BENEFICIAL USE OF DREDGED MATERIAL DISPOSAL HISTORY MISSISSIPPI RIVER, BATON ROUGE TO THE GULF OF MEXICO, LA, SOUTHWEST PASS

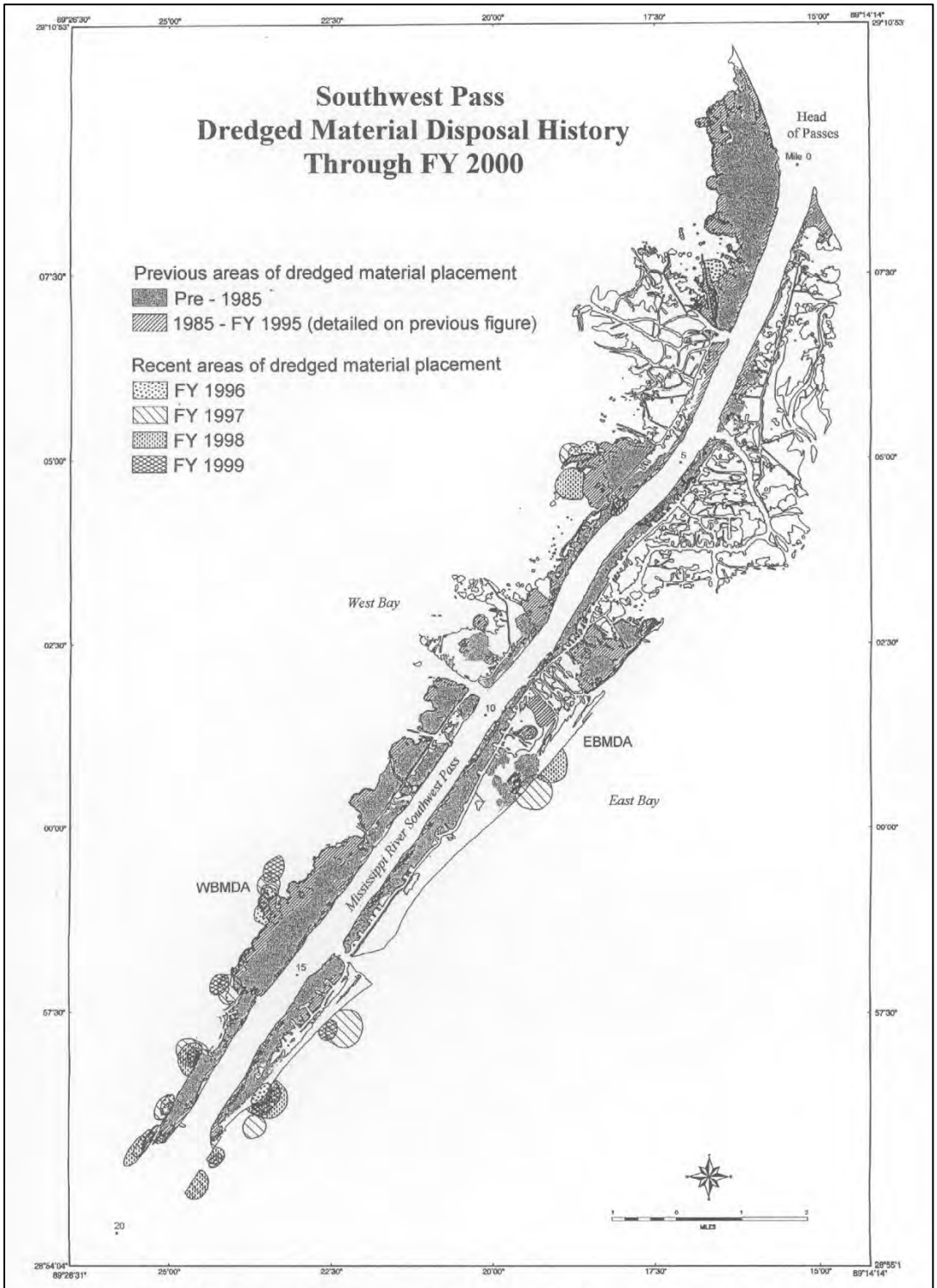


Figure 16B. The dredged material disposal history for the Mississippi River - Southwest Pass BUMP study area, showing the FY 1996 through FY 2000 disposal in detail. There was no cutterhead dredging, and therefore no beneficial use disposal, in FY 2000.

Fiscal Year 1980

Under contract **80-C-0119**, the cutterhead dredges LOUISIANA and E. STROUD (working from 22 April 1980 to 31 Aug 1980) removed a total of 7,916,006 cubic yards (CY) from the Southwest Pass (SWP) Mile 0.2 Above Head of Passes (AHP) to Mile 18.8 Below Head of Passes (BHP) dredging reach. The volume of dredged material discharged at each placement site was not recorded.

West Side Placement: Marsh Creation

Dredged material was placed unconfined for wetlands creation at a total of 21 shallow open water sites along the west side of the channel at the following locations: Mile 0.2 AHP, Mile 0.0, Mile 0.9 BHP, Mile 1.1 BHP, Mile 1.3 BHP, Mile 8.4 BHP, Mile 9.3 BHP, Mile 10.1 BHP, Mile 10.6 BHP, Mile 11.6 BHP, Mile 12.0 BHP, Mile 12.2 BHP, Mile 13.4 BHP, Mile 13.6 BHP, Mile 14.0 BHP, Mile 14.6 BHP, Mile 15.1 BHP, Mile 15.8 BHP, Mile 16.1 BHP, Mile 17.0 BHP, and Mile 17.4 BHP.

East Side Placement: Marsh Creation

Dredged material was placed unconfined for wetlands creation at a total of 14 shallow open water sites along the east side of the channel at the following locations: Mile 8.4 BHP, Mile 10.3 BHP, Mile 11.0 BHP, Mile 11.3 BHP, Mile 11.9 BHP, Mile 14.1 BHP, Mile 14.9 BHP, Mile 15.1 BHP, Mile 15.5 BHP, Mile 15.9 BHP, Mile 16.3 BHP, Mile 16.9 BHP, Mile 17.3 BHP, and Mile 17.5 BHP.

Bank Stabilization

Dredged material was placed behind foreshore rock dikes for bank stabilization at approximately Mile 8.4 BHP along the west side of the channel, and between Miles 6.7 BHP and 7.9 BHP along the east side of the channel.

Results

Final contract cost was $6,359,882.

Fiscal Year 1981

1. Under contract **81-C-0146**, the cutterhead dredges LOUISIANA and E. STROUD (working from 5 July 1981 to 16 December 1981) removed a total of 7,866,533 CY from the SWP Mile 1.0 AHP to Mile 18.8 BHP dredging reach.

West Side Placement: Marsh Creation

Approximately 176,848 CY of material were placed unconfined in shallow open water in West Bay at about **Mile 0.2 AHP** for marsh creation.

Approximately 234,484 CY of material were placed unconfined in shallow open water in Riverside/West Bay at about **Mile 0.1 BHP** for marsh creation.

Approximately 206,585 CY of material were placed unconfined in shallow open water in Riverside Bay at about **Mile 0.8 BHP** for marsh creation.

A total of approximately 887,005 CY of material were placed unconfined in shallow open water areas on the west side of the channel at **Miles 7.8 BHP, 8.7 BHP, 9.2 BHP, 9.6 BHP**, and **10.1 BHP** for marsh creation.

A total of approximately 1,226,629 CY of material were placed unconfined in shallow open water areas on the west side of the channel at **Miles 13.1 BHP, 13.7 BHP, 13.8 BHP, 14.3 BHP, 14.6 BHP**, and **15.3 BHP** for marsh creation.

A total of approximately 1,184,774 CY of material were placed unconfined in shallow open water areas on the west side of the channel at **Miles 15.6 BHP, 16.3 BHP, 16.6 BHP, 17.0 BHP, 17.4 BHP, 17.9 BHP, 18.3 BHP, 18.6 BHP**, and **18.8 BHP** for marsh creation.

East Side Placement: Shoreline Nourishment

A total of approximately 1,712,680 CY of material were placed unconfined in shallow open water areas in East Bay at **Miles 12.1 BHP, 12.6 BHP, 12.9 BHP, 13.4 BHP, 13.6 BHP, 14.1 BHP**, and **14.7 BHP** for shoreline nourishment.

A total of approximately 1,178,419 CY of material were placed unconfined in shallow open water areas in East Bay at **Miles 15.5 BHP, 15.7 BHP, 16.2 BHP, 17.0 BHP, 17.4 BHP, 17.8 BHP, 18.2 BHP, 18.4 BHP**, and **18.7 BHP** for shoreline nourishment.

Bankline Stabilization

Approximately 742,339 CY of material were placed behind the foreshore rock protection dike located on the east bankline between **Miles 7.2 BHP** and **8.5 BHP** for bankline stabilization, and unconfined in the shallow open water of East Bay at about **Mile 8.0 BHP** for marsh creation.

East Side Placement: Hopper Dredge Disposal Area (HDDA) Non-Beneficial Use

Approximately 316,770 CY of material were placed unconfined into the northwestern corner of the **HDDA** by the E. STROUD working the east side of the channel between Mile 1.0 AHP and Mile 0.0.

Results

For this contract work, approximately 3,916,325 CY of dredged material were placed for marsh creation on the west side of the channel, and approximately 2,891,099 CY of dredged material were placed for shoreline nourishment on the east side of the channel. Approximately 742,339 CY were placed for bank stabilization on the east side of the channel.

Final contract cost was $6,359,882.

2. Under contract **81-C-0126**, the cutterhead dredge LOUIS JAMES (working from 13 February 1981 to 6 March 1981) removed a total of approximately 721,298 CY of material from the Cubit's Gap dredging reach in the SWP navigation channel. Although all dredged material was placed for either marsh creation or bank stabilization, the locations of dredged material placement sites were not recorded for this contract.

Results

Final contract cost was $727,588.

Fiscal Year 1982

Under contract **82-C-0221**, the cutterhead dredges LOUISIANA and BUSTER BEAN (working from 2 April 1982 to 16 October 1982) removed a total of 8,308,319 CY from the SWP Mile 1.0 AHP to Mile 18.8 BHP dredging reach. Although all dredged material was placed for either marsh creation, shoreline nourishment, or bank stabilization, the locations of dredged material placement sites were not recorded for this contract.

Results

Final contract cost was $7,478,749.

Fiscal Year 1983

Under contract **83-C-0093**, the cutterhead dredges LOUISIANA, MISSOURI H, and E. STROUD (working from 6 February 1983 to 9 November 1983) removed a total of 10,094,323 CY from the SWP Mile 1.2 AHP to Mile 18.8 BHP dredging reach. Maintenance dredging in SWP was performed during a high water event, which required re-dredging of several channel reaches due to high shoaling rates.

West Side Placement: Marsh Creation

Approximately 735,267 CY of material were placed unconfined at about **Mile 0.8 AHP** in West Bay for marsh creation. LDWF personnel observed that some dredged material had been placed on top of existing marsh habitat by the MISSOURI H in the marsh creation site located at about Mile 0.8 AHP in West Bay. Contract specifications did not direct placement of dredged material in shallow open water areas at this site, only that dredged material was to be placed at locations below a +10 foot elevation. As a result of this miscommunication, future contracts would specify that all dredged material was to be placed in areas of shallow open water and not on existing vegetation to avoid impacts to existing marsh in the vicinity of SWP placement sites.

Approximately 384,692 CY of material were placed unconfined in shallow open water in Dixon Bay at **Mile 5.5 BHP** on the west side of the channel for marsh creation.

Approximately 248,518 CY of material were placed behind foreshore rock dikes at **Mile 8.9 BHP** and **Mile 9.5 BHP** for bankline stabilization on the west side of the channel, and unconfined in shallow open water at **Mile 9.4** for marsh creation.

Approximately 355,925 CY of material were placed unconfined in shallow open water at **Mile 10.1 BHP** on the west side of the channel for marsh creation.

Approximately 401,044 CY of material were placed unconfined in shallow open water at **Mile 12.8 BHP** on the west side of the channel for marsh creation.

Approximately 461,340 CY of material were placed unconfined in shallow open water at **Mile 13.8 BHP** on the west side of the channel for marsh creation.

Approximately 392,189 CY of material were placed unconfined in shallow open water at **Mile 14.5 BHP** and **Mile 15.0 BHP** on the west side of the channel for marsh creation.

Approximately 694,480 CY of material were placed unconfined in shallow open water at **Mile 17.4 BHP** on the west side of the channel for marsh creation.

East Side Placement: Marsh Creation

Approximately 873,792 CY of material were placed unconfined in shallow open water at **Mile 8.3 BHP** on the east side of the channel for marsh creation.

East Side Placement: Shoreline Nourishment

Approximately 1,334,561 CY of material were placed unconfined in the shallow open water of East Bay between **Mile 10.1 BHP** and **Mile 10.9 BHP** for shoreline nourishment.

Approximately 802,812 CY of material were placed unconfined in the shallow open water of East Bay between **Mile 11.1 BHP** and **Mile 11.7 BHP** for shoreline nourishment.

Approximately 1,055,537 CY of material were placed unconfined in the shallow open water of East Bay at **Mile 14.0 BHP** for shoreline nourishment.

Approximately 923,026 CY of material were placed unconfined in the shallow open water of East Bay between **Mile 14.9 BHP** and **Mile 15.3 BHP** for shoreline nourishment.
Approximately 1,013,976 CY of material were placed unconfined in the shallow open water of East Bay between **Mile 16.0 BHP** and **Mile 17.1 BHP** for shoreline nourishment.

Bank Stabilization

Approximately 285,663 CY of material were placed behind foreshore rock dikes along the west side of the channel at **Mile 5.2 BHP** for bankline stabilization.

Approximately 131,501 CY of material were placed behind foreshore rock dikes along the west side of the channel at **Mile 10.0 BHP** for bankline stabilization.

Results

For this contract work, approximately 3,673,455 CY of dredged material were placed for marsh creation on the west side of the channel, and approximately 873,792 CY of dredged material were placed for marsh creation on the east side of the channel. Approximately 5,129,912 CY of dredged material were placed for shoreline nourishment on the east side of the channel. Approximately 417,164 CY were placed for bank stabilization on the west side of the channel.

Final contract cost was $7,904,127.

Fiscal Year 1984

Under contract **84-C-0055**, the cutterhead dredges LOUISIANA, MISSOURI H, and E. STROUD (working from 11 March 1984 to 5 October 1984) removed a total of 8,864,022 CY from the SWP Mile 1.2 AHP to Mile 18.8 BHP dredging reach. The volume of dredged material discharged at each placement site was not recorded.

West Side Placement: Marsh Creation

Dredged material was placed unconfined for marsh creation at a total of 8 shallow open water sites along the west side of the channel at the following locations: **Mile 0.9 AHP, Miles 0.5 AHP to 1.0 BHP, Mile 5.7 BHP, Mile 8.3 BHP, Miles 8.7 BHP to 9.8 BHP, Mile 10.2 BHP, Miles 14.3 BHP to 15.1 BHP**, and **Miles 17.8 BHP to 18.8 BHP**.

East Side Placement: Marsh Creation

Dredged material was placed unconfined for marsh creation at a total of 3 shallow open water sites along the east side of the channel at the following locations: **Mile 3.5 BHP, Mile 4.0 BHP,** and **Miles 7.8 BHP** to **8.7 BHP**.

East Side Placement: Shoreline Nourishment

Dredged material was placed unconfined in shallow open water for shoreline nourishment along the east side of the channel between **Miles 10.0 BHP** to **11.2 BHP** and **Miles 14.2 BHP** to **18.5 BHP**.

Bank Stabilization

Dredged material was placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Miles 5.1 BHP** to **5.6 BHP** and **Miles 8.2 BHP** to **8.6 BHP**.

Results

Final contract cost was $6,534,341.

Fiscal Year 1985

Under contract **85-C-0042**, the cutterhead dredges LOUISIANA and ALASKA (working from 16 February 1985 to 5 June 1985) removed a total of 10,098,032 CY from the SWP Mile 1.2 AHP to Mile 18.8 BHP dredging reach.

West Side Placement: Marsh Creation

Approximately 1,027,311 CY were placed unconfined in shallow open water between **Mile 0.0** and **Mile 0.5 BHP** in West Bay for marsh creation.

Approximately 327,100 CY were placed unconfined in shallow open water at **Mile 9.2 BHP** on the west side of the channel for marsh creation.

Approximately 896,994 CY of material were placed unconfined in shallow open water at **Mile 14.9 BHP** on the west side of the channel for marsh creation.

Approximately 1,040,201 CY of material were placed unconfined in shallow open water between **Mile 14.9 BHP** and **Mile 15.3 BHP** and between **Mile 17.1 BHP** and **Mile 17.3 BHP** on the west side of the channel for marsh creation.

East Side Placement: Marsh Creation

Approximately 481,515 CY of material were placed semi-confined in shallow open water at **Mile 7.9 BHP** on the east side of the channel for marsh creation. The contractor had difficulty in maintaining earthen dikes meant to keep dredged material out of petroleum industry canals.

East Side Placement: Shoreline Nourishment

Approximately 951,819 CY of material were placed unconfined in shallow open water along the east side of the channel at **Mile 11.4 BHP** for shoreline nourishment.

Approximately 556,855 CY of material were placed unconfined in shallow open water along the east side of the channel between **Mile 12.6 BHP** and **Mile 13.0 BHP** for shoreline nourishment.

Approximately 585,172 CY of material were placed unconfined in shallow open water along the east side of the channel between **Mile 14.0 BHP** and **Mile 15.0 BHP** for shoreline nourishment.

Approximately 193,423 CY of material were placed unconfined in shallow open water at **Mile 15.5 BHP** on the east side of the channel for shoreline nourishment.

Approximately 898,212 CY of material were placed unconfined in shallow open water at **Mile 17.5 BHP** on the east side of the channel for shoreline nourishment.

Bankline Stabilization

Approximately 409,659 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 5.0 BHP** and **Mile 6.5 BHP.**

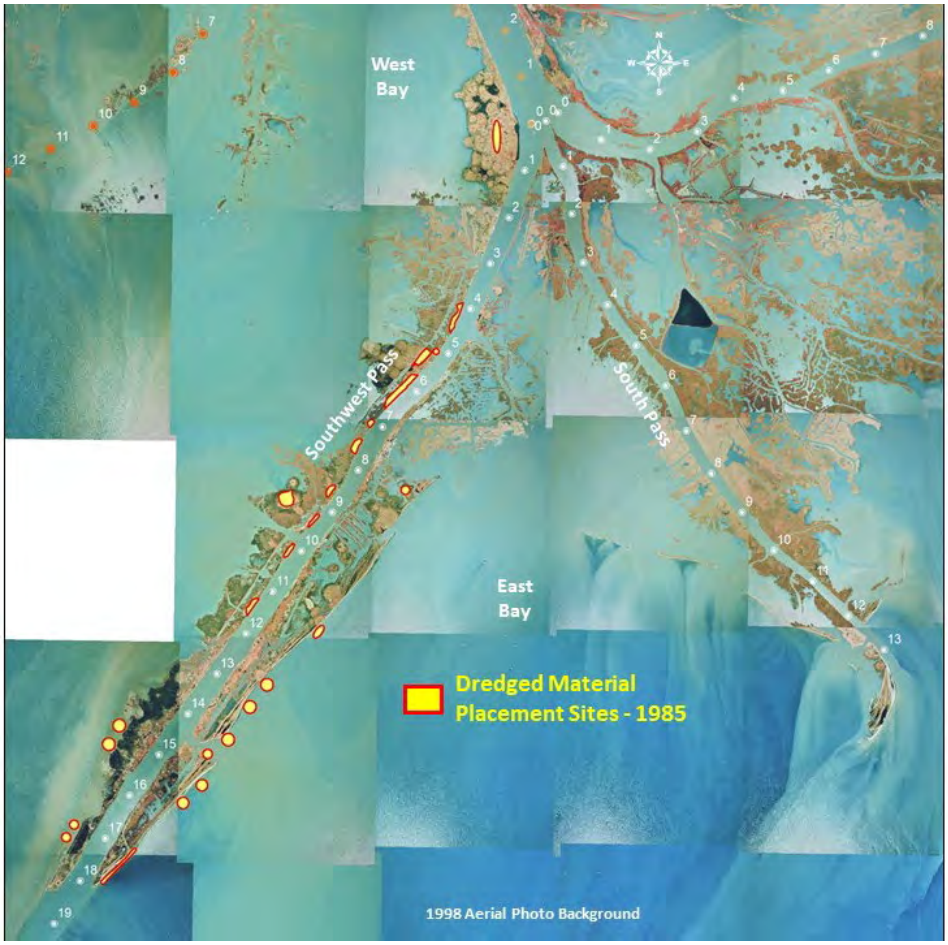
Approximately 810,685 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 6.5 BHP** and **Mile 7.8 BHP**.

Approximately 477,442 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 8.6 BHP** and **Mile 11.6 BHP**.

Results

For this contract work, approximately 3,291,606 CY of dredged material were placed for marsh creation on the west side of the channel, and approximately 481,515 CY of dredged material were placed for marsh creation on the east side of the channel. Approximately 3,185,481 CY of dredged material were placed for shoreline nourishment on the east side of the channel. Approximately 1,697,786 CY were placed for bank stabilization on the west side of the channel.

Final contract cost was $7,359,046.



Fiscal Year 1986

Under contract **86-C-0043**, the cutterhead dredges LOUISIANA, MISSOURI H, and E. STROUD (working from 31 January 1986 to 4 February 1987) removed a total of 14,061,079 CY from the SWP Mile 3.5 AHP to Mile 18.8 BHP dredging reach.

West Side Placement: Marsh Creation

Approximately 116,500 CY of material were placed unconfined in shallow open water at **Mile 0.8 BHP** in West Bay for marsh creation.

Approximately 632,968 CY of material were placed unconfined in shallow open water between **Mile 4.6 BHP** and **Mile 5.5 BHP** on the west side of the channel for marsh creation.

Approximately 116,242 CY of material were placed unconfined in shallow open water at **Mile 9.4 BHP** on the west side of the channel for marsh creation.

Approximately 212,468 CY of material were placed unconfined in shallow open water between **Mile 10.0 BHP** and **Mile 11.5 BHP** on the west side of the channel for marsh creation.

Approximately 476,144 CY of material were placed unconfined in shallow open water at **Mile 12.2 BHP** on the west side of the channel for marsh creation.

Approximately 476,340 CY of material were placed unconfined in shallow open water at **Mile 13.6 BHP** on the west side of the channel for marsh creation.

Approximately 2,116,284 CY of material were placed unconfined in shallow open water between **Mile 14.2 BHP** and **Mile 15.7 BHP** on the west side of the channel for marsh creation.

Approximately 1,532,442 CY of material were placed unconfined in shallow open water between **Mile 16.9 BHP** and **Mile 18.7 BHP** on the west side of the channel for marsh creation.

East Side Placement: Marsh Creation

Approximately 480,000 CY of material were placed unconfined in shallow open water at **Mile 8.8 BHP** for marsh creation in East Bay.

East Side Placement: Shoreline Nourishment

Approximately 532,484 CY of material were placed unconfined in shallow open water along the east side of the channel between **Mile 10.7 BHP** and **Mile 11.9 BHP** for shoreline nourishment.
Approximately 1,232,481 CY of material were placed unconfined in shallow open water along the east side of the channel between **Mile 12.5 BHP** and **Mile 13.8 BHP** for shoreline nourishment.

Approximately 2,196,000 CY of material were placed unconfined in shallow open water along the east side of the channel between **Mile 14.5 BHP** and **Mile 16.3 BHP** for shoreline nourishment.

Approximately 2,232,726 CY of material were placed unconfined in shallow open water along the east side of the channel between **Mile 16.8 BHP** and **Mile 18.6 BHP** for shoreline nourishment.

Bankline Stabilization

Approximately 566,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 0.1 BHP** and **Mile 1.3 BHP**. Some dredged material was placed to an elevation that exceeded the maximum placement height limit of +7.5 feet Mean Low Gulf (MLG). The contractor was able to grade these high areas down to +8.0 feet MLG.

Approximately 456,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 3.1 BHP** and **Mile 4.1 BHP**. Dredged material flowed through several oil well openings into Scott's Canal when both the contractor and Chevron Oil Company failed to build retaining dikes along the canal. The

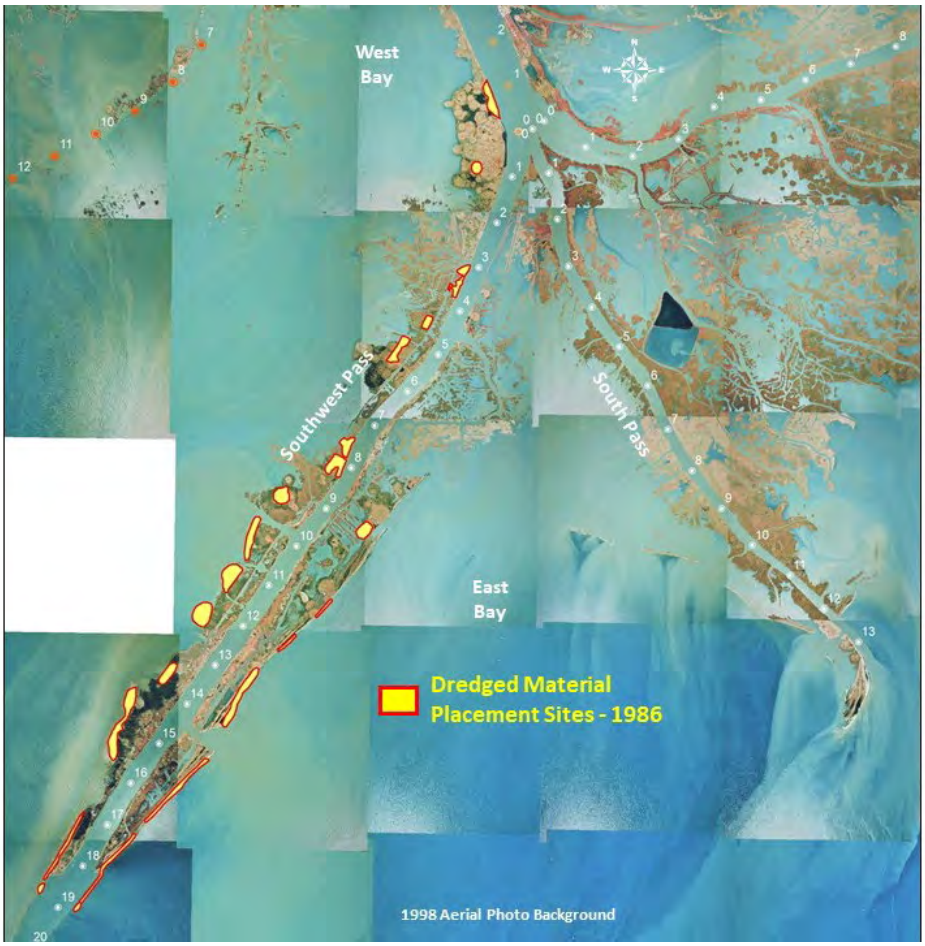
contractor removed dredged material from Scott's Canal on two occasions and excavated the canal to a depth of -8.0 feet MLG.

Approximately 686,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 7.5 BHP** and **Mile 8.3 BHP**.

Results

For this contract work, approximately 5,679,388 CY of dredged material were placed for marsh creation on the west side of the channel, and approximately 480,000 CY of dredged material were placed for marsh creation on the east side of the channel. Approximately 6,193691 CY of dredged material were placed for shoreline nourishment on the east side of the channel. Approximately 1,708,000 CY were placed for bank stabilization on the west side of the channel.

Final contract cost was $9,635,311.



Fiscal Year 1987

During Fiscal Year 1987, routine maintenance dredging was performed in SWP (1 contract) as well as construction dredging (2 contracts) for the Mississippi River deepening project that increased the depth of this channel from 40 feet to 45 feet.

1. Under contract **87-C-0094**, the cutterhead dredge ALASKA (working from 14 March 1987 to 11 June 1987) removed a total of 5,652,101 CY from the SWP Mile 3.5 AHP to Mile 18.8 BHP dredging reach during routine maintenance dredging.

The majority of discharge lines were placed so spoil would be placed into open water in Riverside Bay, Dixon Bay, East Bay and West Bay. Dredged material placed into Riverside Bay exceeded allowable +6 feet MLG near end of discharge line; at end of assignment shore crew pushed material into hole created by discharge.

West Side Placement: Marsh Creation

Approximately 480,000 CY of material were placed unconfined in shallow open water at **Mile 0.2 AHP** on the west side of the channel for marsh creation.

Approximately 140,100 CY of material were placed unconfined in shallow open water at **Mile 1.0 BHP** on the west side of the channel for marsh creation.

Approximately 959,000 CY of material were placed unconfined in shallow open water at **Mile 9.3 BHP** on the west side of the channel for marsh creation.

Approximately 652,000 CY of material were placed unconfined in shallow open water at **Mile 13.5 BHP** on the west side of the channel for marsh creation.

Approximately 450,000 CY of material were placed unconfined in shallow open water at **Mile 18.6 BHP** on the west side of the channel for marsh creation.

East Side Placement: Marsh Creation

Approximately 470,000 CY of material were placed unconfined in shallow open water at **Mile 18.7 BHP** on the east side of the channel for marsh creation.

East Side Placement: Shoreline Nourishment

Approximately 470,000 CY of material were placed unconfined in shallow open water between **Mile 10.0 BHP** and **Mile 12.0 BHP** for shoreline nourishment in East Bay.

Approximately 163,334 CY of material were placed unconfined in shallow open water at **Mile 12.0 BHP** for shoreline nourishment in East Bay.

Approximately 1,269,009 CY of material were placed unconfined in shallow open water at **Mile 13.0 BHP** for shoreline nourishment in East Bay. Dredged material reached an elevation of about +6.8 feet MLG near the end of the discharge pipe.

Approximately 350,000 CY of material were placed unconfined in shallow open water between **Mile 16.8 BHP** and **Mile 18.0 BHP** on the east side of the channel for shoreline nourishment.

Results

For this contract work, approximately 2,681,100 CY of dredged material were placed for marsh creation on the west side of the channel, and approximately 470,000 CY of dredged material were placed for marsh creation on the east side of the channel. Approximately 2,252,343 CY of dredged material were placed for shoreline nourishment on the east side of the channel.

Final contract cost was $3,274,049.

2. Under contract **87-C-0152**, the cutterhead dredges FRITZ JAHNCKE and BILL JAMES (working from 6 July 1987 to 29 September 1987) removed a total of 6,443,670 CY from the SWP Mile 9.0 BHP to Mile 18.8 BHP dredging reach as part of the -45 foot deep channel construction effort.

West Side Placement: Marsh Creation

Approximately 275,000 CY of material were placed unconfined in shallow open water at **Mile 9.2 BHP** on the west side of the channel for marsh creation.

Approximately 305,000 CY of material were placed unconfined in shallow open water at **Mile 11.0 BHP** on the west side of the channel for marsh creation.

Approximately 400,000 CY of material were placed unconfined in shallow open water at **Mile 12.2 BHP** on the west side of the channel for marsh creation.

Approximately 1,300,000 CY of material were placed unconfined in shallow open water between **Mile 14.3 BHP** and **Mile 15.7 BHP** on the west side of the channel for marsh creation.

Approximately 702,000 CY of material were placed unconfined in shallow open water between **Mile 15.0 BHP** and **Mile 16.1 BHP** on the west side of the channel for marsh creation.

Approximately 386,000 CY of material were placed unconfined in shallow open water between **Mile 16.7 BHP** and **Mile 18.8 BHP** on the west side of the channel for marsh creation.

East Side Placement: Shoreline Nourishment

Approximately 595,000 CY of material were placed unconfined in shallow open water between **Mile 10.0 BHP** and **Mile 10.7 BHP** for shoreline nourishment in East Bay.

Approximately 1,313,670 CY of material were placed unconfined in shallow open water between **Mile 14.4 BHP** and **Mile 16.3 BHP** for shoreline nourishment in East Bay.

Approximately 670,000 CY of material were placed unconfined in shallow open water between **Mile 15.2 BHP** and **Mile 16.2 BHP** for shoreline nourishment in East Bay.

Approximately 497,000 CY of material were placed unconfined in shallow open water between **Mile 16.3 BHP** and **Mile 18.8 BHP** for shoreline nourishment in East Bay.

Results

For this contract work, approximately 3,368,000 CY of dredged material were placed for marsh creation on the west side of the channel. Approximately 3,075,670 CY of dredged material were placed for shoreline nourishment on the east side of the channel.

Final contract cost was $2,811,091.

3. Under contract **87-C-0177**, the cutterhead dredges FRITZ JAHNCKE, TOM JAMES, and BILL JAMES (working from 12 September 1987 to 1 December 1987) removed a total of 6,349,479 CY from the SWP Mile 3.5 AHP to Mile 9.0 BHP dredging reach as part of the -45 foot deep channel construction effort.

West Side Placement: Marsh Creation

Approximately 124,000 CY of material were placed unconfined in shallow open water at **Mile 2.4 AHP** in West Bay for marsh creation.

Approximately 182,000 CY of material were placed unconfined in shallow open water at **Mile 1.9 AHP** in West Bay for marsh creation.

Approximately 182,000 CY of material were placed unconfined in shallow open water at **Mile 0.9 AHP** in West Bay for marsh creation.

Approximately 377,000 CY of material were placed unconfined in shallow open water at **Mile 0.2 BHP** in West Bay for marsh creation.

Approximately 360,500 CY of material were placed unconfined in shallow open water at **Mile 4.9 BHP** on the west side of the channel for marsh creation.

Approximately 835,400 CY of material were placed unconfined in shallow open water at **Mile 6.3 BHP** on the west side of the channel for marsh creation.

East Side Placement: Marsh Creation

Approximately 378,000 CY of material were placed confined in shallow open water and eroding marsh at **Savage Island** in the Delta National Wildlife Refuge for marsh creation. Although

dredged material was to be discharged to a maximum initial elevation of +4.5 feet MLG, dredged material placed on about 10 acres of **Savage Island** exceeded this height limit by nearly 2 feet.

Approximately 463,000 CY of material were placed unconfined in shallow open water at **Mile 1.0 AHP** on the east side of the channel for marsh creation.

Approximately 375,000 CY of material were placed unconfined in shallow open water in Portage Bay between **Mile 0.7 BHP** and **Mile 1.6 BHP** on the east side of the channel for marsh creation.

East Side Placement: Shoreline Nourishment

Approximately 861,000 CY of material were placed unconfined in shallow open water at **Mile 8.0 BHP** for shoreline nourishment in East Bay.

Bankline Stabilization

Approximately 115,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 0.8 BHP** and **Mile 1.2 BHP**.

Approximately 490,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 1.8 BHP** and **Mile 2.8 BHP**.

Approximately 105,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 3.2 BHP** and **Mile 3.6 BHP**.

Approximately 140,060 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 4.8 BHP** and **Mile 5.4 BHP**.

Approximately 57,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the east side of the channel between **Mile 3.2 BHP** and **Mile 4.3 BHP**.

Approximately 323,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the east side of the channel between **Mile 4.8 BHP** and **Mile 5.3 BHP**.

Approximately 191,519 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel between **Mile 6.9 BHP** and **Mile 7.2 BHP**.

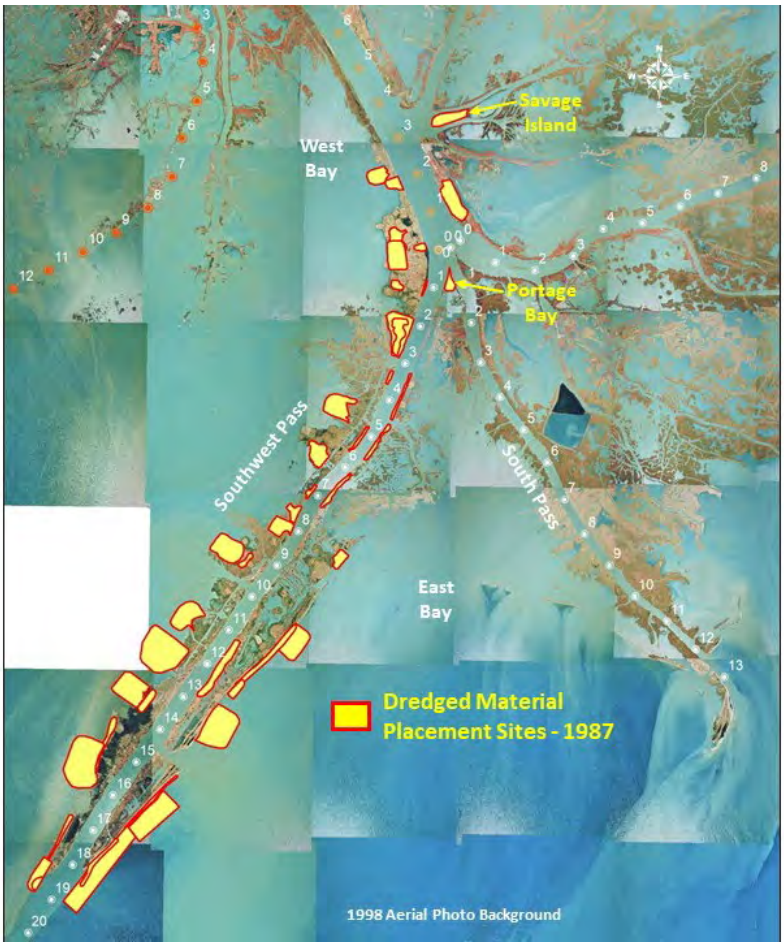
Approximately 300,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the east side of the channel between **Mile 6.1 BHP** and **Mile 7.2 BHP**.

Approximately 490,000 CY of material were placed behind foreshore rock dikes for bank stabilization along the west side of the channel at **Mile 8.0 BHP**.

Results

For this contract work, approximately 2,060,900 CY of dredged material were placed for marsh creation on the west side of the channel, and approximately 1,216,000 CY of dredged material were placed for marsh creation on the east side of the channel. Approximately 861,000 CY of dredged material were placed for shoreline nourishment on the east side of the channel. Approximately 1,531,579 CY were placed for bank stabilization on the west side of the channel, and 680,000 CY were placed for bank stabilization on the east side of the channel.

Final contract cost was $4,400,223.



Fiscal Year 1988

Under contract **88-C-0049**, the cutterhead dredges MISSOURI H and DREDGE 32 (working from 17 February 1988 to 12 October 1988) removed a total of 7,788,922 CY from the SWP Mile 3.5 AHP to Mile 18.8 BHP dredging reach.

West Side Placement: Marsh Creation

Approximately 389,000 CY of material were placed unconfined in the shallow open water of West Bay between **Mile 0.1 BHP** and **Mile 1.0 BHP** for marsh creation.

Approximately 131,669 CY of material were placed unconfined in shallow open water at **Mile 8.5 BHP** on the west side of the channel for marsh creation.

Approximately 230,000 CY of material were placed unconfined in shallow open water at **Mile 10.3 BHP** on the west side of the channel for marsh creation.

Approximately 308,000 CY of material were placed unconfined in shallow open water at **Mile 11.2 BHP** on the west side of the channel for marsh creation.

Approximately 581,000 CY of material were placed unconfined in shallow open water at **Mile 13.5 BHP** on the west side of the channel for marsh creation.

Approximately 1,405,000 CY of material were placed unconfined in shallow open water between **Mile 14.2 BHP** and **Mile 16.1 BHP** on the west side of the channel for marsh creation.

Approximately 796,000 CY of material were placed unconfined in shallow open water between **Mile 16.7 BHP** and **Mile 18.6 BHP** on the west side of the channel for marsh creation.

East Side Placement: Marsh Creation

Approximately 476,535 CY of material were placed unconfined in shallow open water at **Mile 8.4 BHP** for marsh creation in East Bay.

East Side Placement: Shoreline Nourishment

Approximately 280,367 CY of material were placed unconfined in shallow open water between **Mile 10.1 BHP** and **Mile 11.0 BHP** for shoreline nourishment in East Bay.

Approximately 750,000 CY of material were placed unconfined in shallow open water between **Mile 12.5 BHP** and **Mile 13.0 BHP** for shoreline nourishment in East Bay.

Approximately 154,000 CY of material were placed unconfined in shallow open water between **Mile 13.0 BHP** and **Mile 13.7 BHP** for shoreline nourishment in East Bay.

Approximately 270,000 CY of material were placed unconfined in shallow open water between **Mile 17.8 BHP** and **Mile 18.5 BHP** for shoreline nourishment in East Bay.

Bankline Stabilization

Approximately 140,000 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 0.8 BHP** and **Mile 1.3 BHP** for bankline stabilization.

Approximately 124,000 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 3.3 BHP** and **Mile 3.5 BHP** for bankline stabilization.

Approximately 40,000 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 7.5 BHP** and **Mile 7.7 BHP** for bankline stabilization.

Approximately 386,977 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 7.9 BHP** and **Mile 9.1 BHP** for bankline stabilization.

Approximately 281,000 CY of material were placed behind foreshore rock dikes along the east side of the channel between **Mile 7.8 BHP** and **Mile 8.6 BHP** for bankline stabilization.

Approximately 230,000 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 10.8 BHP** and **Mile 11.1 BHP** for bankline stabilization.

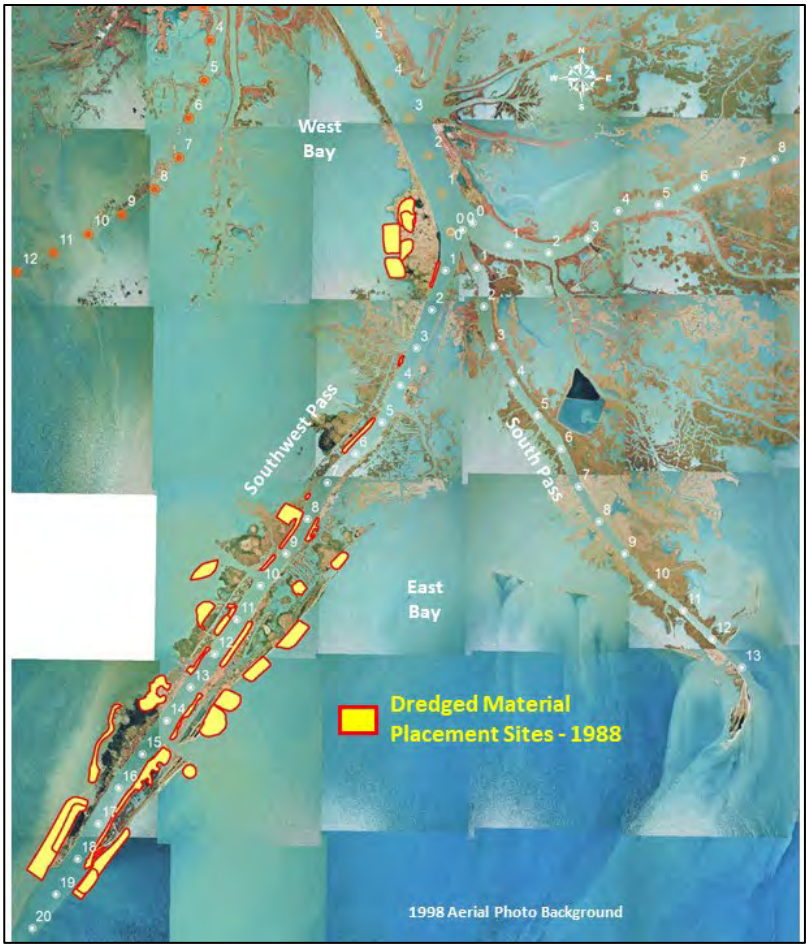
Approximately 66,000 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 12.0 BHP** and **Mile 12.8 BHP** for bankline stabilization.

Approximately 1,080,000 CY of material were placed behind foreshore rock dikes along the east side of the channel between **Mile 14.4 BHP** and **Mile 16.4 BHP** for bankline stabilization.

Results

For this contract work, approximately 3,840,669 CY of dredged material were placed for marsh creation on the west side of the channel, and approximately 476,535 CY of dredged material were placed for marsh creation on the east side of the channel. Approximately 1,454,367 CY of dredged material were placed for shoreline nourishment on the east side of the channel. Approximately 986,977 CY were placed for bank stabilization on the west side of the channel, and approximately 1,361,000 CY were placed for bank stabilization on the east side of the channel.

Final contract cost was $5,100,000.



Fiscal Year 1989

Under contract **89-C-0048**, the cutterhead dredges LOUISIANA, BLACKBURN and ALASKA (working from 21 February 1989 to 28 June 1989) removed a total of 11,483,832 CY from the SWP Mile 3.5 AHP to Mile 18.8 BHP dredging reach.

West Side Placement: Marsh Creation

Approximately 504,485 CY of material were placed unconfined in the shallow open water of West Bay at **Mile 1.0 AHP** for marsh creation.

Approximately 954,202 CY of material were placed unconfined in shallow open water between **Mile 0.9 AHP** and **Mile 0.4 BHP** in West Bay for marsh creation.

Approximately 245,029 CY of material were placed unconfined in shallow open water at **Mile 0.4 BHP** in West Bay for marsh creation.

Approximately 388,670 CY of material were placed unconfined in shallow open water at **Mile 0.9 BHP** in West Bay for marsh creation.

Approximately 796,071 CY of material were placed unconfined in shallow open water between **Mile 17.1 AHP** and **Mile 18.5 BHP** on the west side of the channel for marsh creation.

East Side Placement: Marsh Creation

Approximately 381,144 CY of material were placed unconfined in shallow open water at **Mile 9.5 BHP** for marsh creation in East Bay.

East Side Placement: Shoreline Nourishment

Approximately 809,471 CY of material were placed unconfined in shallow open water at **Mile 14.7 BHP** for shoreline nourishment in East Bay.

Approximately 401,255 CY of material were placed unconfined in shallow open water between **Mile 16.9 BHP** and **Mile 17.6 BHP** for shoreline nourishment in East Bay.

Approximately 149,595 CY of material were placed unconfined in shallow open water at **Mile 18.4 BHP** for shoreline nourishment in East Bay.

Bankline Stabilization

Approximately 317,826 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 5.1 BHP** and **Mile 6.2 BHP** for bankline stabilization.

Approximately 281,408 CY of material were placed behind foreshore rock dikes along the east side of the channel between **Mile 7.9 BHP** and **Mile 8.4 BHP** for bankline stabilization.

Approximately 212,815 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 9.3 BHP** and **Mile 10.1 BHP** for bankline stabilization.

Approximately 342,980 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 9.4 BHP** and **Mile 10.4 BHP** for bankline stabilization.

Approximately 328,256 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 10.8 BHP** and **Mile 11.4 BHP** for bankline stabilization.

Approximately 326,434 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 12.0 BHP** and **Mile 12.7 BHP** for bankline stabilization.

Approximately 508,659 CY of material were placed behind foreshore rock dikes along the east side of the channel between **Mile 11.4 BHP** and **Mile 12.4 BHP** for bankline stabilization.

Approximately 1,747,286 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 12.9 BHP** and **Mile 17.0 BHP** for bankline stabilization.

Approximately 495,005 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 13.1 BHP** and **Mile 14.4 BHP** for bankline stabilization.

Approximately 261,258 CY of material were placed behind foreshore rock dikes along the east side of the channel between **Mile 13.5 BHP** and **Mile 14.1 BHP** for bankline stabilization.

Approximately 993,682 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 14.8 BHP** and **Mile 18.1 BHP** for bankline stabilization.

Approximately 250,686 CY of material were placed behind foreshore rock dikes along the west side of the channel between **Mile 17.9 BHP** and **Mile 18.5 BHP** for bankline stabilization.

Approximately 448,862 CY of material were placed behind foreshore rock dikes along the east side of the channel between **Mile 17.5 BHP** and **Mile 17.8 BHP** for bankline stabilization.

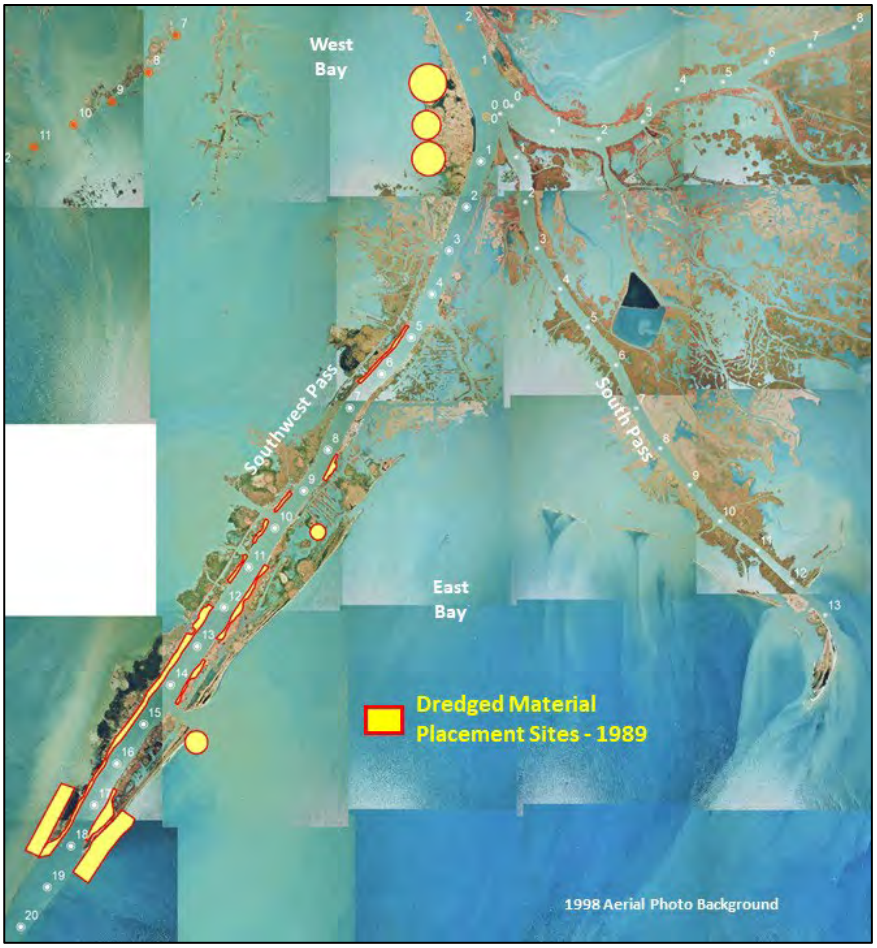
Approximately 298,995 CY of material were placed behind foreshore rock dikes along the east side of the channel between **Mile 16.4 BHP** and **Mile 17.5 BHP** for bankline stabilization.

Approximately 39,758 CY of material were placed behind foreshore rock dikes along the east side of the channel at **Mile 17.6 BHP** for bankline stabilization.

Results

For this contract work, approximately 2,888,457 CY of dredged material were placed for marsh creation on the west side of the channel, and approximately 381,144 CY of dredged material were placed for marsh creation on the east side of the channel. Approximately 1,360,321 CY of dredged material were placed for shoreline nourishment on the east side of the channel. Approximately 5,014,970 CY were placed for bank stabilization on the west side of the channel, and approximately 1,838,940 CY were placed on the east side of the channel for bank stabilization.

Final contract cost was $6,888,000.


West
Bay
Southwest Pass
South Pass
East
Bay
Dredged Material
Placement Sites - 1989
1998 Aerial Photo Background