

**CWPPRA, Prioritization Scores**

Dated: January 15, 2004

Project Name	Project Number	Region	PPL	Lead Agency	Project Type	(2) Total Acres Benefitted	(1) Current Estimate	Cost Per Acre (\$/acre)	Prioritization Scores for each Criteria & Corresponding Weight								Total Weighted Score 100%	Anticipated Date of Request For Construction Approval	Scheduled Construction Start	
									Cost Effective 20%	Area of Need 15%	Implementability 15%	Certainty of Benefits 10%	Sustainability 10%	HGM Riverine Input 10%	HGM Sediment Input 10%	HGM Structure and Function 10%				
Benney's Bay Sediment Diversion	MR-13	2	10	COE	RD	5,706	\$39,295,672	\$6,887	10	5	10	9	10	10	10	10	10	91.50	Aug-05	Sep-05
Delta-Building Diversion North of Fort St. Philip	BS-10	2	10	COE	RD	692	\$6,008,486	\$8,683	10	4.4	10	9	10	10	10	5	5	85.60	Aug-04	Sep-04
South Lake DeCade Freshwater Introduction - CU #1	TE-39	3	9	NRCS	SP	207	\$3,508,315	\$16,948	10	9.3	10	6.5	8	0	0	10	10	73.45	Apr-04	Oct-04
Small Freshwater Diversion to the NW Barataria Basin	BA-34	2	10	EPA	RD	941	\$13,340,508	\$14,177	10	7.5	10	9	8	4	5	0	0	72.25	Jan-07	Jul-07
Barataria Landbridge Phase 3 - CU 5	BA-27c	2	9	NRCS	SP	901	\$19,398,738	\$21,530	7.5	7.6	10	8	10	0	0	10	10	69.40	Apr-04	Oct-04
South White Lake Shore Protection	ME-22	4	12	COE	SP	702	\$24,959,010	\$35,554	7.5	6	10	10	8	0	0	10	10	67.00	Aug-04	Oct-04
Grand Lake Shoreline Protection	ME-21	4	11	COE	SP	495	\$13,476,537	\$27,225	7.5	7.5	10	10	8	0	0	5	5	64.25	Apr-04	Jul-04
Opportunistic Use of Bonnet Carre Spillway	PO-26	1	9	COE	RD	177	\$1,084,080	\$6,125	10	4	10	9	10	4	0	0	10	64.00	Apr-04	Apr-04
Penchant	TE-34	3	6	NRCS	HR	1,155	\$13,250,937	\$11,473	10	5.9	10	2	10	7	0	0	0	62.85	Oct-05	Feb-06
River Reintroduction into Maurepas Swamp	PO-29	1	11	EPA	RD	5,438	\$56,469,628	\$10,384	10	5	4	9	8	7	5	0	0	62.50	Oct-05	Jan-06
East/West Grand Terre Islands Restoration	BA-30	2	9	NMFS	BI	403	\$18,203,486	\$45,170	5	8.9	10	7	1	0	5	10	10	61.35	Aug-04	Apr-05
Dedicated Dredging on the Barataria Basin Landbridge	BA-36	2	11	FWS	MC	564	\$29,514,364	\$52,330	5	10	10	7	4	0	0	10	10	61.00	Apr-04	Jul-04
Avoca Island Diversion & Land Building	TE-49	3	12	COE	RD	143	\$18,823,322	\$131,632	1	8	10	9	6	7	10	0	0	61.00	Apr-05	Aug-05
Barataria Barrier Island Complex Project	BA-38	2	11	NMFS	BI	534	\$61,995,587	\$116,097	1	10	10	7	1	0	10	10	10	60.00	Jan-04	Apr-04
Freshwater Introduction South of Highway 82	ME-16	4	9	FWS	FD	296	\$4,967,680	\$16,783	10	4.1	10	5.2	10	3	0	0	0	59.35	Apr-04	Jun-04
North Lake Mechant - CU 2	TE-44	3	10	FWS	MC	553	\$22,695,218	\$41,040	5	7.4	10	6	6	0	0	10	10	58.10	Aug-04	Jan-05
Sabine Refuge Marsh Creation - Cycle 3	CS-28	4	8	COE	MC	187	\$3,504,333	\$18,740	10	5	10	7	8	0	0	0	0	57.50	Jan-04	May-06
Sabine Refuge Marsh Creation - Cycle 5	CS-28	4	8	COE	MC	168	\$2,133,439	\$12,699	10	5	10	7	8	0	0	0	0	57.50	Jan-04	May-08
Ship Shoal: Whiskey Island West Flank Restoration	TE-47	3	11	EPA	BI	182	\$39,302,916	\$215,950	1	6.3	10	7	4	0	10	10	10	57.45	Aug-04	Apr-05
Raccoon Island Breakwaters - Ph 2	TE-48	3	11	NRCS	BI	167	\$11,174,894	\$66,916	2.5	7.1	10	5.8	4	0	5	10	10	55.45	Apr-04	Oct-04
Pass Chaland to Grand Bayou Pass	BA-35	2	11	NMFS	BI	161	\$19,001,430	\$118,021	1	10	10	7	1	0	5	10	10	55.00	Aug-04	Mar-05
Sabine Refuge Marsh Creation - Cycle 2	CS-28	4	8	COE	MC	261	\$8,808,217	\$33,748	7.5	4.5	10	7	8	3	0	0	0	54.75	Jan-04	May-05
Brown Lake	CS-09a	4	2	NRCS	HR	282	\$3,154,472	\$11,186	10	5	7	5.1	8	3	0	0	0	54.10	Oct-04	Jan-05
Sabine Refuge Marsh Creation - Cycle 4	CS-28	4	8	COE	MC	163	\$3,630,831	\$22,275	7.5	5	10	7	8	0	0	0	0	52.50	Jan-04	May-07
Barataria Basin Landbridge Shoreline Protection - Ph 4	BA-27d	2	11	NRCS	SP	256	\$22,787,950	\$89,015	1	7.6	10	8	6	0	0	10	10	52.40	Jan-04	Jul-04
Mississippi River Sediment Trap	MR-12	2	11	COE	MC	1,190	\$52,180,839	\$43,849	5	5	10	7	2	0	0	10	0	51.50	Aug-04	Sep-04
South Grand Cheniere Hydrologic Restoration	ME-20	4	11	FWS	HR	440	\$19,930,316	\$45,296	5	5	10	6.7	8	3	0	0	0	50.20	Aug-04	May-05
Castille Pass Sediment Delivery	AT-04	3	9	NMFS	RD	589	\$30,785,603	\$52,268	5	0	7	7.7	10	7	0	5	10	50.20	Apr-04	Jul-04
South Lake DeCade Freshwater Introduction - CU #2	TE-39	3	9	NRCS	FD	40	\$1,532,400	\$38,310	7.5	5	7	5	10	2	0	0	0	50.00	unscheduled	unscheduled
Lake Boudreaux	TE-32a	3	6	FWS	FD	603	\$14,450,063	\$23,964	7.5	7.5	7	5	6	2	0	0	0	49.75	Apr-04	Jan-05
Bayou Dupont Sediment Delivery System	BA-39	2	12	EPA	MC	400	\$24,386,990	\$60,967	2.5	10	7	7	2	0	10	0	0	49.50	Jan-05	Jan-05
Rockefeller Refuge Gulf Shoreline Stabilization	ME-18	4	10	NMFS	SP	920	\$49,929,888	\$54,272	5	7.5	10	6	2	0	5	5	5	49.25	Aug-04	Aug-04
West Lake Boudreaux Shoreline Protection & MC	TE-46	3	11	FWS	SP	145	\$14,387,505	\$99,224	1	9.2	10	7.6	4	0	0	5	5	47.40	Aug-04	Jan-05
GIWW Bank Restoration of Critical Areas in Terrebonne	TE-43	3	10	NRCS	SP	366	\$28,944,616	\$79,084	2.5	7.5	10	8	8	0	0	0	0	47.25	Apr-04	Oct-04
Little Pecan Bayou Control Structure	ME-17	4	9	NRCS	HR	144	\$14,285,943	\$99,208	1	4	10	6	10	6	0	0	0	45.00	Aug-06	Feb-07
Lake Borgne and MRGO Shore Protection	PO-32	1	12	COE	SP	266	\$24,979,633	\$93,908	1	4.7	10	8	6	0	0	5	5	43.05	Aug-04	Dec-04
Lake Borgne Shoreline Protection	PO-30	1	10	EPA	SP	167	\$21,030,130	\$125,929	1	5	10	8	4	0	0	5	5	41.50	Aug-04	Feb-05
Grand Bayou	TE-10	3	5	FWS	HR	199	\$8,209,722	\$41,255	5	5.4	7	2	8	2	0	0	0	40.60	Jan-05	Mar-06
Freshwater Bayou Canal HR/SP - Belle Isle to Lock	TV-11b	3	9	COE	SP	241	\$24,181,413	\$100,338	1	3	10	10	6	0	0	0	0	37.50	Apr-04	Jun-04
Weeks Bay/Commercial Canal/GIWW SP	TV-19	3	9	COE	SP	278	\$30,027,305	\$108,012	1	4	4	7.2	4	0	0	5	5	30.20	Aug-04	Mar-05

- Notes:
- Current estimate reflects fully-funded estimate for engineering and design, lands, project administration, construction, construction S&I, contingency, 20 years of O&M and 20 years of only project specific monitoring if applicable. Monitoring monies going to CRMS have been removed from the fully-funded estimate. This estimate is the baseline (at the 100% level) estimate.
  - Total acres reflect total acres benefitted at end of 20 year project.
  - Bayou Lafourche was not prioritized because there is currently no construction estimate available.
  - Delta Building Diversion at Myrtle Grove (PPL 10) is not included because Phase II will not be funded under CWPPRA.
  - Complex projects not yet approved for Phase I were not prioritized.
  - West Point at la Hache Outfall Management Project (BA 04c) was not prioritized because the project features are not known and project costs and benefits can, therefore, not be determined to apply criteria.
  - When project scores were tied an additional sort by the score of the cost effectiveness criterion was run. When those were tied another sort was run based on the sum of the area of need and implementability criteria scores.

**PRIORITIZATION CRITERIA FOR UNCONSTRUCTED PPL 1 - 12 PROJECTS**  
**8 Oct 03**

**I. Cost-effectiveness**

Scoring for this criterion should be based on current estimated total fully funded project cost and net acres created/protected/restored at Target Year (TY) 20. See appendix for calculation of swamp net acres. The fully funded cost estimate (100%) must be reviewed and approved by the Engineering and Economics Workgroups. Monitoring costs should be removed from the fully funded cost estimate, unless the project has a project-specific monitoring cost not covered by CRMS. The net acreage figure must be derived from the official WVA conducted for the project and any new figures must be reviewed and approved by the Environmental Workgroup.

Less than \$20,000/ net acre	10
Between \$20,000 and \$40,000/net acre	7.5
Between \$40,000 and \$60,000/net acre	5
Between \$60,000 and \$80,000/net acre	2.5
More than \$80,000/net acre	1

*Alternate Net Acres for Swamps:* The “cost/net acre” approach used above does not work for swamp projects because the wetland loss rates estimated for Louisiana coastal wetlands using historical and recent aerial photography have not detected losses for swamps. However, future loss rates for swamps have been estimated by Coast 2050 mapping unit. This information, combined with other information regarding project details/benefits can be used to provide an “alternate net acres” estimate for swamp projects. *Attachment 1* contains a description of how alternate net acres will be derived for the purposes of assessing the cost-effectiveness of swamp projects, along with the assessment of alternate net acres for two listed swamp projects.

**II. Address area of need, high loss area**

The purpose of this criterion is to encourage the funding of projects that are located in basins undergoing the greatest loss. Additionally, projects should be located, to the maximum extent practicable, in localized “hot spots” of loss when they are likely to substantially reduce or reverse that loss. The appropriate basin determination on the following table should be selected based on the location of the majority of the project benefits, and the project’s Future Without Project (FWOP) loss rates should be applied. Either table or a combination of both tables (pro-rating) may be used for scoring depending upon what type of loss rates were developed for use in the WVA. Specific basins are assigned to high, medium, low, and stable/gain categories based on recent basin-wide loss rates (1990 to 2001).

For projects with sub-areas affected by varying land loss or erosion rates, the score shall be a weighted average which reflects the proportion of the total project area affected by each loss rate. *Example: Project located in Calcasieu/Sabine basin. Project area of 1,000 acres of which sub-area 1 is 200 acres and experiences a shoreline internal loss rate of 3%/yr, and 800-acre*

subarea 2 has an internal loss rate of 1%/yr. The project would receive a score of  $(0.2*7)+(0.8*5) = 5.4$

For project areas affected by both internal wetlands loss and shoreline loss, the score shall be a weighted average which reflects the proportion of the total project area affected by each loss rate. Example: Project located in Calcasieu/Sabine basin. Project area of 1,000 acres of which sub-area 1 is 200 acres and experiences a shoreline erosion rate of 30 feet/yr, and 800-acre subarea 2 has an internal loss rate of 0.1%/yr. The project would receive a score of  $(0.2*7.5)+(0.8*3) = 3.9$

**FOR NON-SHORELINE PROTECTION PROJECTS**

**Internal Loss Rates**

Basin	High $\geq 2.0\%/yr$	Medium $< 2.0\%$ to $\geq 0.5\%/yr$	Low $< 0.5\%/yr$ to $\geq 0.01\%/yr$
Barataria and Terrebonne	10	7.5	5
Calcasieu/Sabine, Mermentau, and Pontchartrain	7.5	5	4
Breton, Mississippi River	5	4	3
Atchafalaya and Teche/Vermilion	4	3	1

**FOR SHORELINE PROTECTION AND BARRIER ISLAND PROJECTS**

**Average Erosion Rate**

Basin	High $\geq 25$ ft/yr	Medium $\geq 10$ to $< 25$ ft/yr	Low 0 to $< 10$ ft/yr
Barataria Terrebonne	10	7.5	5
Calcasieu/Sabine Mermentau Pontchartrain	7.5	5	4
Breton Mississippi River	5	4	3
Atchafalaya Teche/Vermilion	4	3	1

### III. Implementability

Implementability is defined as the expectation that a project has no serious impediment(s) precluding its timely implementation. Impediments include issues such as design related issues, land rights, infrastructure relocations, and major public concerns. The Workgroups will, by consensus or vote, agree on impediments which will warrant a point score deduction. Other issues which sponsoring agencies believe may significantly affect implementability may also be identified.

The predominant land rights issue affecting implementability is identified as non-participating landowners (i.e., demonstrated unwilling to execute required servitudes, rights-of-way, etc.) of tracts critical to major project features, *unless* the project is sponsored by an agency with condemnation authority which has confirmed its willingness to use such authority. Other difficult or time-consuming land rights issues (e.g., reclamation issues, tracts with many owners/undivided interests) are not defined as issues affecting implementability unless identified as such by the agency procuring land rights for the project. Infrastructure issues are generally limited to modifications/relocations for which project-specific funding is not included in estimated project costs, or if the infrastructure operator/owner has confirmed its unwillingness to have its operations/structures relocated/modified.

Significant concerns include issues such as large-scale flooding increases, significant navigation impacts, basin-wide ecological changes which would significantly affect productivity or distribution of economically- or socially-important coastal resources.

The project has no obvious issues affecting implementability 10 pts

Subtract 3 points for each identified implementability issue, negative scores are possible.

### IV. Certainty of benefits

The Adaptive Management review showed that some types of projects are more effective in producing the anticipated benefits. Factors that influence the certainty of benefits include soil substrate, operational problems, lack of understanding of causative factors of loss, success of engineering and design as well as construction, etc. Scoring for this criterion should be based on selecting project types which reflect the planned project features. If a project contains more than one type of feature, the relative contribution of each type should be weighed in the scoring, as in the example below.

Example: A project in the Chenier plain with two major project components: inland shoreline protection and hydrologic restoration. Approximately 80% of the anticipated benefits (i.e., net acres at TY20) are expected to result from shoreline protection features and approximately 20% of the benefits (i.e. net acres at TY 20) are anticipated to result from hydrologic restoration. Scoring for this project should generally be  $(0.8*10)+(0.2*5) = 9$

Certainty of Benefits – Project Type Table

Inland shoreline protection - chenier plain	10
River diversions- deltaic plain	9
Terracing - chenier plain	8
Inland shoreline protection - deltaic plain	8
Marsh creation - chenier plain	7
Marsh creation - deltaic plain	7
Barrier island projects *	7
Gulf shoreline protection - chenier plain**	6
Gulf shoreline protection - deltaic plain**	5
Freshwater diversion -chenier plain	5
Freshwater diversion - deltaic plain	5
Hydrologic restoration - chenier plain	5
Vegetative plantings (low energy area)	5
Terracing - deltaic plain	3
Hydrologic restoration - deltaic plain	2
Vegetative plantings (high energy area)	2

\* Refers to traditional barrier island projects creating marsh and dune habitats by dedicated dredging. If shoreline protection is a project component, then the score should be weighted by apportioning the benefits between shoreline protection (score of 5) and traditional dedicated dredging techniques (score of 7).

\*\* Gulf shoreline protection means typical structures currently being used around the state and nation such as breakwaters, revetments, concrete mats, etc. Does not include experimental structures being tested at various locations.

## V. Sustainability of benefits

This criterion should be scored as follows:

The net acres (i.e., TY20 FWP acres – TY20 FWOP acres) benefited at TY 20 should be projected through TY 30 based on application of FWOP conditions (i.e., internal loss) to the TY20 net acres. The net acres benefited at TY 20 and the percent decrease in net acres from TY20 to TY30 are combined in the matrix below to produce an indicator of sustainability. Assume that, after year 20, project features such as water control structures would be locked open, controlled diversions and siphons would be closed, and shoreline protection structures only would provide full protection until the next projected maintenance event would be necessary (i.e., future with project (FWP) conditions would continue from TY20 until the next maintenance event would be required.

For shoreline protection projects in the Deltaic Plain, shoreline protection effectiveness will be reduced by 50% from the year the next scheduled maintenance event is required to TY30. For shoreline protection projects in the Chenier Plain, shoreline protection effectiveness will be reduced by 25% from the year the next scheduled maintenance event is required to TY30. The effectiveness of shoreline protection projects utilizing concrete panels will be reduced by

10%. A 50% reduction in effectiveness will also be applied to barrier island projects using rock shoreline protection. Vegetative plantings used for shoreline protection return to FWOP erosion rates after TY20. For all shoreline protection projects, it is critical that information be provided to substantiate when the next projected maintenance event would occur.

Selected project types (e.g., uncontrolled sediment diversions) may be considered for continued application of FWP conditions provided that a valid rationale is provided.

% decrease in net acres between TY20 and TY30	Score
0 to 5% (or gain)	10
6 to 10%	8
11 to 15%	6
16 to 20%	4
21 to 30%	2
> 30%	1

**VI. Consistent with hydrogeomorphic objective of increasing riverine input in the deltaic plain or freshwater input and saltwater penetration limiting in the Chenier plain**

**DELTAIC PLAIN PROJECTS**

- The project would significantly increase direct riverine input into the benefited wetlands (structure capable of diverting  $\geq 2,500$  cfs) 10
- The project would result in the direct riverine input of between 2,500 cfs and 1,000 cfs into benefited wetlands 7
- The project would result in some minor increases of direct riverine flows into the benefited wetlands (structure or diversion  $<1,000$  cfs) 4
- The project would result in an increase of indirect riverine flows into the benefited wetlands 2
- The project will not result in increases in riverine flows 0

**CHENIER PLAIN PROJECTS**

- The project will divert freshwater from an area where excess water adversely impacts wetland health to an area which would be benefited from freshwater inputs OR the project will provide a significant level of salinity control to an area where it is in need 6

The project will result in increases in freshwater inflow to an area where it is in need OR the project may provide some minor and/or local salinity control benefits	3
The project will not affect freshwater inflow or salinity	0

**VII. Consistent with hydrogeomorphic objective of increased sediment input**

The purpose of this criterion is to encourage projects that bring in sediment from exterior sources (i.e., Atchafalaya River north of the delta, Mississippi River, Ship Shoal, or other exterior sources). Therefore, for projects to score on this criterion at all, they must have some outside sediment sources as project components. Large river diversions similar to Benny’s Bay (i.e. >-12 ft bottom elevation) and large marsh creation projects (i.e.  $\geq$  5 million cubic yards) can be expected to input a substantial amount of sediment into areas of need and should rank higher than diversions and marsh creation projects of smaller magnitude. Quantities of sediment deposited by river diversions must be reviewed and approved by the Engineering Workgroup. Mining sediment from outside systems should receive emphasis. Large scale mining of river sediments such as proposed in the Sediment Trap project represent a major input of sediment from outside the system. Major mining of Ship Shoal for use on barrier islands also should be considered to be more beneficial than dredging minor volumes of sediment for placement on barrier islands. Mining ebb tidal deltas also should receive less emphasis than major mining of Ship Shoal due to the limited quantity of high quality sand available from ebb tidal deltas. Ebb tidal deltas are sediment sinks disconnected from input into the system and should be emphasized over flood tidal deltas or other similar interior bay borrow sites. In all cases, to receive any points, the source of the sediment should be considered to be exterior to, and have no natural sediment input into, the basin in which the project is located. Because of the recognized differences in logistics between river-source marsh creation projects/diversions and barrier island projects, a separate scoring category is used for barrier island projects. Projects which do not supply sediment from external sources cannot receive points for this criterion.

Scoring categories for diversions and marsh creation projects utilizing the Mississippi River or Atchafalaya River as a sediment source:

The project will result in the significant placement of sediment ( $\geq$ 5 million cubic yards) from exterior sources	10
The project will input some sediment (< 5 million cubic yards) from external sources	5
The project will not increase sediment input over that presently occurring	0

Scoring categories for barrier island projects utilizing offshore and ebb tidal delta sediment sources:

The project will result in the significant placement of sediment ( $\geq$ 1 million cubic yards) from an offshore sediment source	10
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The project will input some sediment (> 2 million cubic yards) from an ebb tidal delta source 5

The project will not increase sediment input over that presently occurring 0

**VIII. Consistent with hydrogeomorphic objective of maintaining or establishing landscape features critical to a sustainable ecosystem structure and function**

Certain landscape features provide critical benefits to maintaining the integrity of the coastal ecosystem. Such features include barrier islands, lake and bay rims/shorelines, cheniers, landbridges, and natural levee ridges. Projects which do not maintain or establish at least one of those features cannot receive points for this criterion.

The project serves to protect, for at least the 20 year life of the project, landscape features which are critical to maintaining the integrity of the mapping unit in which they are found or are part of an ongoing effort to restore a landscape feature deemed critical to a basin (e.g., Barataria land bridge, Grand and White Lake land bridge) or the coast in general (e.g., barrier islands) 10

The project serves to protect, for at least the 20 year life of the project, any landscape feature described above. 5

The project does not meet the above criteria 0

Once all the projects have been evaluated and scored by the Environmental and Engineering Work Groups, each score will be weighted using the following table and the following formula to create one final score. A maximum of 100 points is possible.

Weighting per criteria:

1. Cost-Effectiveness	20
2. Area of Need	15
3. Implementability	15
4. Certainty of Benefits	10
5. Sustainability	10
6. HGM Riverine Input	10
7. HGM Sediment Input	10
8. HGM Structure and Function	10
TOTAL	100%

$$(C1*2.0) + (C2*1.5) + (C3*1.5) + (C4*1.0) + (C5*1.0) + (C6*1.0) + (C7*1.0) + (C8*1.0)$$



## Attachment 1

### COST / “ALTERNATE NET ACRES” (SWAMP)

“COST / NET ACRE” does not work for swamp projects because the wetland loss rates estimated for Louisiana coastal wetlands using historical and recent aerial photography, have not detected losses for swamps. In spite of this, swamp ecologists and others know that the condition of many of swamps is very poor, and that the trend is for rapid decline. They also know that the ultimate result of this trend will be conversion of the swamps to open water. This conversion is expected to happen very quickly when swamp health reaches some critical low threshold. Because of this, it is not possible to estimate “net acres” as is done for marsh projects. However, future loss rates for swamps have been estimated by Coast 2050 mapping unit (Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority 1998). This information, combined with other information regarding project details/benefits can be used to provide an “**alternate net acres**” estimate for swamp projects.

### EXAMPLES

**Maurepas Diversion Project:** Wetland loss rates for the Coast 2050 Amite/Blind Rivers mapping unit for 1974-90 were estimated by USACE to be 0.83% per year for the swamps, and 0.02% per year for fresh marsh. Based on these rates, about 50% of the swamp, and 1.2% of the fresh marsh will be lost in 60 years (LCWCRTF 1998. Appendix C). For the purposes of this example, in order to be consistent with other approaches, one can estimate the acres that would be lost in the project area in 20 years without the project. The project area is 36,121 acres (Lee Wilson & Associates 2001). The Amite/Blind Rivers mapping unit consisted of 138,900 acres of swamp and 3,440 acres of fresh marsh in 1990 (LCWCRTF 1998. Appendix C). Since we don’t have an estimate of the proportion of swamp and fresh marsh in our study area, we will assume the same proportions as in the Amite/Blind Rivers mapping unit, 98% swamp, 2% fresh marsh. Applying these proportions and the loss rates for the mapping unit, to the project area, about 17,699 acres of swamp and about 9 acres of fresh marsh will be lost in 60 years in the Maurepas project area, without the project. With the project, we assume none of this will be lost. Assuming a linear rate of loss (not really the case for swamps), 5,900 acres of swamp and 3 acres of fresh marsh will be lost in 20 years without the project. With the project, we assume none of this will be lost, so the “alternate net acres” for this project are 5,903. COST / “ALTERNATE NET ACRES” is equal to the project cost estimate, \$57,500,000, divided by 5,903 = \$9,741. This then would fall within the “Less than \$20,000 / net acre” category for a score of 10.

**Small Diversion into NW Barataria Basin:** This project is in the Coast 2050 Des Allemands mapping unit. It is estimated that 60% of the swamp and 30% of the marsh in this unit will be lost in 60 years (LCWCRTF 1998. Appendix D). The project area includes 4,057 acres of swamp and 20 acres of fresh marsh (USGS & LDNR 2000). Applying the estimated future loss rates from Coast 2050 to this project area, we estimate that 2,434 acres of swamp and 6 acres of fresh marsh will be lost in 60 years without the project. Assuming a linear rate of loss (not really the case for swamps), we estimate that 811 acres of swamp and 2 acres of fresh marsh will be lost in 20 years without the project. With the project, we assume none of this will be lost. In addition, this project will restore 200 acres of existing open water to swamp (U.S. EPA 2000), for a total “alternate net acres” for this project of 1,013 acres.  $COST / “ALTERNATE NET ACRES”$  is equal to the project cost estimate, \$7,913,519, divided by 1,013 = \$7,812. This then would fall within the “Less than \$20,000 / net acre” category for a score of 10.

## **REFERENCES**

Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority. 1998. Coast 2050: Toward a Sustainable Coastal Louisiana. Appendices C and D. Louisiana Department of Natural Resources. Baton Rouge, La.

Lee Wilson and Associates. 2001. Diversion Into the Maurepas Swamps. Prepared for U.S. EPA Region 6, Dallas, Texas.

U.S. EPA Region 6. 2000. Wetland Value Assessment Project Information Sheet- Small Freshwater Diversion to the Northwestern Barataria Basin.

USGS & LDNR. 2000. Northwestern Barataria Basin Habitat Analysis.