United States
Department of
Agriculture

Natural Resources
Conservation Service

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To: WVA Work Group et al --- Via Facsimile
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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 Sue 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.

The Natural Resources Conservation Service, formerly the Soil Conservation Service, is an agency of the United States Department of Agriculture

AN EQUAL OPPORTUNITY EMPLOYER

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 re-establishment, 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)

**V2 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
(.135%/yr loss rate; with changes pursuant to 8/27/96 meeting)
Condition: Future Without Project

Marsh type acres:
Fresh.....
Intermediate.. 14948

| Variable | | TY 0 | | TY 1 | | TY 20 | |
|---|---|---|---|---|---|---|---|
| | | Value | SI | Value | SI | Value | SI |
| V1 | % Emergent | 86 | 0.87 | 86 | 0.87 | 84 | 0.86 |
| V2 | % Aquatic | 60 | 0.64 | 60 | 0.64 | 45 | 0.51 |
| V3 | Interspersion | % | | % | | % | |
| | Class 1 | 70 | 0.88 | 70 | 0.88 | 70 | 0.88 |
| | Class 2 | 30 | | 30 | | 30 | |
| | Class 3 | | | | | | |
| | Class 4 | | | | | | |
| | Class 5 | | | | | | |
| V4 | %OW < = 1.5ft | 60 | 0.78 | 60 | 0.78 | 55 | 0.72 |
| V5 | Salinity (ppt) | | | | | | |
| | fresh | | 0.80 | | 0.80 | | 0.60 |
| | intermediate | 5 | | 5 | | 6 | |
| V6 | Access Value | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | | HSI = | 0.82 | HSI = | 0.82 | HSI = | 0.75 |

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... "BA- 2 Revised" -- Option A
(50% reduction in loss rate; with changes from 8/27/96 meeting)

Condition: Future With Project

Marsh type acres:
Fresh.....
Intermediate.. 14948

| Variable | | TY 0 | | TY 1 | | TY 20 | |
|---|---|---|---|---|---|---|---|
| | | Value | SI | Value | SI | Value | SI |
| V1 | % Emergent | 86 | 0.87 | 86 | 0.87 | 85 | 0.87 |
| V2 | % Aquatic | 60 | 0.64 | 70 | 0.73 | 70 | 0.73 |
| V3 | Interspersion | % | | % | | % | |
| | Class 1 | 70 | 0.88 | 70 | 0.88 | 70 | 0.88 |
| | Class 2 | 30 | | 30 | | 30 | |
| | Class 3 | | | | | | |
| | Class 4 | | | | | | |
| | Class 5 | | | | | | |
| V4 | %OW < = 1.5ft | 60 | 0.78 | 60 | 0.78 | 60 | 0.78 |
| V5 | Salinity (ppt) | | | | | | |
| | fresh | | 0.80 | | 1.00 | | 1.00 |
| | intermediate | 5 | | 4 | | 4 | |
| V6 | Access Value | 1.00 | 1.00 | 0.90 | 0.93 | 0.90 | 0.93 |
| | | HSI = | 0.82 | HSI = | 0.85 | HSI = | 0.85 |

# AAHU CALCULATION

**Project:** "BA- 2 Revised" -- Option A
(.135%/yr loss rate; with changes pursuant to 8/27/96 meeting)

| Future Without 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 |
| | | | AAHUs = | 11781.60 |

| Future With Project | | | 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** |