CONSERVALION SUIL United States Department of

ID:5043822042

13:00 No.005 P.01

71302

AUG 28'96 Baton Rouge, Louisiana Natural Resources

August 28, 1996

To:

Agriculture

WVA Work Group et al --- Via Facsimile

Kevin Roy, USFWS, Lafayette

Richard Hartman, NMFS, Baton Rouge Jeanene Peckham, EPA, Baton Rouge

Conservation Service

Sue Hawes, COE, New Orleans Darryl Clark, DNR, Baton Rouge Marty Floyd, NRCS, Alexandria

Anna Hamilton

Denise Reed, LUMCON

From:

Quin Kinler, NRCS, Baton Rouge

Subject:

Updated Project Information Sheets and WVA for "BA-2 Revised"

The accompanying Project Information Sheets and WVA calculations reflect the land loss rates provided today by Suc Hawes and all the other changes agreed to at yesterday's WVA Work Group meeting. These sheets essentially replace sheets 10 through 21 in the package sent out on August 14, 1996. (Note: The land loss rates are: 0.135% for Option A and 0.148% for Option B.)

Kevin Roy has input the values into his spreadsheets and confirmed that the calculations presented here are correct.

At this point, cost estimates for "BA-2 Revised" are being finalized. Once that is completed, the cost information and the WVA information will be brought before the P & E Subcommittee and then the Technical Committee, prior to consideration by the Task Force at its next meeting, tentatively scheduled for September 30.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT UPDATED PROJECT INFORMATION SHEET 8/28/96) "GIWW to Clovelly Wetland (BA-2) - Revised"

Option A

(Includes structure at Site 14A; no structure at Site 11)

Note: This information sheet now reflects changes pursuant to 8/27/96 WVA meeting, and a land loss rate of .135% per year as confirmed by the Corps on 8/28/96.

Project Area Size:

14.948 acres

86% land / marsh: 14% water

Marsh Type:

1.4% fresh; 93.7% intermediate; 1.7% brackish; 3.2% scrub/shrub and

forest

(Use Fresh / Intermediate Marsh Model)

Project Description: Project is designed to: 1) return the flow of freshwater (from rainfall and an existing drainage pump) to natural watercourses, as opposed to a rapid exit through man-made canals, thereby conserving freshwater and retarding salinity spikes; 2) stabilize the mouths of the natural watercourses; 3) reestablish and/or maintain a lakeshore "rim" in critical areas 4) address bankline erosion along Breton Canal. Features include: 3 rock weirs, 4 canal plugs, 1 plug with flapgated culvert, 1 variable crest weir, 1 weir with a barge bay, 5,000 ft. of bankline reestablishment, 6,000 ft. lake-rim re-establishment, and maintenance of spoil / marsh bank on southern perimeter.

V1 EMERGENT VEGETATION

Existing Conditions

86% land / marsh: 14% water

Future Conditions

Without Project

Land loss rate for 1983 - 90, calculated by COE, was .135 % per year.

12,928 acres * .00135= 17.5 acres/ yr.

TY 0: 12,928

(86%)

TY 1: 12,911.5

(86%)

TY 20: 12,578

(84%)

With Project

Assume reduce loss by 50%.

12,928 acres * .000675= 8.7 acres/ yr.

TY 0: 12,928

(86%)

TY 1: 12,919

(86%)

TY 20: 12,753

(85%)

Option A PROJECT INFORMATION SHEET 8/28/96 (Continued)

Y2 AQUATIC VEGETATION

Existing Conditions

About 60 %

Future Conditions

Without Project

Assume SAV decrease to 45% by TY 20.

With Project

Assume SAV increase to 70 % by TY1 and remain 70% through TY20

V3 INTERSPERSION

Existing Conditions

70% at Class 1

30% at Class 2

Future Conditions

Without Project

No Change

With Project

No change

V4 WATER DEPTH

Existing Conditions

60 %

Future Conditions

Without Project

TY 1: 60%

TY 20: 55%

With Project

TY 1: 60%

TY 20: 60%

Option A PROJECT INFORMATION SHEET 8/28/96 (Continued)

V5 SALINITY

Existing Conditions

5 ppt

Future Conditions

Without Project

TY 1: 5 ppt

TY 20: 6 ppt

With Project TY 1: 4 ppt

TY 20: 4 ppt

V6 AQUATIC ORGANISM ACCESS

Existing Conditions

Open system

Future Conditions

Without Project

Open System

With Project

The project area would remain accessible through the three natural bayous which enter Little Lake at (Sites 2, 4, and 7) and the fish access points in the re-established lake rim. Because the rock weirs are designed more like rock liners with much of channel width at 4 feet below marsh at low tide, the WVA Work Group assigned the Structure Rating = 0.9.

WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project...... "BA- 2 Revised" -- Option A

Marsh type acres:

(.135%/yr loss rate; with changes pursuant to 8/27/96 meeting)

Fresh.....

Condition: Future Without Project

Intermediate.. 14948

		TY 0		TY 1		ΤΥ	20
Variable		Value	SI	Value	SI	Value	55
٧1	% Emergent	98	0.87	86	0.87	84	0.86
٧2	% Aquatic	09	0.64	09	0.64	45	0.51
٨3	Interspersion	%		8		8	
	Class 1 Class 2	3 0	0.88	30 70	0.88	30	0.88
	Class 3 Class 4 Class 5	,-					
٧4	%0W <= 1.5ft	09	0.78	09	0.78	55	0.72
V 5	Salinity (ppt) fresh intermediate	S	0.80	n	0.80	ω	09.0
9/	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		= ISH	0.82	HSI =	0.82	HSI =	0.75

WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project...... "BA- 2 Revised" -- Option A

Marsh type acres:

(50% reduction in loss rate; with changes from 8/27/96 meeting)

Fresh.....

Condition: Future With Project

Intermediate.. 1494

		TY 0		TY 1	W. R.	ĭ	20
Variable		Value	SI	Value	SI	Value	SI
٧1	% Emergent	98	0.87	98	0.87	85	0.87
٧2	% Aquatic	09	0.64	70	0.73	07	0.73
73	Interspersion	*		%		%	
	Class 1	70	0.88	70	0.88	70	0.88
	Class 2	30		30		30	
	Class 3	4					
	Class 4						
	Class 5						
44	%0W <= 1.5ft	09	0.78	09	0.78	09	0.78
٧5	Salinity (ppt)						
	fresh		08.0		1.00		1.00
	intermediate	ស		4		4	
9/	Access Value	1.00	1.80	0.90	0.93	0.90	0.93
		HSI	0 82	HEI	OBE	HCI	OBE

AAHU CALCULATION

Project:

"BA- 2 Revised" -- Option A

(.135%/yr loss rate; with changes pursuant to 8/27/96 meeting)

Future Without F	Project		Total	Cummulative
TY	Acres	x HSI	HUs	HUs
0	14948	0.82	12237.94	
1	14948	0.82	12237.94	12237.94
20	14948	0.75	11277.21	223393.97
			CHUs =	235631.91 11781.60

ture With Proj	ect		Total	Cummulative
TY	Acres	x HSI	HUs	HUs
0	14948	0.82	12237.94	
1	14948	0.85	12708.91	12473.43
20	14948	0.85	12644.58	240858.20
			CHUs =	253331.63
			AAHUs =	12666.58

NET CHANGE IN CHUS DUE TO PROJECT	
A. Future With Project CHUs =	253331.63
B. Future Without Project CHUs =	235631.91
Net Change (FWP - FWOP) =	17699.72

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHUs =	12666.58
B. Future Without Project AAHUs =	11781.60
Net Change (FWP - FWOP) =	884.99

02-May-94 Version