



**State of Louisiana  
Department of Natural Resources  
Coastal Engineering Division**

**2005/2006 Annual Inspection  
Report**

for

**COTE BLANCHE HYDROLOGIC  
RESTORATION PROJECT  
(TV-04)**

State Project Number TV-04  
Priority Project List 3

October 11, 2005  
St. Mary Parish

Prepared by:

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## **I. Introduction**

The Cote Blanche Hydrologic Restoration Project is a 31,637 ac (12,655 ha) freshwater marsh located in St. Mary Parish. The project boundaries include the Gulf Intracoastal Waterway to the north, Highway 317 to the east, East Cote Blanche Bay to the south and West Cote Blanche Bay to the west. (See Appendix A).

The Cote Blanche Hydrologic Restoration Project was authorized by Section 303(a) of Title III Public Law 101-646, the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) enacted on November 29, 1990 as amended and approved on the third Priority Project List. The Cote Blanche Hydrologic Restoration Project has a twenty year (20 year) economic life, which began in January 1999.

## **II. Inspection Purpose and Procedures**

The purpose of the annual inspection of the Cote Blanche Hydrologic Restoration Project (TV-04) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, LDNR shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan, 2003). The annual inspection report also contains a summary of maintenance projects, if any, which were completed since completion of constructed project features and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C.

In 2003, the CWPPRA Task Force determined, due to the fact that LDNR was responsible for the operation and maintenance phase of the vast majority of CWPPRA projects, that LDNR would be the responsible party for all Post Storm/Hurricane Assessments. After Hurricanes Katrina and Rita, every project appeared to have been impacted by the storms; therefore, LDNR determined that all projects should be assessed for damages (Broussard, 2006). With concurrence from the federal sponsor, LDNR has decided to use the information obtained during this post hurricane assessment in this Annual Maintenance Inspection.

An inspection of the Cote Blanche Hydrologic Restoration Project (TV-04) was held on October 11, 2005 under clear skies and cool temperatures. In attendance were Stan Aucoin, Herbert Juneau, Patrick Landry, Darrell Pontiff, Dewey Billodeau, Justin Price, Shannon Haynes, and Ismail Merhi of LDNR. Cindy Steyer represented NRCS. The annual inspection began at approximately 11:00 a.m.

The field inspection included a complete visual inspection of all features. Staff gauge readings were used to determine approximate elevations of water, rock weirs, earthen embankments, steel bulkhead structures and other project features. Photographs were taken at

each project feature (see Appendix B) and Field Inspection notes were completed in the field to record measurements and deficiencies (see Appendix D).

### **III. Project Description and History**

The Cote Blanche marsh has experienced increased freshwater introduction from the GIWW and westward currents from the Atchafalaya delta (DeLaune et al. 1987). Historical information documents the alterations in marsh types resulting from these hydrologic changes. Marsh type changes have been documented by 1982 USFWS Ecological Atlas Maps and Vegetative Type Maps of the Louisiana Coastal Marshes (Chabreck et al. 1968; Chabreck and Linscombe 1978, 1988). Using aerial photography, planimeter data show the percentages of each marsh type (USDA 1993). In 1949, the area was almost entirely brackish (93%) with a narrow band of saline (7%) associations along the southwestern shoreline. By 1968, the area was divided into intermediate (39%), fresh (13%), and brackish (48%) associations. In 1978, the area was predominantly fresh (63%) and intermediate (37%) associations, where as by 1988 the entire area was identified as fresh marsh.

Construction of the GIWW and numerous oilfield canals have been the predominant causes of hydrologic change for the project area. Major canals such as the Humble and Humble-F canals were dredged between 1937 and 1958 and the British-American Canal and extensions from the Humble Canal were dredged between 1958 and 1974. Major impacts on the area have resulted from increased tidal action and rapid water exchange between the interior marsh and East and West Cote Blanche bays through these oilfield canals and the GIWW. Rapid water exchange and tidal fluctuations have caused breaches in spoil banks of interior canals that have lead to erosion and conversion of broken marsh to open water. Broken marsh began to be detected in the 1952 aerial photography. An area west of the British-American Canal showed some marsh deterioration prior to the dredging of the canal, however, the dredging created more marsh loss in the area. Utilizing historical aerial photography, from 1957 to 1990, the land loss rate for the area has been estimated to average 73 ac/year (29 ha/yr) (Britsch and Kemp 1990).

Shoreline erosion on the southern project boundary resulting from wave energy and breaches in adjacent canals was evident from aerial photography as early as 1952. Shoreline erosion rates averaged 10–15 ft/yr (3.0-4.6 m/yr) according to 1952, 1957, 1971, 1979, 1983, and 1990 aerial photography and surveys completed in 1975 by Miller Engineers & Associates. These measurements show an increase in shoreline erosion after 1978 for the Teche/Vermilion basin. Erosion rates averaged 10–12 ft/yr (3.0-3.7 m/yr) from 1941 to 1978 and increased to an average of 20–25 ft/yr (6.1-7.6 m/yr) from 1978 to 1983.

The Cote Blanche Hydrologic Restoration Project contains measures to improve hydrologic conditions in 31,637 ac (12,803 ha) of fresh marsh through low-level weirs placed at major water exchange avenues and through shoreline protection on the southern boundary of the project area.

The principal project features include:

1. Low-level weir at Mud Bayou
2. Low-level weir at the Humble-F Canal
3. Low-level weir at the intersection of Bayou Long and the Humble Canal system
4. Low-level weir at the intersection of Bayou Carlin and the Humble Canal system
5. Low-level weir at the Humble Canal
6. Low-level weir at Jackson Bayou
7. Low-level weir at the British-American Canal.
8. Shoreline protection (~ 3,500 LF of PVC wall) along the southern project boundary.

#### IV. Summary of Past Operation and Maintenance Projects

**General Maintenance:** Below is a summary of completed maintenance projects and operation tasks performed since January 1999, the construction completion date of the Cote Blanche Hydrologic Restoration Project.

**2001 Maintenance Project – LDNR:** This maintenance project included the placement of 12”-14” of paving stone spread out around the wingwalls of the weirs at Mud Bayou, Humble F Canal, Bayou Long, Humble Canal, Jackson Bayou and British American Canal to “harden” the area while still allowing flow in extreme tidal events to pass around the structure without washing away the existing bank. Also included was the replacement of approximately 100 pile caps along the PVC wall, the replacement of day markers at Humble F Canal with signs mounted to the weir instead of on driven pylons, and the construction of revetment/foreshore dike along the west bank of the British American Canal from the weir to the canals convergence with Cote Blanche Bay. The costs associated with the engineering, design and construction of the Cote Blanche Maintenance Project are as follows:

Construction-----	\$287,919.80
E & D, construction oversight, as-builts-----	\$ 31,690.79
Project Total-----	\$319,610.59

**2005 Maintenance Project – LDNR:** This maintenance project included rock repair at six of the structures, replacement of warning signs and channel markers. This project was a result of damages that occurred during Hurricane LILI in 2002.

Project Cost	\$84,500.00*
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\* This cost was reimbursed by FEMA

**2005/2006 Structure Operations:** There are no operations associated with this project.

## **V. Inspection Results**

### **Site 1—Mud Bayou**

Mud Bayou did not experience any damages due to Hurricane RITA. The conditions of the structure are good, though it appears that the old bayou channel that existed to the marsh side of the structure appears somewhat wider. (Photos: Appendix B, Photo 1).

### **Site 2—Humble F Canal**

Humble F Canal did not experience any damages due to Hurricane RITA. (Photos: Appendix B, Photo 2).

### **Site 3—Bayou Long**

Bayou Long structure did not receive any damages due to Hurricane RITA. (Photos: Appendix B, Photo 3).

### **Site 4—Bayou Carlin**

Bayou Carlin structure did not receive any damages due to Hurricane RITA. (Photos: Appendix B, Photo 4).

### **Site 5—Humble Canal**

Humble Canal structure received minor damages as a result of Hurricane RITA. The shoreline at the south end of the rock riprap dike has experienced some erosion and the marsh area remaining is narrow and now subject to being breached allowing water to flow around the weir. The “handrail” on the north side of the barge bay notch, actually a railing of 3 inch pipe that is approximately 2 feet above normal water levels that marks that reach of the sheet pile weir as being non-navigable to boaters, is broken and approximately 8-10 feet of same is missing. The balance of the north “handrail”, approximately 40 feet in length, is slightly bent towards the bay. The cable wraps around the timber pile supports (four timber pile supports total) that support the USCG required Navigation Lights with NAVAid signs are all very loose and now ineffective. The four (4) light assembly apparatuses with the associated solar cells, batteries, battery boxes, etc. for each, will have to be inspected by an authorized firm to determine if they still to light up at night. The storm tidal surge in the area came very high, was of high salinity, and left some “wrack” debris among some of the light assemblies, thus the lighting system may have been adversely impacted. One of the solar cells appears to have been displaced such that it does not face the sun properly to charge the batteries. (Photos: Appendix B, Photo 5).

**Site 6—Jackson Bayou**

Jackson Bayou structure did not receive any damages due to Hurricane RITA. (Photos: Appendix B, Photo 8).

**Site 7—British American Canal**

British American Canal did not receive any damages due to Hurricane RITA (Photos: Appendix B, Photos 10 & 11).

**Site 8—PVC Wall**

The PVC shoreline protection wall did not receive any damages because of Hurricane RITA. There was noted that one large tree trunk was deposited onto the wall, but that is of no consequence. (Photos: Appendix B, Photo 9).

**School Bus Bayou**

As an aside to inspecting the structural features of this project, we also inspected the School Bus Bayou area to determine the post-RITA conditions of same. We noted that there are now five (5) major breaches between Cote Blanche Bay and the channel proper of School Bus Bayou. During our last pre-RITA inspection approximately two months earlier, only three (3) channel connections had been found. Some of the channel cuts were sounded for depth and found to be approximately 8 feet deep. Each is approximately 10 to 14 feet in width and water was running out to the bay from the marsh. At some other areas, we noted some indications that other minor cuts were developing, but not yet connected to the bay by water. The remaining “land bridge” that still exists between the bay shore and the bayou appears about the same as to what existed pre-RITA. The marsh in the area has suffered severely from the storm tidal surge and it appears as though some areas have been “mowed” as they are bare of any vegetation. (Photos: Appendix B, Photos 6 & 7).

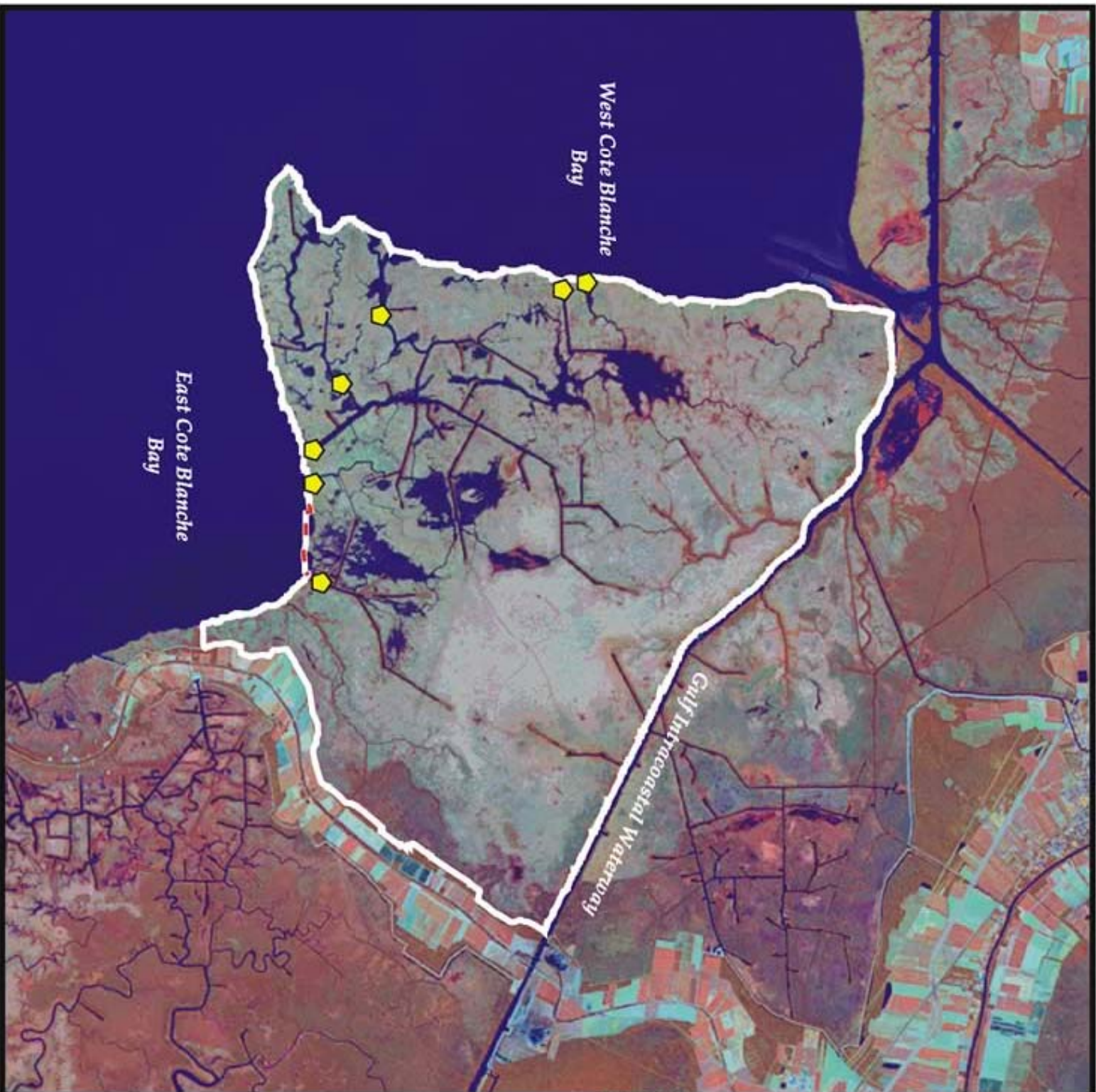
## **VI. Conclusions and Recommendations**

Overall, the Cote Blanche Hydrologic Restoration Project is in good condition and functioning as designed with minimal damage sustained from Hurricane RITA, however requests for FEMA claims will be necessary at the Humble Canal Structure. Corrective actions necessary are as follows: (1) By use of 110 pound type rock riprap, the shoreline protection dike on the south area of the weir will need to be extended a short distance and the “tie-in” of the dike to the bank made more secure by construction of a “bank head” of stone. (2) The north “handrail” will need to be repaired by replacement of the portion of the rail that is missing and the other portion that is bent and leaning needs to be again made plumb. (3) The existing cable wraps on the light system support piling clusters ( four timber pile supports total) will need to be removed (cable is of stainless steel and is in very good condition) and re-installed in a tight and secure manner. (4) The four USCG required light assemblies will need to be inspected by a firm that is authorized as qualified by the manufacturer and that will be engaged by DNR by contracting to inspect and repair the systems if necessary.

On a separate note, although not a component of the TV-04 project, the condition of the breaches between School Bus Bayou and Cote Blanche Bay has worsened and threatens the effectiveness of the Humble Canal structure. Additional O&M monies have been authorized by the CWPPRA Task Force to perform a maintenance project to provide a rock dike shoreline protection along the bay shore on either side of Humble Canal and plugging all of the existing breaches, construct a low level weir along School Bus Bayou on the west side of Humble Canal, and construct a rock plug along School Bus Bayou on the east side of Humble Canal. This project is scheduled for construction during Spring, 2007.



**Appendix A**  
**Project Features Map**



# Cote Blanche Hydrologic Restoration (TV-04)

	Weir
	Shoreline Protection
	Project Boundary

**USGS**  
science for a changing world



Map Produced By:  
U.S. Department of the Interior  
U.S. Geological Survey  
National Wetlands Research Center  
Coastal Restoration Field Station

Background Imagery:  
Thematic Mapper Satellite Imagery 2000  
Map Date: August 13, 2002  
Map ID: 2002-11-673  
Data accurate as of: August 13, 2002

**Appendix B**  
**Photographs**



Photo 1, Mud Bayou Structure



Photo 2, Humble F-Canal Structure



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Photo 3, Bayou Long Structure



Photo 4, Bayou Carlin Structure



Photo 5, Humble Canal Structure



Photo 6, School Bus Bayou Breaches





Photo 7, School Bus Bayou Breaches



Photo 8, Jackson Bayou Structure



Photo 9, PVC Sheet Pile Wall



Photo 10, British American Canal Structure



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Photo 11, British American Canal Structure

## **Appendix C**

### **Three Year Budget Projection**

**COTE BLANCHE/ TV-04 / PPL 3**  
**Three-Year Operations & Maintenance Budgets 07/01/2005 - 06/30/08**

<u>Project Manager</u> Pat Landry	<u>O &amp; M Manager</u> Herb Juneau	<u>Federal Sponsor</u> NRCS	<u>Prepared By</u> Herb Juneau
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	2005/2006	2006/2007	2007/2008
<b>Maintenance Inspection</b>	\$ 4,955.00	\$ 5,250.00	\$ 5,407.00
<b>Structure Operation</b>			
<b>Administration</b>		\$ 40,000.00	\$ 10,000.00

**Maintenance/Rehabilitation**

**05/06 Description: Inspection & Repair of Nav. Aids**

E&D	
Construction	\$ 10,170.00
Construction Oversight	
<i>Sub Total - Maint. And Rehab.</i>	<u>\$ 10,170.00</u>

**06/07 Description: School Bus Bayou Shoreline Protection**

E&D	\$ 167,860.00
Construction	\$ 1,402,300.00
Construction Oversight	\$ 34,405.00
<i>Sub Total - Maint. And Rehab.</i>	<u>\$ 1,604,565.00</u>

**07/08 Description: School Bus Bayou Shoreline Protection/Capping of Rock Dike**

E&D	\$ 30,000.00
Construction	\$ 200,000.00
Construction Oversight	\$ 20,000.00
<i>Sub Total - Maint. And Rehab.</i>	<u>\$ 250,000.00</u>

	2005/2006	2006/2007	2007/2008
<b><u>Total O&amp;M Budgets</u></b>	<u>\$ 15,125.00</u>	<u>\$ 1,649,815.00</u>	<u>\$ 265,407.00</u>

<b><u>O &amp; M Budget (3 yr Total)</u></b>	<b><u>\$ 1,930,347.00</u></b>
<b><u>Existing O &amp; M Budget</u></b>	<b><u>\$ 1,930,672.00</u></b>
<b><u>Remaining O &amp; M Budget (Projected)</u></b>	<b><u>\$ 325.00</u></b>

## OPERATION AND MAINTENANCE BUDGET WORKSHEET

COTE BLANCHE / PROJECT NO. TV-04 / PPL NO. 3

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$4,955.00	<b>\$4,955.00</b>
General Structure Maintenance	LUMP	1	\$0.00	<b>\$0.00</b>
Engineering and Design	LUMP	1	\$0.00	<b>\$0.00</b>
Operations Contract	LUMP	1	\$0.00	<b>\$0.00</b>
Construction Oversight	LUMP	1	\$0.00	<b>\$0.00</b>

### ADMINISTRATION

LDNR / CRD Admin.	LUMP	1	\$0.00	\$0.00
FEDERAL SPONSOR Admin.	LUMP	1	\$0.00	\$0.00
SURVEY Admin.	LUMP	0	\$0.00	\$0.00
OTHER				\$0.00
<b>TOTAL ADMINISTRATION COSTS:</b>				<b>\$0.00</b>

### MAINTENANCE / CONSTRUCTION

#### SURVEY

SURVEY DESCRIPTION:				
Secondary Monument	EACH	0	\$0.00	\$0.00
Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00
Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00
TBM Installation	EACH	0	\$0.00	\$0.00
OTHER				\$0.00
<b>TOTAL SURVEY COSTS:</b>				<b>\$0.00</b>

#### GEOTECHNICAL

GEOTECH DESCRIPTION:				
Borings	EACH	0	\$0.00	\$0.00
OTHER				\$0.00
<b>TOTAL GEOTECHNICAL COSTS:</b>				<b>\$0.00</b>

#### CONSTRUCTION

CONSTRUCTION DESCRIPTION:					
Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE	
Rock Dike	0	0.0	0	\$0.00	\$0.00
	0	0.0		\$0.00	\$0.00
	0	0.0	0	\$0.00	\$0.00
Filter Cloth / Geogrid Fabric	SQ YD	0		\$0.00	\$0.00
Navigation Aid	EACH	1		\$10,170.00	\$10,170.00
Signage	EACH	0		\$0.00	\$0.00
General Excavation / Fill	CU YD	0		\$0.00	\$0.00
Dredging	CU YD	0		\$0.00	\$0.00
Sheet Piles (Lin Ft or Sq Yds)		0		\$0.00	\$0.00
Timber Piles (each or lump sum)		0		\$0.00	\$0.00
Timber Members (each or lump sum)		0		\$0.00	\$0.00
Hardware	LUMP	1		\$0.00	\$0.00
Materials	LUMP	1		\$0.00	\$0.00
Mob / Demob	LUMP	0		\$0.00	\$0.00
Contingency	LUMP	1		\$0.00	\$0.00
General Structure Maintenance	LUMP	1		\$0.00	\$0.00
OTHER				\$0.00	\$0.00
OTHER				\$0.00	\$0.00
CONTINGENCY	LUMP	0		\$0.00	\$0.00
<b>TOTAL CONSTRUCTION COSTS:</b>					<b>\$10,170.00</b>

**TOTAL OPERATIONS AND MAINTENANCE BUDGET:**

**\$15,125.00**

## OPERATION AND MAINTENANCE BUDGET WORKSHEET

COTE BLANCHE / PROJECT NO. TV-04 / PPL NO. 3

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$5,250.00	\$5,250.00
General Structure Maintenance	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$167,860.00	\$167,860.00
Operations Contract	LUMP	1	\$0.00	\$0.00
Construction Oversight	LUMP	1	\$34,405.00	\$34,405.00

### ADMINISTRATION

LDNR / CRD Admin.	LUMP	1	\$35,000.00	\$35,000.00
FEDERAL SPONSOR Admin.	LUMP	1	\$5,000.00	\$5,000.00
SURVEY Admin.	LUMP	0	\$0.00	\$0.00
OTHER				\$0.00
<b>TOTAL ADMINISTRATION COSTS:</b>				<b>\$40,000.00</b>

### MAINTENANCE / CONSTRUCTION

#### SURVEY

SURVEY DESCRIPTION:					
Secondary Monument	EACH	0	\$0.00	\$0.00	
Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00	
Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00	
TBM Installation	EACH	0	\$0.00	\$0.00	
OTHER				\$0.00	
<b>TOTAL SURVEY COSTS:</b>				<b>\$0.00</b>	

#### GEOTECHNICAL

GEOTECH DESCRIPTION:					
Borings	EACH	0	\$0.00	\$0.00	
OTHER				\$0.00	
<b>TOTAL GEOTECHNICAL COSTS:</b>				<b>\$0.00</b>	

#### CONSTRUCTION

CONSTRUCTION DESCRIPTION:					
Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE	
Rock Dike - 1,000 # Stone	0	0.0	33,500	\$35.00	\$1,172,500.00
Rip Rap - 130 # Stone	0	0.0	1,000	\$30.00	\$30,000.00
	0	0.0	0	\$0.00	\$0.00
Filter Cloth / Geogrid Fabric		SQ YD	19,000	\$5.00	\$95,000.00
Navigation Aid		EACH	0	\$0.00	\$0.00
Signage		EACH	9	\$2,200.00	\$19,800.00
General Excavation / Fill		CU YD	0	\$0.00	\$0.00
Dredging		CU YD	0	\$0.00	\$0.00
Sheet Piles (Lin Ft or Sq Yds)			0	\$0.00	\$0.00
Timber Piles (each or lump sum)			0	\$0.00	\$0.00
Timber Members (each or lump sum)			0	\$0.00	\$0.00
Hardware		LUMP	1	\$0.00	\$0.00
Materials		LUMP	1	\$0.00	\$0.00
Mob / Demob		LUMP	1	\$50,000.00	\$50,000.00
Contingency		LUMP	1	\$0.00	\$0.00
General Structure Maintenance		LUMP	1	\$0.00	\$0.00
OTHER				\$0.00	\$0.00
OTHER				\$0.00	\$0.00
CONTINGENCY		LUMP	1	\$35,000.00	\$35,000.00
<b>TOTAL CONSTRUCTION COSTS:</b>					<b>\$1,402,300.00</b>

**TOTAL OPERATIONS AND MAINTENANCE BUDGET:**

**\$1,649,815.00**

**OPERATION AND MAINTENANCE BUDGET WORKSHEET**

COTE BLANCHE / PROJECT NO. TV-04 / PPL NO. 3

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$5,407.00	\$5,407.00
General Structure Maintenance	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$30,000.00	\$30,000.00
Operations Contract	LUMP	1	\$0.00	\$0.00
Construction Oversight	LUMP	1	\$20,000.00	\$20,000.00

**ADMINISTRATION**

LDNR / CRD Admin.	LUMP	1	\$5,000.00	\$5,000.00
FEDERAL SPONSOR Admin.	LUMP	1	\$5,000.00	\$5,000.00
SURVEY Admin.	LUMP	0	\$0.00	\$0.00
OTHER				\$0.00
<b>TOTAL ADMINISTRATION COSTS:</b>				<b>\$10,000.00</b>

**MAINTENANCE / CONSTRUCTION**

**SURVEY**

SURVEY DESCRIPTION:					
Secondary Monument	EACH	0	\$0.00	\$0.00	
Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00	
Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00	
TBM Installation	EACH	0	\$0.00	\$0.00	
OTHER				\$0.00	
<b>TOTAL SURVEY COSTS:</b>				<b>\$0.00</b>	

**GEOTECHNICAL**

GEOTECH DESCRIPTION:					
Borings	EACH	0	\$0.00	\$0.00	
OTHER				\$0.00	
<b>TOTAL GEOTECHNICAL COSTS:</b>				<b>\$0.00</b>	

**CONSTRUCTION**

CONSTRUCTION DESCRIPTION:						
Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE		
Rock Dike	0	0.0	3,600	\$40.00	\$144,000.00	
	0	0.0	0	\$0.00	\$0.00	
	0	0.0	0	\$0.00	\$0.00	
Filter Cloth / Geogrid Fabric	SQ YD	0	\$0.00	\$0.00		
Navigation Aid	EACH	0		\$0.00		
Signage	LUMP	0	\$0.00	\$0.00		
General Excavation / Fill	CU YD	0	\$0.00	\$0.00		
Dredging	CU YD	10,000	\$1.60	\$16,000.00		
Sheet Piles (Lin Ft or Sq Yds)		0	\$0.00	\$0.00		
Timber Piles (each or lump sum)		0	\$0.00	\$0.00		
Timber Members (each or lump sum)		0	\$0.00	\$0.00		
Hardware	LUMP	1	\$0.00	\$0.00		
Materials	LUMP	1	\$0.00	\$0.00		
Mob / Demob	LUMP	1	\$40,000.00	\$40,000.00		
Contingency	LUMP	1	\$0.00	\$0.00		
General Structure Maintenance	LUMP	1	\$0.00	\$0.00		
OTHER			\$0.00	\$0.00		
OTHER			\$0.00	\$0.00		
CONTINGENCY	LUMP	0	\$0.00	\$0.00		
<b>TOTAL CONSTRUCTION COSTS:</b>				<b>\$200,000.00</b>		

**TOTAL OPERATIONS AND MAINTENANCE BUDGET:**

**\$265,407.00**

## **Appendix D**

### **Field Inspection Form**

**MAINTENANCE INSPECTION REPORT CHECK SHEET**

Project No. / Name: TV-04 Cote Blanche

Date of Inspection: October 11, 2005 Time: 11:00 am

Structure No. 1 Mud Bayou

Inspector(s): Stan Aucoin, Herb Juneau, Dewey Billodeau  
Patrick Landry, Darrell Pontiff, Justin Price

Structure Description: Fixed crest weir, rock paving on bank

Shannon Haynes, Ismail Merhi (LDNR) and Cindy Steyer (NRCS)

Type of Inspection: Annual

Water Level Inside: 1.8 Outside:  
Weather Conditions: Sunny and Clear

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Steel Bulkhead / Caps	good				It appears the old bayou channel that existed to the marsh side of the structure appears somewhat wider.
Steel Grating	N/A				
Stop Logs	N/A				
Hardware	good				
Timber Piles	good				
Timber Wales	N/A				
Galv. Pile Caps	N/A				
Cables	N/A				
Signage / Supports	good				
Rip Rap (fill)	good				
Eathem Embankment	N/A				

What are the conditions of the existing levees?  
Are there any noticeable breaches?  
Settlement of rock plugs and rock weirs?  
Position of stoplogs at the time of the inspection?  
Are there any signs of vandalism?



**MAINTENANCE INSPECTION REPORT CHECK SHEET**

Project No. / Name: TV-04 Cote Blanche

Date of Inspection: October 11, 2005 Time: 11:00 am

Structure No. 2 Humble F Canal

Inspector(s): Stan Aucoin, Herb Juneau, Dewey Billodeau

Patrick Landry, Darrell Pontiff, Justin Price

Structure Description: Fixed crest weir, rock paving on bank

Shannon Haynes, Ismail Merhi (LDNR) and Cindy Steyer (NRCS)

Water Level Inside: Outside:

Type of Inspection: Annual

Weater Conditions: Sunny and Clear

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Steel Bulkhead / Caps	good				Structure in good condition. Some slight rusting of pile caps. No immediate action necessary
Steel Grating	N/A				
Stop Logs	N/A				
Hardware	good				
Timber Piles	good				
Timber Wales	N/A				
Galv. Pile Caps	N/A				
Cables	N/A				
Signage / Supports	good				
Rip Rap (fill)	good				
Eathern Embankment	N/A				

What are the conditions of the existing levees?

Are there any noticable breaches?

Settlement of rock plugs and rock weirs?

Position of stoplogs at the time of the inspection?

Are there any signs of vandalism?

**MAINTENANCE INSPECTION REPORT CHECK SHEET**

Project No. / Name: TV-04 Cote Blanche

Date of Inspection: October 11, 2005

Time: 11:00 am

Structure No. 3 Bayou Long

Inspector(s): Stan Aucoin, Herb Juneau, Dewey Billodeau

Patrick Landry, Darrell Pontiff, Justin Price

Structure Description: Fixed crest weir

Shannon Haynes, Ismail Merhi (LDNR) and Cindy Steyer (NRCS)

Water Level      Inside:      Outside:

Type of Inspection: Annual

Weather Conditions: Sunny and Clear

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Steel Bulkhead / Caps	good				Structure in pristine post-construction condition. Some slight rusting of pile caps. No immediate action necessary.
Steel Grating	N/A				
Stop Logs	N/A				
Hardware	good				
Timber Piles	good				
Timber Wales	N/A				
Galv. Pile Caps	N/A				
Cables	N/A				
Signage / Supports	good				
Rip Rap (fill)	N/A				
Eathern Embankment	N/A				

What are the conditions of the existing levees?

Are there any noticable breaches?

Settlement of rock plugs and rock weirs?

Position of stoplogs at the time of the inspection?

**MAINTENANCE INSPECTION REPORT CHECK SHEET**

Project No. / Name: TV-04 Cote Blanche

Date of Inspection: October 11, 2005      Time: 11:00 am

Structure No. 4 Bayou Carlin

Inspector(s): Stan Aucoin, Herb Juneau, Dewey Billodeau  
 Patrick Landry, Darrell Pontiff, Justin Price  
 Shannon Haynes, Ismail Merhi (LDNR) and Cindy Steyer (NRCS)  
 Water Level      Inside:      Outside:  
 Weater Conditions: Sunny and Clear

Structure Description: Fixed crest weir

Type of Inspection: Annual

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Steel Bulkhead / Caps	good				Structure in pristine post-construction condition. Some slight rusting of pile caps. No immediate action necessary.
Steel Grating	N/A				
Stop Logs	N/A				
Hardware	good				
Timber Piles	good				
Timber Wales	N/A				
Galv. Pile Caps	N/A				
Cables	N/A				
Signage / Supports	good				
Rip Rap (fill)	N/A				
Eathern Embankment	N/A				

What are the conditions of the existing levees?  
 Are there any noticable breaches?  
 Settlement of rock plugs and rock weirs?  
 Position of stoplogs at the time of the inspection?  
 Are there any signs of vandalism?

**MAINTENANCE INSPECTION REPORT CHECK SHEET**

Project No. / Name: TV-04 Cote Blanche

Date of Inspection: October 11, 2005

Time: 11:00 am

Structure No. 5 Humble Canal

Inspector(s): Stan Aucoin, Herb Juneau, Dewey Billodeau

Pat Landry, Darrell Pontiff, Justin Price

Structure Description: Fixed crest weir, rock on banks and canal

Shannon Haynes (LDNR) and Cindy Steyer (NRCS)

Water Level Inside: Outside:

Type of Inspection: Annual

Weather Conditions: Sunny and Clear

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Steel Bulkhead / Caps	good				Some initial post construction rusting. No action needed.
Steel Grating	N/A				
Stop Logs	N/A				
Hardware	fair				Handrails need to be replaced and/or repaired.
Timber Piles	N/A				
Timber Wales	N/A				
Galv. Pile Caps	good				
USCG Lights	poor				All light assemblies need to be inspected and repaired if necessary
Signage / Supports	poor				Pile clusters will need to be reinforced/rewrapped with stainless steel cable.
Rip Rap (fill)	fair				Shoreline protection dike on south area of weir needs to be extended and made secure with additional rock.
Eathern Embankment	N/A				

What are the conditions of the existing levees?

Are there any noticeable breaches?

Settlement of rock plugs and rock weirs?

Position of stoplogs at the time of the inspection?

**MAINTENANCE INSPECTION REPORT CHECK SHEET**

Project No. / Name: TV-04 Cote Blanche

Date of Inspection: October 11, 2005      Time: 11:00 am

Structure No. 6 Jackson Bayou

Inspector(s): Stan Aucoin, Herb Juneau, Dewey Billodeau

Structure Description: Fixed crest weir

Patrick Landry, Darrell Pontiff, Justin Price

Shannon Haynes, Ismail Merhi (LDNR) and Cindy Steyer (NRCS)

Type of Inspection: Annual

Water Level      Inside:      Outside:

Weather Conditions: Sunny and Clear

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Steel Bulkhead / Caps	good				Some slight rusting of pile caps. No immediate action necessary.
Steel Grating	N/A				
Stop Logs	N/A				
Hardware	good				
Timber Piles	poor				
Timber Wales	N/A				
Galv. Pile Caps	N/A				
Cables	N/A				
Signage / Supports	good				
Rip Rap (fill)	N/A				
Eathem Embankment	N/A				

What are the conditions of the existing levees?

Are there any noticable breaches?

Settlement of rock plugs and rock weirs?

Position of stoplogs at the time of the inspection?

Are there any signs of vandalism?

**MAINTENANCE INSPECTION REPORT CHECK SHEET**

Project No. / Name: TV-04 Cote Blanche

Date of Inspection: October 11, 2005      Time: 11:00 am

Structure No. 7 British American Canal

Inspector(s): Stan Aucoin, Herbert Juneau, Dewey Billodeau  
Patrick Landry, Darrell Pontiff, Justin Price

Structure Description: Fixed crest weir, rock on banks and canal

Shannon Haynes, Ismail Merhi (LDNR) and Cindy Steyer (NRCS)

Water Level      Inside:      Outside:

Type of Inspection: Annual

Weater Conditions: Sunny and Clear

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Steel Bulkhead / Caps	good				Some initial post construction rusting. Hasn't gotten any worse. No action needed.
Steel Grating	N/A				
Stop Logs	N/A				
Hardware	good				
Timber Piles	N/A				
Timber Wales	N/A				
Galv. Pile Caps	N/A				
Cables	N/A				
Signage /Supports	good				
Rip Rap (fill)	good				
Eathern Embankment	N/A				

- What are the conditions of the existing levees?
- Are there any noticable breaches?
- Settlement of rock plugs and rock weirs?
- Position of stoplogs at the time of the inspection?
- Are there any signs of vandalism?

**MAINTENANCE INSPECTION REPORT CHECK SHEET**

Project No. / Name: TV-04 Cote Blanche

Date of Inspection: October 11, 2005

Time: 11:00 am

Structure No. 8 PVC wall

Inspector(s): Stan Aucoin, Herb Juneau, Dewey Billodeau

Patrick Landry, Darrell Pontiff, Justin Price

Structure Description: approximately 3800 linear feet of PVC wall

Shannon Haynes, Ismail Merhi (LDNR) and Cindy Steyer (NRCS)

Water Level Inside: \_\_\_\_\_ Outside: \_\_\_\_\_

Type of Inspection: Annual

Weather Conditions: Sunny and Clear

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
PVC sheet piling / Caps	fair				PVC wall appears to be in post construction condition and holding up well. There is one large tree trunk deposited onto the wall from Hurricane RITA.
Steel Grating					
Stop Logs					
Hardware	good				
Timber Piles	good				Some pile caps missing again. No immediate action necessary.
Timber Wales	good				
Galv. Pile Caps					
Cables					
Signage / Supports	good				All signs in place and in immediate post construction condition.
Rip Rap (fill)	good				Rock placed along the inside and outside of the PVC wall is still in place and functional. No action necessary.
Earthen Embankment					

What are the conditions of the existing levees?

Are there any noticeable breaches?

Settlement of rock plugs and rock weirs?

Position of stoplogs at the time of the inspection?

## **Appendix E**

### **Locations to be Monitored**