsh behind the dike. The cost would be \$10 to \$15 million.

*#10 – Irish Bayou and Brazillier Island Marsh Creation.* This project was presented by Mr. Patrick Williams with NOAA. Hurricane Katrina and subsequent high water events with storm passage have eroded and breached the Lake Pontchartrain shoreline and induced interior wetland loss in the vicinity of Irish Bayou, Bayou Chevee, and Brazillier Island. Only a portion of the lakeshore is protected by a rock dike (PPL 5, PO-22), with additional reaches planned for protection with materials demolished from the Twin Spans. However, the portion from I-10 south to the existing PO-22 rock remains unaddressed. The proposed solutions are in two increments. The first increment would be the creation of 375 to 400 acres of marsh through confined disposal of sediment dredged from Lake Pontchartrain at a cost of \$10 million. The second increment would be the construction of a rock foreshore dike in two segments at a cost of \$6.4 million. The proposal is restricted to the first increment because of the high cost of a combined project and the fact that the shoreline is not receding fast enough at the present time to justify the cost of a rock dike.

Nominations were closed for the Lake Pontchartrain Basin.

b. Ms. Templet opened the floor for nominations for demonstration projects.

No demonstration projects were introduced.

5. Agenda Item #5, Announcement of Coast-Wide Voting Meeting. Ms. Goodman reiterated that the coast-wide voting meeting would be held on Feb. 24<sup>th</sup>.

6. Agenda Item #6, Announcement of Upcoming PPL 20, Task Force, Technical Committee and Other Meetings. Ms. Goodman indicated that all meeting notices are posted on the CWPPRA website.

7. Agenda Item #7, Adjourn. The meeting adjourned at 3:30 pm.

## MEMORANDUM FOR RECORD

SUBJECT: Regional Planning Team (RPT) Region 2, New Orleans, LA, 28 Jan 10, 9:00 am

1. Agenda Item #1, Welcome and Introductions. Ms. Melanie Goodman, CWPPRA Program Manager, conducted the meeting at the request of Mr. Travis Creel, RPT Region 2 Leader. Ms. Goodman welcomed the attendees and had the attendees introduce themselves.

2. Agenda Item #2, PPL 20 Selection Process Brief Overview and Ground Rules for Today's PPL 20 Nomination Meeting. Ms. Goodman provided a PowerPoint presentation, which is available online at the CWPPRA website. She stated that the purpose of the meeting was to accept project nominations and hear public comments for developing the 20<sup>th</sup> Priority Project List (PPL), as well as nominations for demonstration projects.

Anyone can propose a project for the region. Proposals should be consistent with the Coast 2050 strategies. A project can be nominated from only one basin. If a project crosses into other basin(s), it should be nominated from the basin where primarily located. If the project could apply coast-wide (to any basin), it can be proposed from any basin. Public comments on project proposals will be accepted orally during the meeting and in writing by February 12, 2010.

A coast-wide voting meeting will be held on February 24, 2010, in the Louisiana Room at the Louisiana Department of Wildlife and Fisheries in Baton Rouge. The RPTs will select three projects in the Terrebonne, Barataria, and Pontchartrain basins; two projects in the Breton Sound, Teche-Vermilion, Mermentau, Calcasieu-Sabine, and Mississippi River Delta basins; and one project in the Atchafalaya Basin. If only one project is presented at the RPT meeting for the Mississippi River Delta Basin, an additional nominee will be selected for the Breton Sound Basin. In addition, the RPTs will select six demonstration projects for further evaluation.

In covering the ground rules for the meeting, Ms. Goodman requested that each proposer submit a fact sheet. Projects that are similar can be combined at the request of the proposers. Public comments on the proposals should be as constructive as possible.

3. Agenda Item # 3, Brief Overview of Coast 2050 Regional Strategies. Ms. Goodman indicated that the proposals should be consistent with the Coast 2050 Regional Ecosystem or Coast-Wide Strategies and briefly reviewed the strategies for Region 2 under the headings of restore swamps; restore and sustain marshes; restore, protect, and maintain bay, lake, and Gulf shorelines and barrier islands; and maintain critical landforms. The specifics under each heading can be seen in the PowerPoint presentation for the Region 2 meeting on the CWPPRA website.

4. Agenda Item #4, PPL 20 Project Nominations.

a. Ms. Goodman opened the floor for nominations in the Barataria Basin.

*#1 – Bayou L’Ours Ridge Restoration and Terracing.* This project was presented by Mr. Randy Moertle with the Little Lake Land Company. The gapping of the Bayou L’Ours ridge by pipeline canals has altered the hydrology of the area and contributed to marsh degradation north of the ridge. Tidal flow is causing the depth of the openings to increase. Also, portions of the marsh along the southern shore of the ridge are being eroded. The project is designed to restore the function of the ridge, restore the hydrology north of the ridge, and stop the deepening of the gaps. Three of the gaps will be completely closed, and two will be decreased in size and armored to prevent further scouring. A 325-acre terracing field consisting of approximately 30,000 linear feet of terraces will be constructed south of the ridge to provide additional protection. When this project was proposed last year, people did not understand that the salinity was coming from the south. The project is supported by all of the landowners in the area, according to Mr. Moertle. The cost is \$6 million. Ms. Cheryl Broadnax asked why the project was not extended and received increased cost as an answer. Expressions of support were made by Ms. Marnie Winter with Jefferson Parish, Mr. Pat Amedee with the Lafourche Parish School Board, Mr. Phil Precht with Conoco Phillips, Mr. Nick Matherne with Lafourche Parish, Mr. Oneil Malbrough with Shaw, and Mr. Ed Perrin of Lafitte.

*#2 – Bayou Dupont Marsh and Ridge Creation Phase II.* This project was presented by Ms. Cheryl Brodnax with NMFS. There is widespread historic and continued rapid land loss in the project area because of altered hydrology, wind erosion, and subsidence. This project, which is an extension of Phase I, would create 340 acres of marsh and ridge using confined disposal of sediment dredged from the Mississippi River and reestablish the natural flow of Bayou Dupont to the degree possible. The cost would be \$29.4 million. When questioned about implementation time in relation to Phase I, Ms. Brodnax responded that the other project is being completed. Expressions of support for the project were made by Mr. Pat Amedee with the Lafourche Parish School Board (the school property is being affected by the current conditions), Mr. Phil Precht with Conoco Phillips (because of a refinery in the area that is being affected by current conditions), Ms. Marnie Winter with Jefferson Parish, Mr. Harry Cahill with the West Jefferson Parish Levee District, and Mr. Ed Perrin of Lafitte.

*#3 – South Lake Salvador Shoreline Restoration Project.* This project was presented by Mr. Nick Matherne with Lafourche Parish Government. The Lake Salvador area has been experiencing high rates of land loss, and the lake is expanding because of shoreline erosion rates of approximately 15 feet per year. The erosion has caused the lake to be breached in several areas into adjacent waterbodies. Along the south shore of the lake, breaching with the Gulf Intracoastal Waterway (GIWW) is imminent, which would impede safe navigation and increase erosion in the marshes south of the GIWW that are being buffered by the lake rim. The project would create 400 acres of marsh through confined disposal of sediment dredged from Lake Salvador. Additionally, 2.5 miles of hard shoreline stabilization would be constructed along the south shore of the lake to further fortify and redefine the lake rim. The cost of the project is \$19.2 million.

*#4 – East Golden Meadow Marsh Creation.* This project was presented by Mr. Nick Matherne with Lafourche Parish Government. There is virtually no marsh remaining in the near vicinity of the hurricane protection levee in the East Golden Meadow area. The lack of marsh causes the levee to be completely exposed to wind-generated waves. The project would create 287 acres of

marsh just to the east of the levee, which would help to protect the levee. Borrow materials would be obtained from within the project area because of an absence of external cost-effective sources and would be no more than 14 feet deep to avoid dissolved oxygen issues. The cost would be \$12.3 million. Expressions of support for the project were made by Mr. Randy Moertle with the Little Lake Land Company and by Mr. Phil Precht with Conoco Phillips.

*#5 – Mississippi River Reintroduction North of Lac des Allemands (MR RiNOLDA) (Bayou Becnel or Bayou Lassene).* This project was presented by Mr. Brad Crawford with EPA. Swamps and marshes in the Barataria Basin have been isolated from the Mississippi River for many years, which historically was their primary source of water, sediments, and nutrients. Swamps are now dependent on local rainfall and flooding caused by wind-driven high coastal water levels. Subsidence is moderate, and because of the lack of sediment input and low swamp productivity, there is an accretion deficit that results in increased swamp flooding. The project would divert 400 to 1,000 cfs of Mississippi River water into the swamps northwest of Lac des Allemands at a cost of \$15 million. Mr. Randy Moertle indicated that the water is stagnant and doesn't think more water will help. Mr. Ken Teague said that he was not aware of any impounded areas in the project area and that subsidence needs to be combated, an opinion that was seconded by Mr. Charles Sasser. Mr. Crawford said that landowners were initially concerned about too much water but are now in favor of the project.

*#6 – Home Place Siphon.* This project was presented by Mr. Brad Crawford with EPA. Leveeing of the Mississippi River for flood control and navigation deprived the area of sediment needed to maintain elevation against subsidence, as well as fresh water to maintain low salinity marshes. Aerial photography clearly shows that much wetland loss has occurred in the project area. The project would construct a 1,500 to 2,000 cfs Mississippi River siphon that would create marsh and/or reduce the rate of marsh loss, restore intermediate and fresh marshes, and increase SAV cover. The project would create or protect 500 to 750 acres of marsh and help protect the Mississippi River levee in the vicinity of the project area at a cost of \$16 million. An expression of support for the project was made by Ms. Albertine Kimble with Plaquemines Parish.

*#7 – Coastal Wetland Restoration by Backfilling Oil and Gas Canals in Jean Lafitte National Park.* This project was presented by Mr. Ken Teague with EPA. Canal dredging has contributed significantly to land loss in Louisiana, and this is the case in the Jean Lafitte National Park. Little has been done in Louisiana to reverse the damage caused by canals and spoil banks. The project will backfill the system of oil and gas canals in the park at strategic locations, following the lead set by the park. Backfilling will involve removing the existing spoil banks and disposing of the material in the canals. There is insufficient sediment volume on the spoil banks to fill the canals to marsh elevation, but there is enough to significantly shallow the canals, and over time some fill to marsh elevation. In addition, removal of the spoil banks will restore the natural hydrology across the marsh surface. The cost would be \$18.4 million. In response to a question concerning vegetation on the spoil banks, Mr. Teague responded that Chinese tallow is prevalent. Mr. Randy Moertle indicated that his experience as a land manager has been that the procedure does not work and that backfilled canals don't recover. Mr. Teague responded that the procedure has been documented to be successful by the students of Dr. Gene Turner. Mr. David Muth stated that the effects will depend on where the removal is taking place and that their

experience has been that it is highly successful. Mr. Oneil Malbrough said that he had been to the project area and had seen that it is working. Ms. Marnie Winter with Jefferson Parish expressed support for the project, saying that they had seen promising effects in the placement of Christmas trees in canals. Ms. Vickie Dufour of the Bayou Segnette Boaters Society endorsed the project and said the technique needed to be implemented across the coast.

*#8 – Bayou Dupont Sediment Delivery—Marsh Creation 3.* This project was presented by Mr. Paul Kaspar with EPA. The wetlands in the Barataria Basin were historically nourished by freshwater, sediments, and nutrients delivered by the Mississippi River and its many distributaries. These inputs ceased when the levees were constructed on the lower river for flood control and navigation. In addition, numerous oil and gas canals in the area have contributed significantly to wetland losses. The project, which would cost \$28 million, would create 550 acres of emergent brackish marsh by placing sediment from the Mississippi River into open water areas. The sediment would be obtained through an existing pipeline constructed through the CWPPRA project titled Mississippi River Sediment Delivery System (BA-39). Mr. Oneil Malbrough asked why the project was not extended to a canal on the south, to which increased cost was the response. Mr. Malbrough pointed out that because mobilization and demobilization costs are high, the CWPPRA program could save money by including larger areas in proposals and by shortening the timeframe between phases in phased projects. Ms. Marnie Winter with Jefferson Parish expressed support for the project and said that it should be extended to the PPL 17 project limits.

*#9 – West Pointe a la Hache Marsh Creation South.* This project was presented by Mr. Paul Kaspar with EPA. The Mississippi River levee has isolated the West Pointe a la Hache wetlands from historic overbank flooding of the river. Without continued sediment input, the marshes have been unable to maintain viable elevations because of ongoing subsidence. In addition, oil and gas canals have disrupted the hydrology and facilitated saltwater intrusion, further degrading the marsh. Beginning in 1993, the siphons at West Pointe a la Hache were operated to reintroduce Mississippi River water, fine sediments, and nutrients into the general area. However, land loss rates continue to be high. There is an opportunity to create marshes in the southern portion of the siphon outfall area. The project would create 240 acres of intermediate marsh by using sediment from the nearby Mississippi River and would protect the Mississippi River levee in the vicinity of the project. The cost would be \$13 million.

*#10 – Bayou Villars Shoreline Stabilization Project.* This project was presented by Ms. Susan Hennington with USACE. The proposed project is located along the east shore of Lake Salvador near the Barataria Preserve of the Jean Lafitte National Park and Preserve and lands south of Bayou Villars in Jefferson Parish, Louisiana. Within the past 50 years, the project area has lost more than 650 acres of wetlands, and the opening of Bayou Villars at Lake Salvador has retreated 5,100 feet into the GIWW. Shoreline retreat and wetland loss were accelerated by winds and storm surge caused by Hurricanes Katrina and Rita. Within the project area, these storms eroded the shoreline 100 feet in places, and interior marsh was compacted or torn apart, creating open water ponds. The flooding of the communities of Crown Point, Jean Lafitte, and Barataria may be partly attributed to these high wetland losses. Stabilizing the shoreline and protecting the remaining marsh would protect natural coastal resources, communities, and infrastructure. The project would involve the installation of 31,000 tons of rock along 5,500



linear feet of shoreline from the pipeline crossing north of Bayou Villars to the north bank of the mouth of Bayou Villars and 44,000 tons of rock along 8,000 linear feet of shoreline from the pipeline crossing south of Bayou Villars to the south bank of the mouth of Bayou Villars. The cost would be \$10 million. Support for the project was expressed by Ms. Marnie Winter with Jefferson Parish, Mr. David Muth with the National Park Service (which has land on the north), Ms. Vickie Dufour with the Bayou Segnette Boaters Association (saying this is their No. 1 project), Mr. Jason Smith with Jefferson Parish Environmental (saying that if this area is lost, population and infrastructure to the west and north will be adversely affected), and Mr. Oneil Marlborough with Shaw (citing the secondary benefits).

*#11 – Bayou Grande Cheniere Marsh Creation.* This project was presented by Ms. Angela Trahan with USFWS. Marsh loss is occurring in the West Pointe a la Hache area, even with the operation of the siphons. Significant marsh loss has occurred south of Lake Hermitage with the construction of numerous oil and gas canals. The primary goal of the project is to recreate marsh habitat in the open water areas and nourish marsh along the eastern side of the Bayou Grande Cheniere ridge. The project would use the Pointe a la Hache siphons and hydraulically dredge and pump riverine sediments into the project area by pipeline to create 500 acres of marsh. In addition, 60,000 linear feet of terraces would be constructed to reduce fetch and turbidity and capture suspended sediment. The cost would be \$25 million. Support for the project was expressed by Ms. Albertine Kimble with Plaquemines Parish.

*#12 – Bayou Dupont to Bayou Barataria Marsh Creation.* This project was presented by Mr. John Jurgensen with NRCS. The project had been proposed last year, but was too expensive and has been scaled back. It is intended to address land loss in an area between other existing and proposed projects. The marshes between Bayou Dupont and Bayou Barataria are severely deteriorated. The project would create 240 acres and nourish 50 acres of marsh between Bayou Dupont and Bayou Barataria, partially restoring the area's hydrology. Material for marsh creation would be excavated from The Pen. The project would also include 1,740 feet of rock dike protection along the east bank of the Barataria Bay Waterway. The cost would be \$21 million. According to Mr. Jurgensen, the project is supported by the three major landowners in the area, including Conoco Phillips and LL&E. Support for the project was expressed by Ms. Marnie Winter with Jefferson Parish and Mr. Phil Precht with Conoco Phillips.

*#13 – Homeplace Marsh Creation.* This project was presented by Mr. John Jurgensen with NRCS. The project is located west of the hurricane protection levee near Homeplace in Plaquemines Parish. The marsh between the hurricane protection levee and Bay Lanaux/Bay de la Cheniere is severely degraded, and the lack of healthy marsh at this location poses a threat to the levee. The project would create 250 acres of marsh between the levee and Bay Lanaux/Bay de la Cheniere, which would help to protect the levee. The cost would be \$22 million. Support for the project was expressed by Ms. Albertine Kimble with Plaquemines Parish, who said that this was their second most important project and that it would complement a CIAP project in the area.

*#14 – Naomi Siphon Improvement.* This project was presented by Mr. John Jurgensen with NRCS. The Naomi siphon is operating far below its capacity. The project will address the mechanical shortcomings that are associated with reduced or lost siphon operations. The West

Pointe a la Hache siphon 15 miles downriver is of similar components and design, was experiencing similar difficulties, was improved, and is operating far more efficiently and therefore will be used as a guide for improvements to the Naomi siphon. The proposed improvements include on-site remote instrumentation to provide continuous monitoring of actual flow rates; remote instrumentation to provide immediate notification when pipes lose their prime; on-site vacuum pump, control equipment, and instrumentation to allow speedy reestablishment of flow; and an air release system. Additional improvements that may be investigated during E & O include extension of the intake pipes to prevent vacuum loss from ship passage and installation of a flange attachment for coupling with dredge operations to enrich one or more of the pipes with fine sediment. The cost would be \$5.4 million. Mr. Oneil Malbrough remarked that the siphon could work in conjunction with the land bridge recommendations.

*#15 – Northeast Little Lake Shore Protection and Marsh Creation.* This project was presented by Mr. John Jurgensen with NRCS. The east bank of Harvey Cutoff, the northwest shore of Turtle Bay, and the northeast shore of Little Lake are experiencing erosion of 10 to 25 feet per year; and marsh deterioration is occurring between the northwest shoreline of Little Lake and Harvey Cutoff. The project would involve 35,000 feet of shoreline protection, leaving openings as needed for oil and gas access and/or water exchange, as well as the creation of 200 acres of unconfined marsh in open water areas. The project would cost \$15 million and would contribute to the protection of the Central Barataria Basin Land Bridge, the communities of Lafitte and Barataria, and oil and gas infrastructure. Support for the project was expressed by Ms. Marnie Winter with Jefferson Parish and Mr. Phil Precht with Conoco Phillips.

Nominations were closed for the Barataria Basin.

b. Ms. Goodman opened the floor for nominations in the Mississippi River Delta Basin.

*#1 – Coastwide Planting Project.* This project was presented by Mr. Ron Boustany with NRCS. The coastal restoration community has long recognized the benefits of vegetative plantings in restoration. Many marsh creation and most terracing projects require planting to insure success. Coastal shoreline plantings have also proven to be very effective, and some have demonstrated the ability to facilitate accretion as well as to stop shoreline erosion. Recent hurricane events have demonstrated a need to have a mechanism in place so that large-scale planting efforts can be deployed in a timely manner to specifically target areas of need anywhere coastwide. Although CWPPRA can fund specific large-scale projects, the normal program cycle for individual projects can delay needed restoration plantings for a number of years. The proposed project would provide a consistent annual mechanism for vegetative planting projects through the CWPPRA program designed to implement targeted restoration planting efforts. The project would set up an advisory panel consisting of representatives of various state and federal agencies who would assist in the selection of projects for funding. The project would also set up a mechanism by which project nominations would be submitted for consideration. The panel would provide an annual report on project activities. The cost would be \$500,000 per year for 20 years (\$10 million total). It would have the added advantage of stabilizing the business of growers.

*#2 – Beneficial Use of Mississippi River Dredge Material via Hopper Dredge Pumpout Stations.* This project was presented by Mr. Robert Dubois with USFWS. Valuable sediments are being lost through discharges by hopper dredges into deep water. The project would enable beneficial use of these sediments by establishing four to eight mooring/pumpout sites along either side of the Mississippi River in the vicinity of Head of Passes, West Bay, and East Bay. These would be simple structures much like oil and gas companies have in Southwest Pass and would have several large posts bundled together with a cable and set in a series so that the hopper dredge could temporarily moor while pumping. The pumpout station would also have a small catwalk between the post and a pipe that would be attached to an arm that could be swung out to the hopper dredge. The pipe would run back into the marsh or open water area that would receive the sediment. Ms. Albertine Kimble with Plaquemines Parish expressed strong support for the project.

Nominations were closed for the Mississippi River Delta Basin.

c. Ms. Goodman opened the floor for nominations in the Breton Sound Basin.

*#1 - Lake Lery Shoreline Marsh Creation.* This project was presented by Mr. Chris Allen with OCPR. The marshes forming the eastern shoreline of Lake Lery and directly to the east of the former lake shoreline were severely deteriorated by Hurricane Katrina. Unless these marshes are rebuilt, the lake will probably continue to grow and will extend to Bayou Terre aux Boeufs. The project would create/nourish 460 acres of marsh along the eastern shore of Lake Lery using material dredged from Lake Lery and vegetative plantings. The target elevation for the marsh creation area will correspond with the elevation of healthy marsh in the surrounding areas. Temporary containment dikes will be constructed in situ around the marsh creation/nourishment area and will be gapped within three years of construction to allow greater tidal exchange and estuarine organism access. The project would cost \$19 million, would complement several other projects, and would represent the final construction unit required to restore the Lake Lery shoreline. Support for the project was expressed by Mr. William McCartney with St. Bernard Parish, citing its synergy with other projects.

*#2 – Monsecour Siphon.* This project was presented by Mr. Kenneth Teague with EPA. The area north of Phoenix, Louisiana, in Plaquemines Parish has been disconnected from the Mississippi River since levees were constructed in the early 20<sup>th</sup> century. The lack of overbank flooding/crevasses ensures that wetlands do not have sufficient sediment input to maintain elevation against subsidence. In addition, drainage canals and oil and gas canals and associated spoil banks probably create some undesirable impoundment and tidal scour/saltwater intrusion in the area. The project would involve construction of a siphon from the Mississippi River with a 2,000 cfs capacity that would introduce sediments and nutrients into the project area, thereby protecting 990 acres of intermediate marsh and reducing wetland loss rates. The project would cost \$10.6 million. Ms. Albertine Kimble with Plaquemines Parish expressed support for the project (this is their No. 1 project), saying that the area was a breeding ground for mosquitoes.

*#3 - White Ditch Marsh Creation Sediment Delivery.* This project was presented by Mr. Kenneth Teague with EPA. Marshes east of the Mississippi River in the vicinity of Belair, Louisiana, in Plaquemines Parish were historically intermediate to brackish. They were completely converted

to brackish when the early development of New Orleans cut off the freshwater that had been supplied by overbank flooding of the Mississippi River. Failed agricultural impoundments converted much of the area to open water. A siphon built in 1963 to bring freshwater and sediment to the marshes became nonfunctional, but has recently been partly rehabilitated. The project would create/nourish 380 acres of intermediate marsh using dredged sediments from the Mississippi River and would complement the White Ditch Resurrection and Outfall Management project (BS-12), which is currently in the engineering and design phase. The project would cost \$19.5 million.

*#4 – Breton Marsh Restoration Project.* This project was presented by Mr. Robert Dubois with USFWS. The project area is located in Plaquemines Parish southeast of Delacroix, Louisiana, and south of Lake Lery between Bayou Terre aux Boeufs and River aux Chenes. Much of the marsh in the project area was destroyed by Hurricane Katrina. The Caernarvon Freshwater Diversion project cannot assist in the restoration of the marshes because most of the sediments and nutrients are removed before the water reaches the project area. The project would restore 337 acres of marsh and nourish 99 acres of marsh through hydraulic dredging of sediments in Lake Lery deposited by the Caernarvon Diversion Project. Dredged material would be pumped into containment dikes, and the dikes would be gapped or degraded no later than three years post construction to allow for access of estuarine organisms. The project would cost \$8.8 million (or \$11 million including contingency). Support for the project was expressed by Mr. William McCartney of St. Bernard Parish and Ms. Albertine Kimble with Plaquemines Parish.

*#5 – Wills Point Marsh Creation.* This project was presented by Mr. Scott Wandell with USACE. The project area is located in Plaquemines Parish on the east bank of the Mississippi River, northeast of Wills Point, and adjacent to the local 40-Arpent levee. The area lies between the natural ridge of Rive aux Chenes and Tigers Ridge. The area is mostly shallow water that appeared when marsh was lost between 1958 and 1974. Although Hurricane Katrina did not cause a great deal of damage in the project area, adjacent areas were severely affected, and another hurricane could open the area more and impact the two natural ridges. The project would restore 630 acres of marsh and provide additional protection to the levee and the ridges by mining 5.8 million cubic yards of material from the bar at Wills Point on the Mississippi River. The project would cost \$28 million. Support for the project was expressed by Ms. Albertine Kimble with Plaquemines Parish.

*#6 – Delacroix Wetland Restoration Project.* This project was presented by Mr. Gregory Miller with USACE. The project is located in St. Bernard Parish adjacent to and east of the town of Delacroix and La. Hwy. 300. The area has experienced significant marsh loss, particularly during the past decade as a result of hurricane impacts and especially Hurricane Katrina. Delacroix has been deprived of a natural protection buffer, and runoff and discharges from the town contribute to lessened water quality in the absence of nearby marshes. The project would utilize dedicated dredging from Lake Lery to create 468 acres of marsh and would utilize existing infrastructure (the highway embankment and canal/slip spoil banks) to maximize its utility and cost effectiveness. There is competition for borrowing from the lake. Project costs have not been estimated. Support for the project was expressed by Mr. William McCartney with St. Bernard Parish.

*#7 – Reggio Area Marsh Creation Project.* This project was presented by Mr. Gregory Miller with USACE. The project is located in St. Bernard Parish near the community of Reggio and La. Hwy. 300. The marshes between Lake Lery and the Bayou Terre aux Boeufs ridge were decimated by Hurricane Katrina. Open water areas in this region are continuing to expand, eroding the few remaining areas of marsh. The site proposed for marsh creation is a natural pond close to the bayou and the Delacroix Highway. Erosion of nearby wetlands has created a two-mile expanse of open water stretching from the edge of Lake Lery to the site, which has caused flooding of nearby property and roads during the last three hurricane seasons. The project would utilize dedicated dredging from Lake Lery to create 400 acres of marsh in the open water area on the west side of Reggio. Project costs have not been estimated. Support for the project was expressed by Mr. William McCartney with St. Bernard Parish.

*#8 – Lake Lery Marsh Restoration—Voss Family Property.* This project was presented by Mr. Gregory Miller with USACE. The project is located in St. Bernard Parish north of Lake Lery on the property of the Voss family who suggested the project. Although the Caernarvon Freshwater Diversion structure benefited the area marshes, Hurricane Katrina and other storms have heavily damaged and destroyed marshes in the area, producing a shallow open water area in the project site. The project would utilize dedicated dredging from Lake Lery to restore 850 acres of marsh destroyed by Hurricane Katrina. Spoil banks surround the area and would be used to contain the dredged material during construction. After dewatering, gaps would be cut into the spoil bank at natural waterways and otherwise as needed to allow tidal exchange. All of the created marsh area would be planted with wetland vegetation. Landscape design features such as ponds and tidal creeks would be included to increase estuarine productivity and maintain opportunities for traditional fish and wildlife use of the marsh. Restoring the integrity of these wetlands will ensure opportunities for continued recreational and commercial uses of the natural resources and will help protect the community of Delacroix and buffer a portion of the Verret to Caernarvon levee. Project costs have not been estimated. Support for the project was expressed by Mr. William McCartney with St. Bernard Parish.

Nominations were closed for the Breton Sound Basin.

d. Ms. Goodman opened the floor for nominations for demonstration projects.

*#1 – Ecosystem Wave Attenuator for Shoreline Protection.* This project was presented by Mr. David Walter with Ecosystems Solutions for the Marine Environment and had previously been proposed. The wave attenuator is constituted by fixed clustered rock or concrete on an upright pole. Small-scale demonstrations of the technology have been conducted in Tampa Bay, and the inventor is seeking a larger demonstration through the CWPPRA program.

*#2 – Use of Sand Derived from Pulverized Glass as Beach Nourishment on Barrier Island Restoration Projects.* This project was presented by Mr. Steven O'Connor with the nonprofit NOLA Glass. Sand usable for barrier island construction is getting more difficult and costly to obtain because of restrictions on where the materials can be dredged, and there is a dearth of sand that is of suitable particulate size to minimize beach erosion on completed barrier island projects. This project would demonstrate the use of sand derived from pulverized glass as a technically superior and less expensive material for beach topping to prevent erosion, providing

an outlet for waste glass and a reduction in landfill needs. It is already being used successfully in other places in the world.

Nominations were closed for the demonstrations.

5. Agenda Item #5, Announcement of Coast-Wide Voting Meeting. Ms. Goodman reiterated that the coast-wide voting meeting would be held on Feb 24<sup>th</sup>.

6. Agenda Item #6, Announcements of Upcoming PPL20, Task Force, Technical Committee and Other Meetings. Ms. Goodman indicated that all meeting notices are posted on the CWPPRA website.

7. Agenda Item #7, Adjourn. The meeting was adjourned at 1:00 pm.

## MEMORANDUM FOR RECORD

SUBJECT: Regional Planning Team (RPT) Region 3, Houma, LA, 27 Jan 10, 9:00 am

1. Agenda Item #1, Welcome and Introductions. M. Darin Lee, RPT Region 3 Leader, opened the meeting, welcomed the attendees, and had the attendees introduce themselves.
2. Agenda Item #2, PPL 20 Selection Process Brief Overview and Ground Rules for Today's PPL 20 Nomination Meeting. Ms. Melanie Goodman, CWPPRA Program Manager, provided a PowerPoint presentation, which is available online at the CWPPRA website. She thanked Terrebone Parish for hosting the meeting and stated that the purpose of the meeting was to accept project nominations and hear public comments for developing the 20<sup>th</sup> Priority Project List (PPL), as well as nominations for demonstration projects.

Anyone can propose a project for the region. Proposals should be consistent with the Coast 2050 strategies. A project can be nominated from only one basin. If a project crosses into other basin(s), it should be nominated from the basin where primarily located. If the project could apply coast-wide (to any basin), it can be proposed from any basin. Public comments on project proposals will be accepted orally during the meeting and in writing by February 12, 2010.

A coast-wide voting meeting will be held on February 24, 2010, in the Louisiana Room at the Louisiana Department of Wildlife and Fisheries in Baton Rouge. The RPTs will select three projects in the Terrebonne, Barataria, and Pontchartrain basins; two projects in the Breton Sound, Teche-Vermilion, Mermentau, Calcasieu-Sabine, and Mississippi River Delta basins; and one project in the Atchafalaya Basin. If only one project is presented at the RPT meeting for the Mississippi River Delta Basin, an additional nominee will be selected for the Breton Sound Basin. In addition, the RPTs will select six demonstration projects for further evaluation.

In covering the ground rules for the meeting, Mr. Lee requested that each proposer submit a fact sheet. Projects that are similar can be combined at the request of the proposers. Public comments on the proposals should be as constructive as possible.

3. Agenda Item # 3, Brief Overview of Coast 2050 Regional Strategies. Mr. Lee indicated that the proposals should be consistent with the Coast 2050 Regional Ecosystem or Coast-Wide Strategies and briefly reviewed the strategies for Region 3 under the headings of restore swamps; restore and sustain marshes; restore and protect bay, lake, and Gulf shorelines and barrier islands; and resolve Vermilion-Cote Blance Bays salinity problems. The specifics under each heading can be seen in the PowerPoint presentation for the Region 3 meeting on the CWPPRA website.

4. Agenda Item #4, PPL 20 Project Nominations.

a. Mr. Lee opened the floor for nominations in the Terrebonne Basin.

*#1 – Lake Hackberry Northeast Floating Marsh Restoration.* This project was presented by Mr. Quin Kinler with NRCS. The project area is located northeast of the Gulf Intracoastal Waterway (GIWW). The once continuous floating marshes in the area have been perforated by the GIWW and smaller access canals, leading to “float” breakup and transport. The purpose of the project is to restore floating marsh in the project area using floating mat units. The units would provide and hold in place vegetative source material to create islands and lines of floating vegetation. These islands and lines would “weave” or “knit” together existing floating islands that are currently experiencing breakup and transport. Approximately 26,600 feet of “single row” and approximately 10,835 feet of “double row” groups of floating mat units would be installed. The mat units would be planted with potted maidencane and stems. Nutria control would be provided through an enhanced incentive program in the area surrounding the floating mat deployment. The project would incorporate lessons learned from the Mandalay Refuge floating marsh restoration project (LA 05), particularly with respect to the way the units are put together. The project would cost \$3 million. When asked about nutria control, Mr. Kinler stated that they are not much of a problem in the area and that increased incentives for trapping would be more cost effective than vegetation guards. It was pointed out that water hyacinth has been found to be successful as a pioneer species for other species to move in physically. Mr. Greg Linscombe with Continental Land expressed support for the project, pointing to the encouraging results of a demonstration project after Hurricane Gustav.

*#2- East Island Beach and Backbarrier Marsh Restoration.* This project was presented by Mr. Kenneth Teague with EPA. East/Trinity Island is part of the Isles Denieres barrier island chain, one of the most rapidly deteriorating barrier shorelines in the U.S. The islands ensure that the estuaries behind them are low energy environments capable of supporting wetlands and emerging deltas where Mississippi River water is reintroduced. The islands lack a stable subaerial backbarrier platform upon which they could migrate landward. The project would place dredged material on the back side of the island to create (with vegetative plantings) 232 acres of intertidal marsh and to provide a backbarrier platform on which the island can migrate landward. Dredged material would also be placed on the front of the island, extending the life of the island by increasing its width and providing additional sand for redistribution by currents and waves along the entire island’s Gulf beach. The cost would be \$15 to \$20 million.

*#3 – Marsh Nourishment on Point au fer Island by Beneficial Use of Dredged Material.* This project was presented by Mr. Kenneth Teague with EPA. Brackish marshes continue to be lost over time at Point au fer Island, despite the existence of high concentrations of sediment and nutrients in the water surrounding the island. Possible causes include insufficient accretion, oil and gas canals, and semi-impoundment marsh management. The project would nourish 10,000 acres of existing degraded marsh on the island by beneficially using dredged material from the Atchafalaya navigation channel to the west in Atchafalaya Bay and in the nearshore Gulf of Mexico. Two to four million cubic yards of dredged material would be discharged across the marsh surface without containment. The project would cost \$20 to \$40 million.



*#4 – Timbalier Island Shoreline Sediment Nourishment.* This project was presented by Mr. Chris Llewellyn with EPA. Timbalier Island is part of the Lafourche Delta headland and barrier island system, one of the rapidly deteriorating Louisiana shorelines. Additionally, the pass east of Timbalier Island (Little Pass Timbalier) is moving westerly. Recent hurricanes have breached the island in the proposed project area. Closure of the breach would help to prevent the pass from shifting west. The project would place dredged material on the back side of the island to create 60 acres of intertidal marsh and to provide a stable platform for the island to migrate landward. Dredged material would also be placed on the front of the island, closing the cut and extending the life of the island by increasing its width. The cost would be \$30.5 million. Mr. Darin Lee questioned whether it was technically feasible to close the cut.

*#5 – Lake Barre Marsh Creation.* This project was presented by Ms. Rachel Sweeney with NOAA. The project was submitted last year and has been modified. The project area is 10 miles southeast of Montegut in Terrebonne Parish. The remaining land mass between Madison Bay and Terrebonne Bay is deteriorating as a result of interior wetlands loss and shoreline erosion. This land mass is the last barrier between Terrebonne Bay and interior bays, marshes, and infrastructure along lower Bayou Terrebonne. Water depths and bay processes on the northern edge of Terrebonne Bay may make restoration south of the project area technically challenging and costly. Marsh creation/nourishment along the southern edge of Madison Bay would act to maintain an interior line of defense and stabilize the land mass between Madison and Terrebonne bays. The project would involve dedicated dredging of 3.4 million cubic yards of material from either Lake Barre or Madison Bay to create 328 acres and nourish 103 acres of saline marsh. The cost would be \$25.9 million (including full containment, which might not be needed). Support for the project was expressed by Mr. Phil Precht with Conoco Phillips, Mr. Tim Allen with Apache Louisiana Minerals (saying the area is in big trouble), and Ms. Leslie Suazo with Terrebonne Parish (saying that this was one of the parish's priorities and that it would complement existing efforts in Madison Bay).

*#6 – Bayou Terrebonne Diversion Project.* This project was presented by Mr. Ron Boustany with NRCS. The Central and East Terrebonne marshes are greatly deprived of freshwater, nutrients, and sediments from riverine sources, which has given rise to subsidence and saltwater intrusion that have resulted in high rates of land loss. The GIWW has been recognized as a lateral source of freshwater from the Atchafalaya River extending from west to east across the entire Terrebonne Basin and provides a potential to reroute freshwater to the Central and East Terrebonne marshes. The project would construct a diversion to move freshwater, nutrients, and sediments originating largely from the Atchafalaya River through the GIWW and Bayou Terrebonne into the Montegut marshes in Central Terrebonne, including a conduit of 1,200 feet from the bayou to the northern extent of the marsh. The project would cost \$8.5 million. When questioned about the potential for salinity intrusion in the bayou as a result of the withdrawals, Mr. Boustany replied that this was an issue that would need to be looked at closely. Ms. Leslie Suazo with Terrebonne Parish expressed support for the project.

*#7 – North Catfish Lake Shoreline Protection.* This project was presented by Mr. Ron Boustany with NRCS. The north shore of Catfish Lake in Lafourche Parish has experienced average shoreline erosion of 28 feet per year, with some areas losing as much as 55 feet per year. Interior marsh loss has also created a large pond on the east side of the lake shoreline that threatens to

breach and greatly accelerate wetland loss in the area. The project would construct 20,000 linear feet of shoreline protection along the north shore of Catfish Lake using rock-filled gabion mattresses, a technique recently applied successfully in the TE-45 CWPPRA demonstration project. This method has been proven to greatly minimize complications related to oyster leases and oil and gas infrastructure, both of which are present in the project area. The method involves minimal disturbance to surface features and can be installed over existing utility infrastructure. The cost would be \$7.5 million. Mr. Nick Matherne with Lafourche Parish expressed support for the project, saying it would complement a CIAP project nearby.

*#8 – St. Louis Canal Freshwater Introduction Project.* This project was presented by Mr. Ron Boustany with NRCS. The Central and East Terrebonne marshes are greatly deprived of freshwater, nutrients, and sediments from riverine sources, which has given rise to subsidence and saltwater intrusion that have resulted in high rates of land loss. The GIWW has been recognized as a lateral source of freshwater from the Atchafalaya River extending from west to east across the entire Terrebonne Basin and provides a potential to reroute freshwater to the Central and East Terrebonne marshes. The project would replace two water control structures in the northern section of the St. Louis Canal near Grand Bois, which currently block water flow from north to south. The objective would be to provide freshwater from the GIWW to the Central and East Terrebonne marshes. The project would cost \$3.5 million. The structures were put in place by the landowner under the assumption that there was a salinity intrusion problem; but the landowner now approves reversion to the original conditions. Support for the project was expressed by Mr. Tim Allen with Apache Louisiana Minerals, which has land nearby. Mr. Allen said that the original closure had been opposed and that Apache would be happy to operate the structure. Additional support for the project was expressed by Mr. Nick Matherne with Lafourche Parish, who said that the landowner had constructed the structures to keep people off his property.

*#9 – Bayou Dularge Freshwater and Terracing Project.* This project was presented by Ms. Cheryl Brodnax with NOAA. The project is located in the northwest and southeast open water areas adjacent to the Falgout Canal and Bayou Dularge in Terrebonne Parish. Wetlands within the Terrebonne Basin have been experiencing some of the most drastic land loss rates in the state from subsidence, saltwater intrusion, and lack of sediment, freshwater, and nutrient inputs. Numerous river diversions and siphons have been constructed to replenish wetlands, but these projects are costly and not available in all areas of the coast. With much of south Louisiana under forced drainage, there are many opportunities to optimize drainage and the beneficial discharge of collected stormwater by retrofitting existing pumping stations. Stormwater is generally pumped into canals adjacent to pumping stations and then channelized and diffused into large open receiving bays. This freshwater could be directed into stressed marshes. The project would include 130,000 linear feet of earthen terracing in the open water areas flanking Bayou Dularge and the Falgout Canal and siphoning freshwater from Mormand Canal into pump station D18 and rerouting 300 cfs of the stormwater north into the terracing field. Beneficially redirecting stormwater is a known technique and has previously been applied and studied in south Louisiana. There appear to be no water quality issues because the stormwater does not contain sewage. The parish and main landowner have indicated no issues with the project concept. The cost would be \$7.1 million. Expressions of support for the project were made by

Mr. Tim Allen with Apache Louisiana Minerals and Ms. Leslie Suazo with Terrebonne Parish, who indicated that this is a priority of the Parish Coastal Advisory Committee.

*#10 – Terrebonne Bay Marsh Creation-Nourishment Project.* This project was presented by Mr. Robert Dubois with USFWS. The project is located east of Bayou Terrebonne on the north shoreline of Terrebonne Bay. Emergent marshes on the north of Terrebonne Bay have been eroding as fast or faster than almost any other marshes along the Louisiana coast as a result of lack of sediment input and a limited supply of freshwater coupled with past dredging of oil and gas canals. This rapid loss of land has dramatically increased the tidal prism north of Terrebonne Bay and contributes directly to the ongoing flooding of many communities along Bayou Terrebonne, including the town of Montegut. This rapidly increasing tidal prism is likely accelerating the interior marsh loss rates for the marshes directly north of Terrebonne Bay. These marshes also serve to slow the progress of high saline waters that threaten the lower saline marshes north and west of Madison Bay and even in Lake Boudreaux. The purpose of the project is to start reducing the tidal prism that has been increasing for many years. This would be accomplished by strengthening 16,800 feet of shoreline along the north bank of Terrebonne Bay by creating a high marsh and planting with *Spartina* and by creating 235 acres of emergent marsh in shallow open water and nourishing 550 acres of emergent marsh. Dredged materials would be obtained from the bay. The cost would be \$13.8 million (\$17.2 million with contingency). Support for the project was expressed by Mr. Phil Precht with Conoco Phillips (the landowner) and Ms. Leslie Suazo with Terrebonne Parish, who would like to see this as part of a larger project.

*#11 – Bay Raccourci Shoreline and Marsh Creation Project.* This project was presented by Mr. Robert Dubois with USFWS. The project is located north of Lake Mechant in Terrebonne Parish. High saline waters from Lake Mechant have directly contributed to the loss and/or conversion of much of the historically intermediate marshes to low salinity brackish marshes north of Lake Mechant. Much of the emergent marshes have converted to open water, which has increased fetch and is accelerating interior marsh loss. The zone of intermediate marsh in this area is very narrow and is located directly north of Lake Mechant. This transition zone between brackish marsh and the very productive fresh marshes is a very unique zone that is becoming increasingly scarce in coastal Louisiana. The CWPPRA North Lake Mechant Project (TE-44), which is currently under construction, will help retain the transition zone by strengthening critical marshes directly north of the lake. It will also close some key water exchange points to further slow the movement of high saline waters north. The largest exchange point between Lake Mechant and the lower saline marshes north of the lake is Bayou Raccourci. Currently, water from the lake enters Bayou Raccourci, continuing north until it empties into Bay Raccourci, which is just a short distance from the lake. When the high saline water enters Bay Raccourci from Bayou Raccourci, it effectively short-circuits the TE-44 project and can flow unimpeded into the lower saline marshes in any direction. The project is designed to help reduce the effects of that water exchange point, which could not be addressed by the TE-44 project, by restoring the integrity of the Bay Raccourci shoreline through shoreline restoration and marsh creation. The project would restore 23,500 linear feet of Bay Raccourci shoreline, which would effectively complete the restoration of the shoreline, by creating an earthen berm whose bay face would be planted with *Spartina*. Directly behind the shoreline restoration, 410 acres of intermediate and low salinity brackish marsh would be created by hydraulically dredging

material from either Lake Decade or Lake Mechant. The cost would be \$14.5 million (\$18 million with contingency). Mr. John Foret asked whether the lake rim would be established to historic conditions. The response from Mr. Dubois was that this would be done wherever possible. Support for the project was expressed by Mr. Tim Allen with Apache Louisiana Minerals and Ms. Leslie Suazo with Terrebonne Parish.

*#12 – Raccoon Island West Protection and Restoration Project.* This project was presented by Mr. Loland Broussard with NRCS. Raccoon Island is the smallest of the Isles Dernieres, but is particularly significant because of the number and variety of birds. The western half of the island is currently an emergent sand shoal that has become ephemeral. The sand is apparently being depleted by wave action rather than by an existing breakwater on the eastern half of the island. The shoal is either completely submerged or severely reduced in size each time a tropical storm impacts the island. Lack of sustainability prevents the establishment of vegetation that would provide protection to that part of the island, and lack of vegetation severely limits the habitat usage of critical avian and waterfowl species. The project would restore 230 acres of dune on top of the existing sand shoal through placement of offshore dredged material, the construction of offshore segmented rock breakwaters extending from the existing breakwater, and the building of a terminal groin at the end of the breakwater. Herbaceous and woody vegetation would be planted on the dune/beach platform. The cost would be \$32.1 million. Mr. Ken Teague asked about the location of the borrow sites. Mr. Broussard responded that a number of potential offshore sites were being considered.

*#13 – Whiskey Island Shoreline Protection and Enhancement.* This project was presented by Mr. Loland Broussard with NRCS. Whiskey Island is part of the Isles Dernieres chain and is the only Louisiana barrier island that provides immediate adjacent protection to interior wetlands and oil and gas infrastructure. The 1998 CWPPRA TE-27 Whiskey Island Restoration Project increased the structural integrity and longevity of the island. However, shoreline and inland bay erosion continues to threaten the island's sustainability, and the hurricanes of 2005 and 2008 considerably reduced the island's profile. The project would involve the construction of offshore segmented breakwaters from the western vegetated portion of the island to the eastern end. The adjoining TE-48 Raccoon Island Project has shown that segmented breakwaters in appropriate areas are less expensive and environmentally intrusive than alternatives used in the past and that a particular benefit is the ability to provide material recovery. The project would protect 407 intertidal and dune acres. An additional 76 acres of tidal and supratidal beach area are expected to accrue between the breakwaters and the existing shoreline as a result of the segmented nature of the breakwaters. The cost would be \$13.3 million.

Nominations were closed for the Terrebonne Basin.

b. Mr. Lee opened the floor for nominations for the Atchafalaya Basin.

*#1 – West Wax Lake Wetlands Diversion.* This project was presented by Ms. Karen Wicker with Coastal Environments. The project area is the west side of the Wax Lake Wetlands in St. Mary Parish. Three Wax Lake Outlet bayous (Hog, Leopard, and Blue) are becoming blocked by the development of the outlet's west bank natural levee, which is reducing the diversion of freshwater, nutrients, and sediment to the West Wax Lake Wetlands east of Bayou Sale and

causing marsh loss. The project is designed to restore and maintain the bayou openings by dredging and to create 64 acres of freshwater wetlands through deposition of dredged material from the channels and indirectly create 55 acres of freshwater wetlands through accretion in access canals and shallow ponds adjacent to the channel. Because of the complexity of the situation, Ms. Wicker wants to work with NRCS to get a better understanding of the hydrology. Mr. Mark Hester stated that it appeared that oil and gas canals and spoil banks were affecting the situation and asked whether there was any plan to fill or close the canals. Ms. Wicker responded that because of the complexity of the situation, the canals would need to be looked at on a case-by-case basis. A cost estimate has not been prepared, but Ms. Melanie Goodman said this could be done later.

Nominations were closed for the Atchafalaya Basin.

c. Mr. Lee opened the floor for nominations for the Teche-Vermilion Basin.

*#1 – Coles Bayou Marsh Creation and Restoration.* This project was presented by Mr. John Foret with NOAA. The project is located on the eastern bank of the Freshwater Bayou Canal in the vicinity of Schooner Bayou and to the west of Little Vermilion Bay. Marshes in the area have been declining as a result of shoreline erosion, subsidence/sediment deficit, and interior ponding. The canal has widened to 800 feet from its authorized width of 200, producing direct wetland losses. Three breaches have formed on the east bankline of the canal, allowing boat wakes and hydrologic action to export organic material from the project area. Significant interior marsh loss has resulted from saltwater intrusion and hydrologic changes associated with increasing tidal influence, producing a more floatant marsh type. Disturbances to the landscape from hurricanes and herbivory have resulted in the breakup and export of large sections of interior marsh, producing open water areas. To correct these problems, the project would create 335 acres of intermediate marsh in open water areas through dedicated dredging from Vermilion Bay. Approximately 30,000 feet of terraces would be constructed in shallow open water areas to reduce pond enlargement. A 10,600-foot rock dike would be constructed along the east bank of the canal beginning on the north at Schooner Bayou. Flap-gated culverts would be installed along the canal and through spoil banks in the northwestern portion of the project area to provide conduits for freshwater and sediment introduction. The project would cost \$26 million. Mr. Judge Edwards asked if anyone knew of circumstances in which brackish marshes were replenished by an influx of turbid water, to which he received no response. Expressions of support for the project were made by Mr. Randy Moertle with McIlhenny Company/M.O. Miller Estates, Ms. Sherrill Sagrera with Vermilion Parish, and Mr. Judge Edwards with Vermilion Parish. Mr. Tim Allen with Apache Louisiana Minerals commended the project even though it doesn't affect their lands. Mr. Timmy Vincent of the National Audubon Society indicated that they would be willing to commit \$300,000 toward the project.

*#2 – GIWW Vermilion Bankline Protection Project.* This project was presented by Mr. Charles Stemmans with NRCS. The project is located in Vermilion Parish on the north bank of the GIWW. The GIWW bankline has deteriorated rapidly along much of its length throughout the parish. Because the canal traverses mostly coastal marshes, there has been an accelerated deterioration of some areas where the bank has eroded through its original construction spoil and has begun to penetrate highly organic soils of adjacent marshes. The erosion of the bankline is

mostly unabated, and action is necessary to prevent further erosion into adjacent marshes and bayous, particularly in the most sensitive areas. The project would construct 23,000 linear feet of bankline protection on the north shore of the GIWW. Additional action would include bankline protection at the mouth of the Boston Canal and North Bayou on the north bank of the GIWW to prevent further widening of the channel. The cost would be \$10.4 million. Mr. Tim Allen of Apache Louisiana Minerals expressed support for the project and that landowners to the north are also in agreement.

*#3 – Cote Blanche Freshwater and Sediment Introduction and Shoreline Protection Project.*

This project was presented by Ms. Cindy Steyer with NRCS. The project is located in St. Mary Parish along the northern shoreline of East Cote Blanche Bay and the eastern shoreline of West Cote Blanche Bay. The TV-4 Project has reduced water level variability, thereby facilitating accretion of the sediment entering from the adjacent bays and achieving the objective of reducing the rate of interior marsh loss; but much of the marsh in the area was removed or damaged by Hurricane Lilli and more recent hurricanes. Significant quantities of freshwater and sediment are available from the GIWW, but only a small amount is reaching the interior marshes. The Marone Point shoreline has historic and predicted shoreline erosion rates of 15 to 20 feet a year, which will lead to the conversion of interior wetlands to open bay if left unchecked. The project would include channel enlargement, spoilbank gapping, and/or structural measures where necessary to increase freshwater and sediment input from the GIWW into the interior marshes. Approximately 26,000 linear feet of armored protection would be provided parallel to the northern shoreline of East Cote Blanche Bay. The construction cost would be \$12.5 million, and the fully funded cost would be \$20 million.

*#4 – Shark Island Shoreline Protection.* This project was presented by Mr. Loland Broussard with NRCS. The project is located in Iberia Parish along the eastern shoreline of Vermilion Bay. The area shoreline has historic and predicted erosion rates of 15 to 20 feet a year. If left unchecked, the rapidly eroding shoreline along Vermilion Bay will continue to diminish the size of Shark Island and further expose the east bank of Weeks Bay to significantly larger fetch conditions. Critical oil and gas infrastructure, navigation interests along the GIWW, and the wetlands protecting Weeks Island are being adversely impacted by unimpeded wave conditions generated from the west by the continued regression of Mud Point. The project would involve construction of 19,300 linear feet of armored protection parallel to the eastern shoreline of Vermilion Bay from Mud Point southward to Blue Point. The cost would be \$9.7 million.

Nominations for the Teche-Vermilion Basin were closed.

d. Mr. Lee opened the floor for nominations for demonstration projects.

*#1 – Marsh Restoration and Enhancement Utilizing Floating Islands.* Ms. Nicole Waguespack with Floating Island Environmental Solutions in Baton Rouge presented this project. The Floating Island is a multi-faceted marsh restoration and enhancement system that absorbs and deflects wave energy, protects and enhances vegetation, protects and creates emergent marsh, traps sediment, and provides nursery habitat. The islands are made from recycled PET plastic and adhered together with polyurethane marine foam. They are connected to each other and anchored into the soil with marine/earth anchor systems. The cost is \$80 per linear foot for the

four-inch and \$120 per linear foot for the eight-inch. Support for the project was expressed by Mr. Nick Matherne with Lafourche Parish and Ms. Leslie Suazo with Terrebonne Parish.

*#2 – The Wave Robber Wave Suppressor Sediment Collection System.* This project was presented by Mr. Webster Pierce, the inventor. As its name indicates, the system is designed to attenuate waves and to collect sediment behind the system. The face of the system is sloped towards the waves, and the system contains holes to let water and sediment pass through. The system acts as a barrier to wave action and tidal surge, thereby protecting shorelines and wetlands. The sediment that passes through is trapped and deposited between the system and the shorelines and wetlands and then would consolidate to form a solid base for the establishment of emergent marsh. The system is transportable and reusable. It has been laboratory tested with promising results. The demonstration project would involve 50 units on three different shorelines (500 linear feet for each shoreline) with two different spacing patterns at each site at a cost of \$1 million. Mr. Nick Matherne with Lafourche Parish has visited the laboratory and supports the project, as does the Lafourche Parish Coastal Advisory Committee, of which he is the director. Support for the project was also expressed by Ms. Leslie Suazo with Terrebonne Parish.

Nominations were closed for the demonstrations.

5. Agenda Item #5, Announcement of Coast-Wide Voting Meeting. Ms. Goodman reiterated that the coast-wide voting meeting would be held on Feb. 24<sup>th</sup>.

6. Agenda Item #6, Announcement of Upcoming PPL 20, Task Force, Technical Committee and Other Meetings. Ms. Goodman indicated that all meeting notices are posted on the CWPPRA website.

7. Agenda Item #7, Adjourn. The meeting adjourned at 2:00 pm.

## MEMORANDUM FOR RECORD

SUBJECT: Regional Planning Team (RPT) Region 4, Rockefeller Refuge, LA, 26 Jan 10,  
1:00 pm

1. Agenda Item #1, Welcome and Introductions. Mr. Darryl Clark, RPT Region 4 Leader, opened the meeting and expressed his appreciation to the Rockefeller Refuge for providing the meeting facilities. He welcomed all of the attendees and recognized representatives from Cameron, Calcasieu, and Vermilion parishes. Guthrie Perry welcomed the attendees to the refuge, emphasizing its research capacity. Additional welcomes were provided by Ms. Tina Horn of Cameron Parish, Ms. Laurie Cormier of Calcasieu Parish, and Mr. Gerald Butaud of Vermilion Parish. Mr. Clark congratulated the engineering design teams for projects that had been constructed, stressed that project funding had increased, and expressed regret that the West Bay project had been closed.

2. Agenda Item #2, PPL 20 Selection Process Brief Overview and Ground Rules for Today's PPL 20 Nomination Meeting. Ms. Melanie Goodman, USACE Project Manager, provided a PowerPoint presentation, which is available online at the CWPPRA website. She stated that the purpose of the meeting was to accept project nominations and hear public comments for developing the 20<sup>th</sup> Priority Project List (PPL), as well as nominations for demonstration projects.

Anyone can propose a project for the region. Proposals should be consistent with the Coast 2050 strategies. A project can be nominated from only one basin. If a project crosses into other basin(s), it should be nominated from the basin where primarily located. If the project could apply coast-wide (to any basin), it can be proposed from any basin. Public comments on project proposals will be accepted orally during the meeting and in writing by February 12, 2010.

A coast-wide voting meeting will be held on February 24, 2010, in the Louisiana Room at the Louisiana Department of Wildlife and Fisheries in Baton Rouge. The RPTs will select three projects in the Terrebonne, Barataria, and Pontchartrain basins; two projects in the Breton Sound, Teche-Vermilion, Mermentau, Calcasieu-Sabine, and Mississippi River Delta basins; and one project in the Atchafalaya Basin. If only one project is presented at the RPT meeting for the Mississippi River Delta Basin, an additional nominee will be selected for the Breton Sound Basin. In addition, the RPTs will select six demonstration projects for further evaluation.

In covering the ground rules for the meeting, Mr. Clark requested that each proposer submit a fact sheet and that in the oral presentations each proposer should give his name and the name of the project and its location, then describe the problem, the project, and its benefits. Projects that are similar can be combined at the request of the proposers. Public comments on the proposals should be as constructive as possible.

3. Agenda Item #3, Brief Overview of Coast 2050 Regional Strategies. Mr. Clark indicated that proposals should be consistent with the Coast 2050 Regional Ecosystem or Coast-Wide



Strategies and briefly reviewed the strategies for Region 4 under the headings of restoring and sustaining wetlands; salinity control; restoring, protecting, and maintaining all shorelines; and maintaining critical landforms. Mr. Clark said that shoreline stabilization is needed just about everywhere. The specifics under each heading can be seen in the PowerPoint presentation for the Region 4 meeting on the CWPPRA website.

4. Agenda Item #4, PPL 20 Project Nominations.

a. Mr. Clark opened the floor for nominations in the Mermentau Basin.

*#1 – Rockefeller Gulf of Mexico Shoreline Stabilization, Joseph’s Harbor East, ME-15.* This project was presented by Mr. John Foret with NOAA. The project is designed to address Gulf shoreline retreat averaging 35 feet a year east of Joseph’s Harbor canal. It would involve construction of a \$17 million near-shore breakwater of neutral buoyancy material encapsulated by 2,200 lb. class stone. The breakwater would extend 10,000 feet east of the canal and would promote shallowing, settling out, and natural vegetative colonization of overwash material landward of the structure. The project is designed as an extension of the ME-18 Rockefeller Refuge Gulf Stabilization Project. Ms. Tina Horn said that it was recently completed and appeared promising, an opinion that was seconded by Mr. Guthrie Perry, Refuge Manager. Mr. Nick Matherne of Lafourche Parish asked whether the design could be applied anywhere and received a positive response. Mr. Randy Moertle with M.O. Miller Estates expressed support for the project.

*#2 – Big Marsh Restoration at Freshwater Bayou.* This project was presented by Mr. Judge Edwards with the Vermilion Corporation. The area in the vicinity of the Freshwater Bayou Channel is being degraded from wave energy, saltwater intrusion, and erosion associated with boat traffic and tidal exchange. The spoil banks along the canal, which have been rocked, have been breached in many places. The project would place dedicated dredge materials behind the rocks and employ Sediment Introduction Pipelines or SIPs for exchange. Potential sediment sources would include Freshwater Bayou, the Gulf of Mexico, and Little Vermilion Bay. The project would return 18,000 acres of interior marsh to a self-maintaining condition at a cost of \$10 million. In response to questions from Mr. Daryl Clark, the presenter indicated that the project would not prevent fish access and that the landowner would manage the structure. Mr. Randy Moertle with M.O. Miller Estates expressed support for the project.

*#3 – Lower Mud Lake Terracing and Bankline Stabilization.* This project was presented by Mr. Troy Mallach with NRCS. The area of fetch and associated wave energies prevent sediments from the Mermentau River from being deposited. The project would encourage the flow of incoming sediments by constructing 36,000 linear feet of terraces similar to those used at Little Vermilion Bay (TV-12) and the Jaws (TV-15) at a cost of \$5 to \$8 million. Ms. Tina Horn indicated that this project would be compatible with her project to resolve erosion problems on the west bank of the Mermentau River Cut by protecting with rock and depositing dredged materials in the interior. Mr. Mallach said that he would incorporate this feature into his project.

*#4 – This project is a combination of the Grand Lake Shore Protection at Lacassine Point Project proposed by Mr. Wayne Syron with USFWS and the Umbrella Bay Shoreline Protection*

*Project* proposed by Mr. Kevin Long of the Lake Arthur Hunting Club. The Lacassine Bay project would protect the northwest shoreline of Grand Lake by constructing a rock breakwater from Lacassine Point to the Gulf Intracoastal Waterway (GIWW) at a cost of \$4 million. The Umbrella Bay project would protect the shorelines of eastern Grand Lake and Umbrella Bay by constructing a rock breakwater at a cost of \$12 million. The two projects were combined through mutual agreement, and with the recognition that combined projects sometimes are uncompetitive because of large costs. Support for the project was expressed by Mr. David Richard with Stream Properties and Mr. Chad Courville with the Miami Corporation.

Nominations were closed for the Mermentau Basin.

b. Mr. Clark opened the floor for nominations in the Calcasieu-Sabine Basin.

*#1 – Cameron Meadows Marsh Creation and Wetland Restoration Project.* This project was presented by Mr. John Foret with NOAA. Cameron Meadows has experienced significant marsh loss because of surface downwarping from fluid and gas extraction and because hurricanes have physically removed the marsh. The project would produce 600 acres of marsh in two adjacent areas utilizing dredge materials from the Gulf of Mexico to construct 10,000 linear feet of earthen terraces. Project feature would include the clearing out of 50,000 linear feet of drainage canals that were filled by hurricanes. The project would cost \$27 million, with a \$1 million contribution by the landowner. Mr. David Richard with Stream Properties expressed support for the project.

*#2 – Black Bayou Terraces.* This project was presented by Mr. John Foret with NOAA. The Black Bayou area has experienced marsh loss because of saltwater intrusion from the GIWW along with erosion caused by wave action from nearby boats, winds, and tides. The CWPPRA sponsored Black Bayou Hydrologic Restoration Project (CS-27) features address the saltwater intrusion problem, but the entire area is being converted into open water. The project would reverse this process by constructing 261,000 linear feet of earthen terraces that would be oriented in such a way as to reduce wind-generated wave fetch. The project would cost \$7 million. Mr. Darryl Clark remarked that it would be the largest terracing project in the world. Susan Hennington wondered if it would be visible from space and Mr. Clark responded, saying that it very well could be.

*#3 – Cameron-Creole Watershed Grand Bayou Marsh Creation.* This project was presented by Ms. Angela Trahan with USFWS. The Cameron-Creole Watershed Project was constructed to reduce saltwater intrusion and stimulate marsh restoration. Recent hurricanes breached the watershed levee, scoured the marsh and allowed higher Calcasieu Lake salinities to enter the watershed, which caused more land loss. The project would restore and nourish marsh with three million cubic yards of dedicated dredge material from a Calcasieu Lake borrow site to benefit fish and wildlife resources within the Cameron Prairie NWR and adjacent brackish marshes. The project would restore 604 acres and nourish 13 acres of brackish marsh at a cost of \$23 million. Mr. John Foret remarked that the project had been presented before and received a positive response to a question about whether the fisheries issue had been resolved. Mr. David Richard remarked that it would be more cost effective to use dredge maintenance materials from the ship channel, which he thought should have been included in the Dredged Material

Management Plan or DMMP, or from present spoil piles. Ms. Trahan responded that this would be considered.

*#4 – Kelso Bayou Hydrologic Restoration and Marsh Creation.* This project was presented by Mr. Troy Mallach with NRCS. The construction of the Calcasieu Ship Channel reduced the ability of Kelso Bayou and Alkali-Ditch to the north to retain freshwater, which has promoted marsh loss and tidal scour in the project area. The project would create 275 acres of marsh using materials from existing disposal areas. The created marsh as well as a part of the ship channel would be protected against erosion by a rock dike. Other features of the project include four 30-inch culverts at Crab Gully and a barge bay at Alkali-Ditch. The project would cost \$12 to \$15 million. Ms. Melanie Goodman asked whether beneficial use had been considered. Mr. Mallach responded in the negative, saying that he wanted to take materials from the easiest source. Mr. David Richard stated that this was the closest place to the channel where beneficial use would apply and that this needs to be put in the DMMP. Mr. Darryl Clark suggested that Mr. Mallach should look at the cost of beneficial use compared to use of present spoil areas.

*#5 – North Willow Lake Restoration.* This project was presented by Mr. Troy Mallach with NRCS. The north shore of Willow Lake has lost its integrity, with attendant marsh loss and conversion to open water in the area north of the lake, as well as export of sediments into the GIWW. The project is designed to protect 7,000 linear feet of shoreline, create 150 acres of marsh with dedicated dredge material, and create an additional 43 acres of marsh through the construction of 60,000 linear feet of terraces. The project would cost \$10 million. Ms. Tina Horn asked where the dredge materials would come from, to which the reply was from the center of Willow Lake. Ms. Horn suggested that the GIWW might be a better source. Mr. Chad Courville of the Miami Corporation expressed support for the project.

*#6 – Holly Beach Breakwaters.* This project was presented by Mr. Troy Mallach with NRCS. The project is designed to protect the Gulf shoreline in an area in which the Gulf is approaching within 55 feet of Louisiana State Highway 82. It would involve 15,000 linear feet of breakwaters in the area immediately to the west of the Calcasieu Ship Channel patterned after the Holly Beach Breakwater Project (CS-01) to the west and incorporating the lessons learned from the Holly Beach Breakwater Enhancement and Sand Management Project (CS-31). The project would trap sediment between the breakwaters and the shoreline and would protect a state project to restore the beach using sand from offshore borrow sites. The cost would be \$17 million. Mr. David Richard stated that the breakwater/beach nourishment effort of which this project would be a part of would be a model for the world, having demonstrated its benefits to the west.

Nominations were closed for the Calcasieu-Sabine Basin.

c. Mr. Clark opened the floor for nominations for demonstration projects.

*#1 – Marsh Restoration and Enhancement Utilizing Floating Islands.* Nicole Waguespack with Floating Island Environmental Solutions in Baton Rouge presented this project. The Floating Island is a multi-faceted marsh restoration and enhancement system that absorbs and deflects wave energy, protects and enhances vegetation, protects and creates emergent marsh, traps sediment, and provides nursery habitat. The islands are made from recycled PET plastic and are

adhered together with polyurethane marine foam. They may be connected to each other and anchored into the soil with marine/earth anchor systems. The cost is \$80 per linear foot for the four-inch and \$120 per linear foot for the eight-inch. The presenter showed in-field photographs of the technology. Ms. Tina Horn asked why additional demonstration was needed. Ms. Waguespack responded that the existing demonstrations were short-term and unmonitored and needed additional demonstration before money could be allocated for use in large areas. Mr. David Richard said that the mats could be made less dense to produce liberal spread of rhizomes. Mr. Darryl Clark said that this would be included in the demo and asked the presenter whether she had compared similar technologies, to which the response was negative.

Nominations were closed for the demonstrations.

5. Agenda Item #5, Announcement of Coast-wide Voting Meeting. Ms. Goodman reiterated that the coast-wide voting meeting would be held on Feb 24<sup>th</sup>.

6. Agenda Item #6, Announcements of Upcoming PPL 20, Task Force, Technical Committee and Other Meetings. Ms. Goodman indicated that all meeting notices are posted on the CWPPRA website.

7. Agenda Item #7, Adjourn. The meeting was adjourned at 4:00 pm.