

**NOVEMBER 2004**  
Revised September 2005

---

**MANATEE HARBOR**  
**MANATEE COUNTY, FLORIDA**

**SECTION 156 MITIGATION CREDIT**  
**FOR PHASE II AND III**



**US Army Corps  
of Engineers®**  
Jacksonville District  
South Atlantic Division

## SYLLABUS

Section 156 (3) of the Energy and Water Development Appropriations Act of 2004 (H.R. 2754) directs the Assistant Secretary of the Army for Civil Works to credit the non-Federal Sponsor (Manatee County Port Authority (MCPA)) the cost of planning, design, and construction carried out by Sponsor on the Port Manatee Federal Navigation Project, if the Secretary determines that the work is integral to the project.

Previously, the Sponsor has constructed mitigation for Phase II and Phase III port improvements per Florida Department of Environmental Protection (FDEP) and Department of Army (DOA) permit requirements. Since passage of H.R. 2754, the Sponsor has asked for credit for locally constructed mitigation associated with Phase II and Phase III improvements. The purpose of this letter report is to document for credit, Sponsor constructed mitigation that is integral to the Phase II and III improvements.

The total Phase II and III mitigation costs originally submitted by the Project Sponsor, Manatee County Port Authority (MCPA), was \$5,736,052. The costs were updated by additional information and costs provided by the MCPA, a Defense Contract Audit Agency (DCAA) audit, and a policy review. The resulting total mitigation costs for Phase II and III mitigation is \$5,616,980.

Allotting the \$5,616,980 mitigation cost between Phases II and III results in \$4,000,141 being attributed to Phase II, with the remaining \$1,616,839 attributed to Phase III. The portion of mitigation associated with only the General Navigation Features (excluding berthing area mitigation) is 3,807,679 for Phase II and 1,584,198 for Phase III.

Applying current cost sharing criteria results in a Phase II credit due to the sponsor of \$2,855,759 and \$1,188,149 for Phase III. Total mitigation credit due to the Sponsor for Phases II and III is currently estimated at \$4,043,908.

**MANATEE HARBOR  
SECTION 156 MITIGATION CREDIT  
FOR PHASE II AND III**

**TABLE OF CONTENTS**

<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 PROJECT DESCRIPTION .....	1
1.2 PURPOSE .....	1
1.3 PROJECT AUTHORIZATIONS 1986 THROUGH 2004 .....	1
1.4 PREVIOUS STUDIES, REPORTS, AND HISTORY .....	2
1.5 DETAILS FROM PREVIOUS DECISION DOCUMENTS .....	5
1.6 PROJECT COOPERATION AGREEMENT HISTORY AND SCHEDULE .....	11
1.7 PROJECT MITIGATION HISTORY .....	12
<b>2.0 ENVIRONMENTAL ASSESSMENT AND PERMITS .....</b>	<b>14</b>
2.1 JULY 2002 ENVIRONMENTAL ASSESSMENT .....	14
2.2 DEP PERMITS .....	14
2.3 CORPS DOA PERMIT .....	15
<b>3.0 MITIGATION .....</b>	<b>15</b>
3.1 SPONSOR PROPOSED MITIGATION .....	15
3.2 DESCRIPTION OF MITIGATION COSTS .....	15
3.3 STATUS OF MITIGATION CONSTRUCTION .....	16
<b>4.0 APPLICABLE TOTAL PROJECT MITIGATION COSTS .....</b>	<b>18</b>
4.1 VERIFIED COSTS .....	18
4.2 ADJUSTED COSTS .....	18
<b>5.0 COST ALLOCATION AND APPORTIONMENT .....</b>	<b>18</b>
5.1 PRORATING OF MITIGATION COSTS .....	18
5.2 COST SHARING APPORTIONMENT .....	18
<b>6.0 CONCLUSION AND RECOMMENDATION .....</b>	<b>20</b>
6.1 CONCLUSION .....	20
6.2 RECOMMENDATION .....	22
<b>7.0 BIBLIOGRAPHY .....</b>	<b>23</b>

**LIST OF TABLES**

Table 1: Manatee Harbor Authorized Project History .....	6
Table 2: Manatee Harbor General Navigation Features Summary of Costs .....	7
Table 3: Sponsor Proposed Mitigation Plan .....	17
Table 4: Mitigation Cost Allocation .....	19
Table 5: Mitigation Cost Apportionment .....	20

## LIST OF FIGURES

Figure 1 Location Map .....	25
Figure 2 Phase II Improvements .....	26
Figure 3 Turning Basin and Channel Extension .....	27
Figure 4 Phase II and III Impacts .....	28
Figure 5 Port 1999 Mitigation .....	29

## LIST OF APPENDICES

Section 156 of Energy and Water Development Appropriations Act of 2004 .....	A
Pertinent Correspondence .....	B
Draft Project Cooperation Agreement Amendment .....	C
Department of the Army Permit Environmental Assessment .....	D
Department of the Army Permit .....	E
State of Florida Department of Environmental Protection Conceptual Permit .....	F
Line Item Table of Mitigation Costs .....	G

## 1.0 INTRODUCTION

### 1.1 PROJECT DESCRIPTION

1. The Manatee Harbor Federal Navigation Project is located in Manatee County (Figure 1), Florida. The authorized project (Phases I and II) contains two turn wideners located at the entrance to the Tampa Harbor Ship Channel; a 400-ft wide by 3-mile long entrance channel; and a 900-ft by 1,300-ft elongated turning basin (Figure 2). The Phase III work contains the proposed south channel extension (adjacent to Berth 12 Figure 3).

### 1.2 PURPOSE

2. The purpose of this report is to document the Sponsor (Manatee County Port Authority, MCPA) credit for mitigation that is integral to the project based upon applicable Federal laws, policies, and procedures. This document details costs associated with planning, design, and construction of mitigation that is integral to the Phase II and III projects. The document will also describe the appropriate cost sharing.

### 1.3 PROJECT AUTHORIZATIONS 1986 THROUGH 2004

3. Water Resources Development Act (WRDA) 1986 (PL 99-662) Title II, Section 202. "The project for navigation, Manatee Harbor, Florida: Report of the Chief of Engineers, dated May 12, 1980, at a total cost of \$16,400,000 with an estimated first Federal cost of \$9,500,000 and an estimated first non-Federal cost of \$6,900,000 including such modifications as the Secretary determines to be necessary and appropriate to mitigate the adverse effects of construction, operation, and maintenance of the project on the benthic environment of the area to be dredged.

The Secretary, in consultation with appropriate Federal, State, and local agencies, shall study the effects that construction, operation, and maintenance of the proposed project will have on the benthic environment of the area to be dredged. Not later than one year after the date of enactment of this Act, the Secretary shall transmit to the Committee on Environment and Public Works and Transportation of the House of Representatives and the Committee on Environment and Public Works of the Senate a report on the results of such study. The Secretary shall monitor the effects of construction, operation, and maintenance of the project on the benthic environment of the dredged area."

4. WRDA 1990 (PL 101-640) Title I, Section 102(j) "The project for navigation, Manatee Harbor, Florida, authorized by section 202(a) of the Water Resources Development Act of 1986 (100 Stat. 4093), is modified to direct the Secretary to construct the project substantially in accordance with the post authorization change report, dated April 1990, at an estimated total cost of

\$27,589,000, with an estimated first Federal cost of \$12,381,000 and an estimated first non-Federal cost of \$15,208,000."

5. FY 2004 Energy and Water Appropriation Act, Section 156 "The project for navigation, Manatee Harbor, Florida, authorized by Section 202(a) of the Water Resources Development Act of 1986 (100 Stat. 4093) and modified by section 102(j) of the Water Resources Development Act of 1990 (104 Stat. 4612), is further modified -

- (1) to include the construction of an extension of the south channel a distance of approximately 1584 feet consistent with the general reevaluation report, dated April 2002, prepared by the Jacksonville District Corps of Engineers, at a total cost of \$11,300,000, with an estimated Federal cost of \$8,475,000 and an estimated non-Federal cost of \$2,825,000;
- (2) to direct the Secretary to credit toward the non-Federal share of the cost of the project the cost of in-kind services and materials provided for the project by the non-Federal interest;
- (3) to direct the Secretary to credit toward the non-Federal share of the cost of the project the cost of the cost of planning, design, and construction work carried out by the non-Federal interest before the date of the partnership agreement for the project if the Secretary determines that the work is integral to the project; and
- (4) to authorize the Secretary to carry out the project as modified at a total cost of \$61,500,000. "

#### 1.4 PREVIOUS STUDIES, REPORTS, AND HISTORY

6. 1970 Port Manatee Establishes Operations. Port Manatee, owned and operated by the MCPA, commenced operations in 1970. The Port initially served as a barge facility for bulk commodities. A channel extending approximately 15,850 feet in length from the county port harbor to the Tampa Bay Shipping Channel provided access for navigation.

7. 1974 Manatee Harbor adopted as Federal Channel. Federal interest in navigation concerns at Manatee Harbor started in 1974 through a House resolution. As a result, the Secretary of the Army directed the Chief of Engineers to study navigation and related water resource problems at Manatee Harbor and incorporate the local constructed project for Federal maintenance.

8. 1978 Feasibility Report and EIS. Feasibility Report and Environmental Impact Statement recommended maintenance of the channel as originally dredged, plus an enlarged channel entrance and turning basin for safety and navigation. Dredged materials from initial and subsequent maintenance operations were to be placed in an upland disposal area on Port property.

9. 1983 General Design Memorandum (GDM). Detailed the design of the Feasibility Report Recommended Plan and contained a more accurate estimate of the shoaling rate leading to an increased maintenance-dredging schedule.
10. 1986 Authorization of Federally Maintained Channel. Congress authorized the Manatee Harbor Federal navigation project in WRDA 1986, Public Law (PL) 99-662. The plan recommended Federal assumption of the existing navigation channel (400-foot width, 40 foot depth) commencing from the Harbor and extending 15,850 feet to Tampa Harbor.
11. 1989 Waterways Experiment Station (WES) performed a ship simulation study. A ship simulation to evaluate the proposed channel improvement for safe, efficient vessel use was undertaken. The design vessel was the *EI Gaucho*, a 775-foot long cargo ship, with 106-foot beam, and a 36-foot draft. The improved navigation features simulated for this vessel were expanded entrance turning wideners at the Tampa Harbor and a ship's turning basin. A 1990 GDM modified the project design in accordance with the WES study.
12. 1990 Post Authorization Change (PAC). WRDA 1990, PL 101-640, divided the project work into two sequential phases rather than a single contract. Phase I dredging of the access channel and Phase II entrance channel wideners and ship-turning basin. The report further recommended changing the maintenance dredging cycle from five to three years. Figure 4 shows Phase II and III dimensions.
13. 1994 Limited Reevaluation Report (LRR). In 1994, an LRR was prepared to update the economic analysis of the project as two phases of construction to accommodate the financial capabilities of the non-Federal project partner.
14. 1996 Florida Department of Environmental Protection (FDEP) states the project cannot be permitted because of anticipated impacts to dense seagrass within the proposed turning basin site.
15. 1996 Phase I Authorized Channel Dredging Complete. Phase I was completed in December 1996. There have been two maintenance cycles, one included dredging the berths to their respective depths (concurrent with Phase I channel construction) and the other was performed in June 1999.
16. 1999 Ship Simulation Study. A second ship simulation study investigated harbor improvements for the turning basin introducing a new vessel call for a large cruise ship. The study analyzed a 1,400-foot diameter-turning basin using two design vessels; the *EI Gaucho* and the *Disney Magic*, a 965-foot long cruise ship with a 106-foot beam and a 26-foot draft.

17. 2002 Engineering Design Report and EA Phase II. An EDR revised engineering design and construction cost estimates, while the EA was developed to document environmental issues including revisions to the turning basin to reduce impacts to seagrass.

18. 2003 Letter Report. In March 2003, a Letter Report was approved to raise the dikes for the upland disposal area facility 26 feet above the previous height of 29 feet. The additional capacity was justified on the basis of accommodating the maintenance material for Phase I on a 3-year cycle for 20 years and to accommodate for the disposal of dredge material from Phase II work. It was recognized that additional capacity or alternative disposal options would be required to meet future disposal needs for Phase II. MCPA owns the upland disposal area.

19. 2003 LRR/PAC - Phase II. In May 2003, the LRR/PAC adopted the following as the NED plan for Phase II (1) the turning basin, (2) the channel entrance wideners, and (3) a completed disposal site dike height of 55 feet to provide ample capacity to handle the Phase II construction dredge material and 20 years of upland disposal for Phase I maintenance. The design vessel for simulation was the *Melvana*, (LOA 797.0 feet, beam 105.6 feet, and a draft of 45 feet "light loaded to 40 feet").

20. 2004 Changes to Port Berths and Disposal Area. Phase II and scheduled maintenance dredging of the authorized project is under construction and expected to be completed by September 2005. In addition, MCPA expanded Berth 5, located adjacent the new turning basin, to dimensions of 1,200-foot length and depth of 40 feet, and constructed the wharf at Berth 12. Berth 12 has dimensions of 1,000 feet in length and 20-foot depths. Dredged materials from Berth 5 were disposed into the upland disposal site, altering the available capacity of the modified disposal site. Phase II and III seagrass mitigation plans were completed by the MCPA.

21. 2005 GRR for Phase III is undertaken due to changed without-project conditions. The GRR is still underway and examining navigational improvements of a channel extension 1,590 feet long, 275 feet wide, and 40 feet deep to further address vessel traffic congestion at Port Manatee.

22. Project Construction Dates. Phase I construction was initiated in 1996 and completed in early 1997. Phase II construction was initiated in April 2004 and is scheduled for completion in November 2005. Phase III is scheduled to be initiated potentially by the project Sponsor in January 2006 and be completed by November 2006. The completed mitigation project for Phase II and III was constructed between September 2001 and December 2003. The mitigation project has required success and is monitored on a yearly basis. The mitigation project also requires annual maintenance throughout the project life. Table 3 includes a breakdown of construction dates for each element of the mitigation project.

## 1.5 DETAILS FROM PREVIOUS DECISION DOCUMENTS

23. Table 1 contains information on each major step in the project life of Manatee Harbor. Table 2 provides the summary of costs for each phase. The same steps are also described in the following paragraphs.

24. 1990 Post Authorization Report (April 1990)

Purpose: Decision document to raise the 902 limit from \$17,800,000 to \$27,589,000 (October 1989 dollars) due to project implementation modifications.

Scope of reevaluation: Compare 1986 authorized project costs with latest project costs. Discuss design and other changes that have occurred.

Changes: Increase total project cost. Do not use Disposal Areas 1 and 2 but raise the dikes in Manatee Port Authority Disposal Area to account for project modifications including higher shoaling rates than those anticipated in the 1978 Feasibility Report. Reduce turn widener on south side, add new turn widener on north side. Shift the turning basin to the north. Perform the authorized project in 2 phases: 1<sup>st</sup> phase is to restore project to 40 ft depth, 2<sup>nd</sup> phase includes turn wideners and enlarged turning basin (2 phases were required to accommodate Port funding issues).

Recommendations: Prepare a supplement to the GDM to accompany PAC and new LCA. LCA based on performing the work in two separate contracts and to accommodate the revised work described in the PAC.

Authority needed to implement the recommendations: Re-authorization was required.

25. 1994 Limited Reevaluation Report (March 1993 - Rev. 1994)

Purpose: To provide an updated economic analysis of the project authorized by WRDA 1990 and to provide support for new start construction funding in 1994.

Scope of reevaluation: Update the cost and benefit estimates based on the refined detailed design developed by the GDM Supplement I and PAC.

Conclusions: Based on the estimates of current benefits and costs, Phase I alone (BCR 1.7) and both phases together (BCR 1.6) of the authorized navigation project are economically justified for construction.

**Table 1. Manatee Harbor Authorized Project History**

Item	Costs	Notes	Wideners Phase II	Entrance Chan Phase I	Turning Basin Phase II	South Chan Ext Phase III	Impacts	Mitigation	Shoaling Rate							
<b>WRDA 86 PROJECT</b>																
Cost - USACE	\$12,699,000	Per Jan 86 update	Keep existing widener on Northwest corner of entrance channel and enlarge existing widener on Southwest corner of entrance channel.	Entrance channel is 400 feet wide and 40 ft deep extending northwesterly from Manatee Harbor approximately 3 miles to the Tampa Main Ship Channel. The original Port provided channel may not be constructed to the width of 400 feet.	Turning basin proposed is 40 feet deep, 900 feet diameter, and located on the Southeast corner of the entrance channel.	South Channel Extension was not part of Water Resources Development Act of 1986.	Turning Basin construction impacts 6.6 acres shallow bay bottom.	Scrapping down 10 acres of an adjacent island to elevation -2 feet mean low water to mitigate for the 6.6 acres of Turning Basin impacts. The estimated costs was \$60,000 not including contingencies, Preconstruction engineering and design, and supervision and administration.	50,000 cubic yards per year							
Cost - USCG	\$11,000	Per Jan 86 update														
Cost - Port of Manatee	\$3,727,000	Per Jan 86 update														
Total Construction Cost	\$16,437,000	Per Jan 86 update														
Total Construction Cost	\$16,400,000	Per WRDA 86														
AAEQ Cost	\$1,440,000	50 yrs, 8 5/8%														
AAEQ O/M	\$188,000	50 yrs, 8 5/8%														
Total AAEQ Cost	\$1,628,000	50 yrs, 8 5/8%														
AAEQ Benefits - Com. Nav	\$11,119,000	50 yrs, 8 5/8%														
AAEQ Benefits - Land Enhance	\$112,000	50 yrs, 8 5/8%														
AAEQ Benefits TOTAL	\$11,231,000	50 yrs, 8 5/8%														
Net Benefits	\$9,603,000															
BCR	6.9	Per Jan 86 update														
<b>Cost Apportionment</b>																
Federal Const. Cost	\$9,500,000	Per WRDA 86														
Non-Fed. Const. Cost	\$2,837,000															
LERRD's	\$4,063,000															
Total Non-Fed Cost	\$6,900,000	Per WRDA 86														
Notes: Project originally constructed by the Manatee County Port Authority to a depth of 40 feet																
<b>WRDA 2000</b>																
Cost - USACE	\$12,370,000	Per Apr 90 PAC	Keep existing widener on Northwest corner of entrance channel and enlarge existing widener on Southwest corner of entrance channel.	Entrance channel is 400 feet wide and 40 ft deep extending northwesterly from Manatee Harbor approximately 3 miles to the Tampa Main Ship Channel. The original Port provided channel may not be constructed to the width of 400 feet.	Turning basin proposed is 40 feet deep, 900 feet diameter, and located on the Southeast corner of the entrance channel.	not part of WRDA 90 project	Turning Basin construction impacts 6.6 acres shallow bay bottom.	Scrapping down 10 acres of an adjacent island to elevation -2 feet mean low water to mitigate for the 6.6 acres of Turning Basin impacts. The estimated costs was \$135,000 not including contingencies, Preconstruction engineering and design, and supervision and administration.	220,000 cubic yards per year							
Cost - USCG	\$11,000	Per Apr 90 PAC														
Cost - Port of Manatee	\$15,208,000	Per Apr 90 PAC														
Total Construction Cost	\$27,589,000	Per Apr 90 PAC														
Total Construction Cost	\$27,589,000	Per WRDA 2000														
AAEQ Cost	\$2,484,000															
AAEQ O/M	\$1,698,000															
Total AAEQ Cost	\$4,182,000	50 yrs, 8 7/8%														
AAEQ Benefits - Com. Nav	\$5,742,000															
AAEQ Benefits - Land Enhance	\$0															
AAEQ Benefits TOTAL	\$5,742,000	50 yrs, 8 7/8%														
Net Benefits	\$1,560,000															
BCR	1.4	Per Jan 86 update														
<b>Cost Apportionment</b>																
Federal Const. Cost	\$12,381,000	Per WRDA 90														
Non-Fed. Const. Cost	\$5,578,000	Per WRDA 90														
LERRD's	\$9,630,000															
Total Non-Fed Cost	\$15,208,000															
Notes: 902 Limit exceeded so additional authorization was required. Cost increases due to larger shoaling rate and associated disposal (dike construction) costs.																
<b>2003 PAC/LRR</b>																
Cost - USACE	\$21,639,000		Enlarge existing widener on Northwest corner of entrance channel and enlarge existing widener on Southwest corner of entrance channel.	Entrance channel is 400 feet wide and 40 ft deep extending northwesterly from Manatee Harbor approximately 3 miles to the Tampa Main Ship Channel. The original Port provided channel may not be constructed to the width of 400 feet.	Turning basin proposed is 40 feet deep, 900 feet diameter, and located on the Southeast corner of the entrance channel opposite Berth 5.	Not part of Post Authorization Change/Limited Reevaluation Report.	Impacts to 80+ acres of shallow bay bottom, 2.3 acres of seagrass, and other minor impacts. The project scope had not changed significantly but the definition of environmental impact had greatly changed since the original authorization in 1986.	Seagrass mitigation, enhancement of Bird Island, restoration of the Piney Point, establishment of mangrove and seagrass protection zones. The total cost was \$914,000 based upon USACE interpretation of project sponsor provided costs. The cost amount was based upon actual construction values but not audited when LRR was approved.								
Cost - USCG	\$15,000															
Cost - Port of Manatee	\$19,388,000															
Total Construction Cost	\$41,042,000	Per Apr 03 PAC														
AAEQ Cost	\$2,610,000	50 yrs, 5 7/8%														
AAEQ O/M	\$2,520,000	50 yrs, 5 7/8%														
Total AAEQ Cost	\$5,130,000	50 yrs, 5 7/8%														
AAEQ Benefits - Com. Nav	\$5,318,000															
AAEQ Benefits - Land Enhance	\$0															
AAEQ Benefits TOTAL	\$5,318,000	50 yrs, 5 7/8%														
Net Benefits	\$188,000															
BCR	1.0	Per Apr 03 PAC														
<b>Cost Apportionment</b>																
Federal Const. Cost	\$21,654,000	Per Apr 03 PAC														
Non-Fed. Const. Cost	\$15,209,000	Per Apr 03 PAC														
LERRD's	\$4,179,000															
Total Non-Fed Cost	\$19,388,000															
Notes: Sponsor performed upfront mitigation for Phase II, Phase III, and local berthing area improvements Changes approved using Chief's Discretionary Authority June 2003																

Table 2  
Manatee Harbor General Navigation Features  
Summary of Costs for the Selected Plan

Phase I (Oct 2003 Price Level, Phase II LRR)	
LERR	\$ 4,154,000
Commercial Navigation	5,820,000
Mitigation	0
Preconstruction Engineering, and Design (PED)	483,000
Construction Management (E&D, S&A)	<u>422,000</u>
Total First Cost	<u>\$10,879,000</u>
Phase II (Oct 2003 Price Level, Phase II LRR)	
LERR	\$ 25,000
Commercial Navigation	23,764,000
Mitigation	3,808,000
Preconstruction Engineering, and Design (PED)	1,180,000
Construction Management (E&D, S&A)	<u>1,780,000</u>
Total First Cost	<u>\$30,557,000</u>
Phase III (Oct 2004 Price Level, Draft Phase III GRR)	
LERR	\$ 2,213,000
Commercial Navigation	4,711,000
Mitigation	1,584,000
Preconstruction Engineering, and Design (PED)	500,000
Construction Management (E&D, S&A)	<u>528,000</u>
Total First Cost	<u>\$9,536,000</u>
Total Project	
LERR	\$ 6,392,000
Commercial Navigation	34,295,000
Mitigation	5,392,000
Preconstruction Engineering, and Design (PED)	2,163,000
Construction Management (E&D, S&A)	<u>2,730,000</u>
Total First Cost	<u>\$50,972,000</u>

Table 2 (Continued)

Manatee Harbor, Florida - Phase I General Navigation Features Cost Sharing <b>without Credit</b> (October 2003 Price Level)			
Item	Non-Federal Cost	Federal Cost	Total Cost
LERR	\$ 4,154,000	\$ 0	\$ 4,154,000
Commercial Navigation	1,455,000	4,365,000	5,820,000
Mitigation	0	0	0
PED	121,000	362,000	483,000
E&D, S&A	<u>105,000</u>	<u>317,000</u>	<u>422,000</u>
Total First Cost (Percent)	\$5,835,000 (54)	\$5,044,000 (46)	\$10,879,000 (100)
Manatee Harbor, Florida - Phase II General Navigation Features Cost Sharing <b>without Credit</b> (October 2003 Price Level)			
Item	Non-Federal Cost	Federal Cost	Total Cost
LERR	\$ 25,000	\$ 0	\$ 25,000
Commercial Navigation	5,941,000	17,823,000	23,764,000
Mitigation	3,808,000	0	3,808,000
PED	295,000	885,000	1,180,000
E&D, S&A	<u>445,000</u>	<u>1,335,000</u>	<u>1,780,000</u>
Total First Cost (Percent)	\$10,514,000 (34)	\$20,043,000 (66)	\$30,557,000 (100)
Manatee Harbor, Florida - Phase III General Navigation Features Cost Sharing <b>without Credit</b> (October 2004 Price Level)			
Item	Non-Federal Cost	Federal Cost	Total Cost
LERR	\$ 2,213,000	\$ 0	\$ 2,213,000
Commercial Navigation	1,178,000	3,533,000	4,711,000
Mitigation	1,584,000	0	1,584,000
PED	125,000	375,000	500,000
E&D, S&A	<u>132,000</u>	<u>396,000</u>	<u>528,000</u>
Total First Cost (Percent)	\$5,232,000 (55)	\$4,304,000 (45)	\$9,536,000 (100)
Manatee Harbor, Florida – Total Project Costs General Navigation Features Cost Sharing <b>without Credit</b> (October 2004 Price Level)			
Item	Non-Federal Cost	Federal Cost	Total Cost
LERR	\$ 6,392,000	\$ 0	\$ 6,392,000
Commercial Navigation	8,574,000	25,721,000	34,295,000
Mitigation	5,392,000	0	5,392,000
PED	541,000	1,622,000	2,163,000
E&D, S&A	<u>682,000</u>	<u>2,048,000</u>	<u>2,730,000</u>
Total First Cost (Percent)	\$21,581,000 (42)	\$29,391,000 (58)	\$50,972,000 (100)

Table 2 (Continued)

Manatee Harbor, Florida - Phase I General Navigation Features			
Cost Sharing <b>with Credit</b> (October 2003 Price Level)			
Item	Non-Federal Cost	Federal Cost	Total Cost
LERR	\$ 4,154,000	\$ 0	\$ 4,154,000
Commercial Navigation	1,455,000	4,365,000	5,820,000
Mitigation	0	0	0
PED	121,000	362,000	483,000
E&D, S&A	<u>105,000</u>	<u>317,000</u>	<u>422,000</u>
Total First Cost	\$5,835,000	\$5,044,000	\$10,879,000
(Percent)	(54)	(46)	(100)
Manatee Harbor, Florida - Phase II General Navigation Features			
Cost Sharing <b>with Credit</b> (October 2003 Price Level)			
Item	Non-Federal Cost	Federal Cost	Total Cost
LERR	\$ 25,000	\$ 0	\$ 25,000
Commercial Navigation	5,941,000	17,823,000	23,764,000
Mitigation	952,000	2,856,000	3,808,000
PED	295,000	885,000	1,180,000
E&D, S&A	<u>445,000</u>	<u>1,335,000</u>	<u>1,780,000</u>
Total First Cost	\$7,658,000	\$22,899,000	\$30,557,000
(Percent)	(25)	(75)	(100)
Manatee Harbor, Florida - Phase III General Navigation Features			
Cost Sharing <b>with Credit</b> (October 2004 Price Level)			
Item	Non-Federal Cost	Federal Cost	Total Cost
LERR	\$ 2,213,000	\$ 0	\$ 2,213,000
Commercial Navigation	1,178,000	3,533,000	4,711,000
Mitigation	396,000	1,188,000	1,584,000
PED	125,000	375,000	500,000
E&D, S&A	<u>132,000</u>	<u>396,000</u>	<u>528,000</u>
Total First Cost	\$4,044,000	\$5,492,000	\$9,536,000
(Percent)	(42)	(58)	(100)
Manatee Harbor, Florida – Total Project Costs General Navigation Features			
Cost Sharing <b>with Credit</b> (October 2004 Price Level)			
Item	Non-Federal Cost	Federal Cost	Total Cost
LERR	\$ 6,392,000	\$ 0	\$ 6,392,000
Commercial Navigation	8,574,000	25,721,000	34,295,000
Mitigation	1,348,000	4,044,000	5,392,000
PED	541,000	1,622,000	2,163,000
E&D, S&A	<u>682,000</u>	<u>2,048,000</u>	<u>2,730,000</u>
Total First Cost	\$17,537,000	\$33,435,000	\$50,972,000
(Percent)	(34)	(66)	(100)

Recommendations: Phase I new start construction funding.

Changes in the project: An increase in the total project first cost from \$27,589,000 (from the 1990 PAC) to \$30,553,000.

Status of Approval: Approved by HQUSACE, 11 June 1994.

26. 2003 Letter Report

Purpose: To serve as a decision document to allow for raising the Port's disposal area dikes and to update cost sharing for O/M dike raising.

Scope of reevaluation: PGL 47 cost sharing evaluation of Port's disposal area.

Conclusions: It is necessary to raise the dikes to 55 feet to accommodate 20 years of maintenance dredging. Share costs as GNF per PGL 47. No additional land required. Total non-Federal share is 40.78% (\$1,157,000 or 31.67% upfront, and \$332,800 or 9.11% over 30 years).

Recommendations: Raise the dikes to 55 ft NGVD to accommodate O/M material for 20 years cost shared as a GNF per WRDA 1996 (as indicated in PGL 47). PCA to be prepared to conduct O/M dredging and dike raising. Prepare a PA/DMMP as well as NEPA document to accommodate Phase II material.

Status of Approval: Approved by CESAD, 12 Mar 2003.

27. 2003 Limited Reevaluation Report/Post Authorization Change Report

Purpose: To evaluate possible modifications to Phase II, economic and environmental update.

Scope of reevaluation: Limited plan formulation for Phase II improvements, economic update for entire project, NEPA document for Phase II improvements.

Conclusions: Phase II economically justified with 1.04 BCR.

Recommendations: Approval of proposed Phase II modifications using discretionary authority.

Changes in the project: An increase in the total project first cost from \$27,589,000 as previously authorized to \$41,041,840. A 900 ft Turning Basin moved north from the center of the entrance channel and elongated to a 1300 ft by 900 ft Turning Basin. Entrance channel wideners enlarged slightly. Existing DMMA dikes to be raised to 55 ft. The

mitigation plan outlined in 1990 GDM Supplement I was modified, increasing the cost from \$176,685 to \$914,000.

Authority needed to implement the recommendations: Chief's discretionary authority needed to approve proposed modifications to the authorized project.

Status of approval: Approved by the HQUSSACE, 27 Jun 2003.

#### **1.6 PROJECT COOPERATION AGREEMENT HISTORY AND SCHEDULE**

28. Project Cooperation Agreement (PCA) dated 31 March 1995:

Project Description: A 15,850 foot long and 400 foot wide entrance channel extending from the main Tampa Harbor Channel to the Manatee County Port Facilities at Manatee Harbor, Florida with a depth of 40 feet mean low water to be constructed in Phase I; turning wideners over a 31.5 acre area at the intersection of the Port Manatee and Tampa Harbor Channels to be constructed in Phase II; and a 900 foot diameter circular turning basin at Port Manatee to be constructed in Phase II, as generally described in the "Manatee Harbor, Florida, General Design Memorandum, Supplement 1, dated May 1990, prepared by the District Engineer, Jacksonville, and approved by HQUSSACE on 8 August 1990 and in the Post Authorization Change Report dated April 1990 as approved by Congress in Section 102(j) of the WRDA 1990.

Mitigation Features: Approximately 6.6 acres of shallow bay bottom along the existing island in Manatee Harbor through the removal of material to a minus 2-foot mean low water elevation, to be constructed in Phase I, as generally described in the environmental assessment for this Project dated 3 April 1992.

29. PCA dated 6 July 2004: This PCA supersedes the previous 31 March 1995 PCA.

Project Description: A 15,850 foot long and 400 foot wide entrance channel extending from the main Tampa Harbor Channel to the Manatee County Port Facilities at Manatee Harbor, Florida with a depth of 40 feet mean low water constructed as Phase I and the subsequent dredged or excavated material disposal facilities.

The general navigation features shall consist of the turning wideners at the intersection of Port Manatee and Tampa Harbor Channels; and the modified 900 by 1300 foot turning basin at Port Manatee as generally described in the Manatee Harbor, Florida, LRR and Environmental Assessment and Post Authorization Change Report dated May 2003 and approved by the Chief of Engineers on June 27, 2003 and the 15,850 foot long and 400 foot wide entrance channel extending from the main Tampa Harbor Channel to Manatee County Port Facilities at Manatee Harbor, Florida with a depth of 40 feet mean low water constructed as Phase I.

Mitigation Features: Transplanting and salvaging seagrasses, enhancement of Bird Island, restoration of Piney Point sand spit scrape down, tidal creek restoration of Little Redfish Creek and establishment of a mangrove/seagrass protection zone attributable to impacts from construction.

A draft PCA for the 156 Mitigation credit for Phase II and III is included in appendix C. The PCA will be updated upon approval of this document. The updated PCA will be sent to the project sponsor for review. The draft amended PCA will be forwarded to SAD, HQ, and ASA(CW) for review and approval prior to execution.

Phase III consists of the construction of a side channel extension, which consists of a channel 1,590 foot long by 275 foot wide and 40 foot deep. Another agreement will be required prior to implementation of the Phase III portion of the project.

The project sponsor is considering implementation via 204e. A 204e agreement will be required if the project sponsor chooses to construct the project and seek reimbursement. A PCA will be required if the USACE constructs the project. The Phase III GRR will further discuss this issue.

#### **1.7 PROJECT MITIGATION HISTORY**

30. In 1996 the U.S. Army Corps of Engineers (USACE) entered into discussions for a water quality certification (WQC) from the Florida Department of Environmental Protection (DEP). The WQC was to address the Phase II improvements to the authorized project. The WQC process was halted when DEP informed USACE that the project was not permittable as designed. Subsequently, the Manatee County Port Authority (MCPA) obtained all permits for the proposed improvements.

31. In 1998 USACE sent a letter to the Port supporting the Port's comprehensive approach to mitigation (see Appendix C).

32. From 1999 through 2004 the Sponsor obtained a series of permits for proposed Phase II and III project modifications from DEP. The mitigation plan was based upon the array of alternatives under consideration at the time. The array included a turning basin 1,400 feet in diameter. In 2001 the Sponsor obtained a Department of Army (DOA) permit for the berthing areas associated with the proposed Phase II and III improvements. The Sponsor sought and obtained approval for mitigation using a "comprehensive ecosystem" approach. The mitigation program was required by both permits to provide a package of features that, in total, benefit the environment as much as the project impacts the environment. This is referred to as a "comprehensive ecosystem approach" to mitigation as opposed to an approach wherein every component of project impact is mitigated by its own corresponding component of the mitigation program.

33. The Sponsor then proceeded with the mitigation design and construction at their cost. Federal funds were not used in the mitigation project. The mitigation project construction included transplanting seagrass from the future impacted areas to the mitigation site. The impacted area was calculated based upon a 1,400-foot diameter-turning basin. The transplanting was completed in 2002. In 2003 and 2004, the MCPA worked with DEP to revise the mitigation plan based upon changes in potential impacts. The changes included reducing the impacted area based upon a 1,300-foot diameter-turning basin.

34. USACE prepared a Limited Reevaluation Report (LRR) and Post Authorization Change Report (PAC) in May 2003. The reports recommended Phase II modifications to the project including repositioning the authorized but un-constructed 900 ft turning basin to the northern edge of the harbor channel thereby creating an effective 900 ft by 1,300 ft turning basin. Headquarters, U.S. Army Corps of Engineers (HQUSACE) under the Chief's discretionary authority, approved the changes on June 27, 2004. The LRR cost estimate included \$914,000 in mitigation costs for seagrass impacts due to Phase II construction.

35. Section 156(3) of the 2004 Energy and Water Development Appropriations Act (Appendix A) directed the Secretary to "credit toward the non-Federal share of the cost of the project the cost of planning, design, and construction work carried out by the non-Federal interest before the date of the partnership agreement for the project if the Secretary determines that the work is integral to the project..."

36. Implementation guidance was provided by USACE because of the directive language. The guidance fact sheet is included in Appendix A. The guidance was implemented through the preparation of two reports, including this report for the mitigation credits and a General Reevaluation Report (GRR) to address the Phase III portions of Section 156.

37. The LRR mitigation cost has been adjusted to reflect additional research and analysis into the Phase II and Phase III resource impacts. The LRR mitigation costs also did not include planning and design costs allowed by the subsequent Section 156 legislation. The planning and design cost for the mitigation plan are high due to the complexity of the plan, enormous amounts of required coordination with resource agencies, and the amount of time needed to secure the permits. Analysis completed in March 2004 concluded that \$3,897,288 was the appropriate cost for all Phase II mitigation (both cost-shared and non cost-shared). A letter included in Appendix B was prepared to inform USACE of the result. The total mitigation cost provided by the MCPA on March 4, 2004 was \$5,736,052 and included Phase II and III mitigation.

38. Subsequently, the Jacksonville District was instructed to prepare a report that contains sufficient documentation for the Assistant Secretary of the Army for Civil Works (ASA(CW)) to make a determination of sponsor Phase II credit.

39. The Jacksonville District requested an audit by the Defense Contract Audit Agency (DCAA) of the \$5,736,052 cost submitted by MCPA. The results were received on August 19, 2004. The audit results were used to adjust the Sponsor-provided costs. A further review was conducted to remove any items that are not applicable for credit per USACE policy. A detailed listing of each item is provided in appendix G. The remaining costs were then allocated between the phases based upon the resource impacts associated with each phase. Lastly, the mitigation cost was split between USACE and the MCPA based on current cost sharing requirements for GNF and berthing area impacts.

## **2.0 ENVIRONMENTAL ASSESSMENT AND PERMITS**

### **2.1 July 2002 Environmental Assessment**

40. The Jacksonville District prepared an Environmental Assessment (EA) for the Phase II project features and issued a Finding of No Significant Impact on August 5, 2002. The EA addressed impacts due the selected Phase II construction plan including Federal navigation project features and associated local berthing facilities.

### **2.2 DEP Permits**

41. DEP Permits were issued to the Sponsor for the project as follows:

Conceptual Environmental Resources Permit no. 0129291-001EC issued 12/10/99 - for entire proposed action (DEP, 1999).  
Included in appendix F

Seagrass Mitigation Construction Permit no. 0129291-002-EI issued 8/29/00 - for all seagrass mitigation (DEP, 2000)

Environmental Resource Permit - Berth 12 Phase I no. 0129291-004 issued 5/11/01 - for Berth 12 Phase I construction (DEP, 2001)

Consolidated Environmental Resource Permit and Submerged Lands, no. 012929-003-EI issued 12/17/02 - for remainder of proposed action (DEP, 2002)

Wideners Permit no. 0129291-009-EM issued 6-17-04 (DEP, 2004)

## **2.3 Corps DOA Permit**

42. The Jacksonville District issued Department of the Army (DOA) permit 199801210(IP-MN), for non-Federal project activities (berthing areas), on March 30, 2001. Federal law requires the DOA permit to include State 401 permit requirements. The permit states "Therefore, all of the FDEP permit specific conditions related to this conceptual ERP are hereby incorporated into this department of the Army (DA) permit". The permit is included in appendix E.

43. An environmental assessment was prepared as part of the Department of the Army permitting process. This EA is included in appendix D. The EA establishes the Federal plan for mitigation required to offset the impacts caused by construction of navigation features for this project. The resource impacts and resulting mitigation listed in table 3 are comparable to similar impacts for recent navigation projects. The Miami Harbor Federal project included a mitigation ratio of 3:1 ratio for seagrass impacts. The Port Everglades Harbor Federal project is proposing a 2:1 mitigation ratio for seagrass impacts. A Federally proposed mitigation plan would have been larger because the USACE normally constructs mitigation projects concurrently with project construction. The MCPA built the mitigation project in advance as required by the resource agencies. An advantage of up front mitigation is a reduced requirement and normally cost since the risk of failure is removed or greatly reduced. District team members have been involved in the mitigation planning and design activities. District team members continue to be involved in monitoring activities to ensure success.

## **3.0 MITIGATION**

### **3.1 Sponsor Proposed Mitigation**

44. Table 3 describes the Sponsor's 1999 mitigation plan and implementation dates. The plan remained essentially intact, but was modified somewhat as the permitting process unfolded.

### **3.2 Description of Mitigation Costs**

45. The Sponsor planned, designed, and constructed the mitigation prior to the approval of the IRR. The MCPA followed State of Florida acquisition requirements in procuring all mitigation features. All procurement activities over \$50,000 are approved by the MCPA Board in a public meeting. All procurement activities over \$200,000 must be bid through a public process. The procurement process followed by the MCPA is very similar to the Federal Acquisition Regulation and resulted in qualified contractors performing quality work at the best price. The Sponsor used an ecosystem approach in identifying and proposing

mitigation for various impacts. Initially the Sponsor identified impacts to seagrasses, shallow bay bottom (areas -6 ft MLLW and shallower exclusive of seagrass and inclusive of mangroves), and deep-water areas. Seagrass impacts were found to occur mostly in the vicinity of the turning basin and south channel extension areas (Figure 4). Figure 5 provides details of the mitigation plan and associated impacts. Throughout the mitigation permitting process, seagrass and shallow bay bottom impacts have consistently been considered integral to the project. Jacksonville District team members have participated in the entire mitigation process and concur with the mitigation requirement and scope.

46. The Piney Point boat ramp mitigation feature includes construction of a boat ramp, channel markings (buoys), management, and patrols for enforcement. The management and enforcement activities are required for the project life. This management area will include the actual boat ramp, channel, and surrounding 395 acres. Seagrass loss due to prop scars total 11.2 acres in this area. Seagrasses in the construction area were transplanted into the prop scar areas. The designation of a channel and vessel restrictions should protect this area and over 100 acres of seagrass from future impacts.

### **3.3 Status of Mitigation Construction**

47. The Sponsor has received approval from DEP for the construction of Phase II and Phase III improvements. The approval means that the constructed mitigation plan is progressing at the assumed rate. Outstanding issues exist with the Port's annual monitoring and reporting requirements that require correction, as noted in correspondence from DEP dated July 26, 2004. The MCPA estimates that an additional \$1,800,000 in construction related activities that are not included in this report would be required for complete compliance with the project permits. Any future construction related costs would follow the same process as followed in this report. The MCPA will submit the costs. The costs will be audited. A report will be prepared under Section 156 and submitted for approval. This procedure follows the guidance provided though the Video Teleconference Process for Fiscal Year 2004.

**Table 3: Sponsor Proposed Mitigation Plan  
May 1999**

<b>Impact</b>	<b>Acres</b>
Seagrass Excavation (Berths 4, 5, 12)	12.64
Seagrass Fill (Berths 4, 5, 12)	0.06
Unvegetated Shallow Bay Bottom Excavation <sup>1</sup>	29.20
Unvegetated Shallow Bay Bottom Fill	0.30
Mangrove Swamp Excavation berths 4, 5, 12	1.54
Mangrove Swamp Fill berths 4, 5, 12	0.30
<b>Total</b>	<b>44.04</b>

<b>Mitigation</b>	<b>Acres</b>	<b>Construction Dates</b>
Transplant Seagrass to Areas 1-6	12.70	9/01 – 7/02
Historical fill removal and transplant of seagrass Areas 7-8	12.82	9/01 – 10/01
Piney Point Seagrass salvage	0.32	7/03
Bird Island <sup>2</sup>		1/03 – 12/03
Mangrove enhancement 3.93 ac		
Mangrove creation 6.89 ac		
Tidal creek restoration 2.02 ac		
Salt barren creation 3.21 ac		
Total Bird Island	16.06	2/02 – 4/02
Little Redfish Creek Restoration <sup>3</sup>		
Tidal creek restoration 13.25 ac		
Mangrove/tidal marsh restoration 13.43 ac		
Hydrologic enhancement 73.62 ac	100.30	
Piney Point Scrape Down	0.15	9/01 – 10/01
Bird Island Part 2		1/03 – 12/03
Upland Management 23.77 acres		
Hammock creation 14.56 acres		
Tern nesting area 7.96 acres	49.34	
Laughing gull nesting area 3.05 acres	382.30	4/00 – Project Life
395 acres less 12.7 acres of restored seagrass		
<b>Total</b>	<b>573.99</b>	
<b>Land Transfers<sup>4</sup></b>	<b>13.00</b>	

**Table 1 Notes:**

- 1 includes intertidal mudflats, very scattered individual colonies of colonial truncates, and soft corals, no areas of live bottom communities pg 6 1999 mitigation plan
- 2 modify spoil island to create bird sanctuary, clearing and grubbing, re-grading uplands, excavation of tidal creeks, planting of selected materials, remove exotics
- 3 construct new tidal creek channels in Hendry property using 1957 aerial of Little Redfish Creek, include transplanted mangroves and cordgrass, monitoring months 3-60
- 4 port has obtained 13 acres of submerged and formerly submerged lands: Savage property at Piney Point, FPL property south of Berth 12

## **4.0 APPLICABLE TOTAL PROJECT MITIGATION COSTS**

### **4.1 Verified Costs**

48. The Defense Contract Audit Agency (DCAA) completed an audit on July 19, 2004 to verify incurred costs. The Audit verified a total of \$5,654,480 of the \$5,736,052 cost submitted by the MCPA. The table in appendix G shows the results. The "amount" column shows costs submitted by the Sponsor for credit. The "verified" column shows the amount verified by the audit. The table includes costs for the entire mitigation project. The values will be apportioned into Phase II and Phase III per resource impacts of each phase.

### **4.2 Adjusted Costs**

49. The costs that are not integral to the project and cannot be reimbursed due to USACE policy include DOA permit costs of \$37,500. The "adjusted" column includes the audited costs adjusted per policy. The notes indicate why any adjustment was made.

## **5.0 COST ALLOCATION AND APPORTIONMENT**

### **5.1 Prorating of Mitigation Costs**

50. An analysis was performed to allocate the costs between Phase II and Phase III. Table 4 contains the allocation of mitigation costs by resource impacts to each phase and responsibility. Federal General Navigation Features (GNF) refers to impacted acreage within the Federal Channels and Turning Basin. Non-Federal refers to any impacts within the non-Federal features such as berthing areas. The impacted acreage increased from 44.02 acres in the 1999 plan to 45.82 acres in the current plan by refinements to the project design and footprint. The mitigation plan was derived through a comprehensive ecosystem approach for Phase II and Phase III impacts. This approach provided both in-kind and out-of-kind mitigation components required to offset the environmental impacts as a whole. The mitigation plan features were assigned to either "seagrass" mitigation or "other" mitigation impacts. The other mitigation includes shallow bay bottom losses and Mangrove losses.

### **5.2 Cost Sharing Apportionment**

51. The total Phase II mitigation cost is 70% of the total mitigation costs or \$4,000,141 including cost shared and non-cost shared portions. The total Phase III mitigation cost is 30% of the total mitigation cost or \$1,616,839 including cost shared and non-cost shared portions.

Table 4: Mitigation Cost Allocation

Responsibility	Seagrass			Other (Shallow Bay and Mangrove)			Total	
	Acreage	Percentage	Mitigation Costs	Acreage	Percentage	Mitigation Costs	Costs	Percentage
Phase II GNF	8.50	66.89%	2,769,372	23.28	70.30%	1,038,307	3,807,679	67.79%
Phase II Berths	0.35	2.74%	113,445	1.77	5.35%	79,016	192,462	3.43%
Phase III GNF	3.86	30.37%	1,257,288	7.33	22.14%	326,910	1,584,198	28.20%
Phase III Berths	0.00	0.00%	-	0.73	2.21%	32,641	32,641	0.58%
	12.70	100.00%	4,140,105	33.12	100.00%	1,476,875	5,616,980	100.00%
	Total Acreage			45.82				

52. The total cost of General Navigation Features for Phases I, II, and III) including the mitigation cost are now estimated to be \$50,972,000. The 10% over time value is \$5,097,000. LERR credits applied total \$6,392,000. The LERR credits exceed the 10% over time amount so the project sponsor is not responsible for any of the 10% over time costs.

53. Table 5 contains the cost apportionment based on current cost sharing criteria of 75% Federal and 25% non-Federal for the cost-shared portion of the mitigation. The project sponsor is also responsible for an additional 10% but the LERR credits exceed the 10% over time amount so the project sponsor is not responsible for any of the 10% over time costs. The Federal credit for Phase II mitigation is the 75% share of \$3,807,679 totaling \$2,855,759. The Federal credit for Phase III mitigation is the 75% share of \$1,584,198 totaling \$1,188,149.

54. Real Estate credit requirements for the mitigation project are covered by the navigational servitude enjoyed by the Federal Government. The project sponsor owns the mitigation projects lands via title or has been given rights to the property from the State of Florida through the permitting process. The Limited Reevaluation Report approved in 2003 provided no costs for the lands required for Phase II mitigation. The Phase III General Reevaluation Report will provide no costs for lands required for Phase III mitigation.

Table 5: Mitigation Cost Apportionment

Item	Phase II	Phase III
Cost Shared Mitigation Cost	\$3,807,679	\$1,584,198
75% Federal	\$2,855,759	\$1,188,149
25% non-Federal	\$951,920	\$396,050

The LERR credits exceed the 10% over time amount so the project sponsor is not responsible for any of the 10% over time costs

## 6.0 CONCLUSION AND RECOMMENDATION

### 6.1 Conclusion

55. On March 23, 2004 the District estimated the total Phase II mitigation costs including cost shared and 100% non-Federal costs to be \$3,897,288 based on a total Phase II and III mitigation cost of \$5,736,052.

56. The total Phase II and III mitigation cost has been updated to \$5,616,980. The update was based upon information provided by the project sponsor, a DCAA audit, and a USACE policy review.

The mitigation cost was allocated based upon resource impacts in each Phase. The total Phase II mitigation cost is \$4,000,141 including cost shared and non-cost shared portions. Applying the current cost sharing criteria results in a Phase II credit due to the sponsor of \$2,855,759. The total Phase III mitigation cost is \$1,616,839 including cost-shared and non-cost-shared portions. Phase III credit is estimated at \$1,188,149. Total mitigation credit for Phases II and III combined is \$4,043,908.

57. Regulatory and resource agencies prefer mitigation to be provided in advance of construction. The MCPA has provided a completed and verified mitigation project prior to Federal construction. The mitigation plan includes improvements to 573.99 acres for a current cost of \$5,616,980 or \$9,786/acre. Mitigation projects typically cost significantly more per acre to construct. The comprehensive ecosystem approach was applied to this project that resulted in a healthy mix of in-kind and out-of-kind mitigation.

58. The Chief of Engineers' Environmental Operating Principles were followed in the development of the mitigation plan. The project team strived to achieve environmental sustainability by designing a healthy, diverse, and sustainable project. The environmental consequences of the project were recognized and the team included appropriate mitigation. The plan is balanced and was developed utilizing synergy among human development activities and natural systems that support and reinforce one another. The mitigation planning sought ways and means to assess and mitigate cumulative impacts to the environment. The comprehensive ecosystem approach was utilized to bring a systems approach to the full life cycle of the project. The project team consisted of engineers, biologists, consultants, regulatory and resource agencies to build and share an integrated scientific, economic, and social knowledge base that supports a greater understanding of the project environment and the impacts. A wide variety of input was sought and utilized in preparing and executing the mitigation plan with the goal of finding innovative win-win solutions to the project's impacts to protect and enhance the environment.

59. Each line item has been determined to be reasonable, allocable, and allowable per ERI165-2-131. The mitigation plan as constructed by the MCPA was required to offset impacts associated with project construction. Subsequent audits confirmed the accuracy and accountability of the mitigation costs per the OMB Circular Number A-87.

60. The test for reasonable was answered by the environmental assessment completed for the Department of the Army permit process. The EA concluded that the mitigation was adequate to offset the project impacts. The permit provided by the State of Florida Department of Environmental Protection supported this fact. Jacksonville District team members have been involved in

the entire mitigation project life including design, permitting, construction, and monitoring. The sponsor constructed mitigation plan is the Federal mitigation plan.

61. The test for allocable was answered by allocating the mitigation costs by resource impacts between Phase II and III. The Phase costs were then further allocated between GNF and non-Federal impacts.

62. The test for integral was addressed the same as the reasonable test. The environmental assessment completed for the Department of the Army permit process concluded that the mitigation was adequate to offset the project impacts. The permit provided by the State of Florida Department of Environmental Protection supported this fact. Jacksonville District team members have been involved in the entire mitigation project life including design, permitting, construction, and monitoring. Again, the sponsor constructed mitigation plan is the Federal mitigation plan.

63. The test for allowable is a sum of the previous three tests.

The appropriate plan was constructed and is considered the Federal mitigation plan. The plan has been successful and monitoring will continue. The mitigation plan costs have been audited by DCAA and reviewed for USACE policy compliance.

64. The Phase III GRR is currently being finalized for review and approval. The mitigation plan discussed in this report will be the same plan as discussed in the Phase III GRR. The Phase III mitigation costs discussed in this report will also be included in the Phase III GRR upon this report being approved.

#### 6.2 Recommendation

65. It is recommended that the Sponsor, Manatee County Port Authority be credited \$2,855,759 for Phase II mitigation and \$1,188,149 for Phase III mitigation. The phase III credit is dependant upon the approval of the Phase III GRR.

  
ROBERT M. CARPENTER  
Colonel, U.S. Army  
District Engineer

Signed: Erik L. Stor

## 7.0 BIBLIOGRAPHY

108<sup>th</sup> Congress, Jan 2004. Section 156 of the Energy and Water Appropriations Act of 2004, (H.R. 2754).

FDPEP, Dec 1999. Conceptual Environmental Resources Permit no. 0129291-001EC issued 12/10/99. Florida Department of Environmental Protection, Marjory Stoneman Douglass Building, 3900 Commonwealth Blvd., Tallahassee, Florida 32399-3000

FDPEP, Aug 2000. Seagrass Mitigation Construction Permit no. 0129291-002-EI issued 8/29/00. Florida Department of Environmental Protection, Marjory Stoneman Douglass Building, 3900 Commonwealth Blvd., Tallahassee, Florida 32399-3000

FDPEP, May 2001. Environmental Resource Permit - Berth 12 Phase I no. 0129291-004 issued 5/11/01. Florida Department of Environmental Protection, Marjory Stoneman Douglass Building, 3900 Commonwealth Blvd., Tallahassee, Florida 32399-3000

FDPEP, Dec 2002. Consolidated Environmental Resource Permit and Submerged Lands, no. 012929-003 EI issued 12/17/02. Florida Department of Environmental Protection, Marjory Stoneman Douglass Building, 3900 Commonwealth Blvd., Tallahassee, Florida 32399-3000

FDPEP, Jun 2004. Wideners Permit no. 0129291-009 EM issued 6-17-04. Florida Department of Environmental Protection, Marjory Stoneman Douglass Building, 3900 Commonwealth Blvd., Tallahassee, Florida 32399-3000

MCPA, May 1999. Mitigation Plan, Port Manatee Navigation and Berth Improvements. Manatee County Port Authority, 300 Regal Cruise Way, Suite I, Palmetto, Florida 34221-6608.

MCPA, Jul 2000. Seagrass Mitigation Plan, Port Manatee Navigation and Berth Improvements. Manatee County Port Authority, 300 Regal Cruise Way, Suite I, Palmetto, Florida 34221-6608.

USACE, Mar 2001. Department of the Army Permit 199801210(IP-MN) to the Manatee County Port Authority. U.S. Army Corps of Engineers, Jacksonville District, 701 San Marco Blvd, Jacksonville, Florida, 32207.

USACE, Jul 2002. Environmental Assessment, Manatee Harbor, Florida. U.S. Army Corps of Engineers, Jacksonville District, 701 San Marco Blvd, Jacksonville, Florida, 32207.

USACE, May 2003. Limited Reevaluation Report and Environmental Assessment, Manatee Harbor, Florida. U.S. Army Corps of Engineers, Jacksonville District, 701 San Marco Blvd, Jacksonville, Florida, 32207.

USACE, May 2003. Post Authorization Change Report for Manatee Harbor, Florida. U.S. Army Corps of Engineers, Jacksonville District, 701 San Marco Blvd, Jacksonville, Florida, 32207.

# LOCATION MAP

## Manatee Harbor

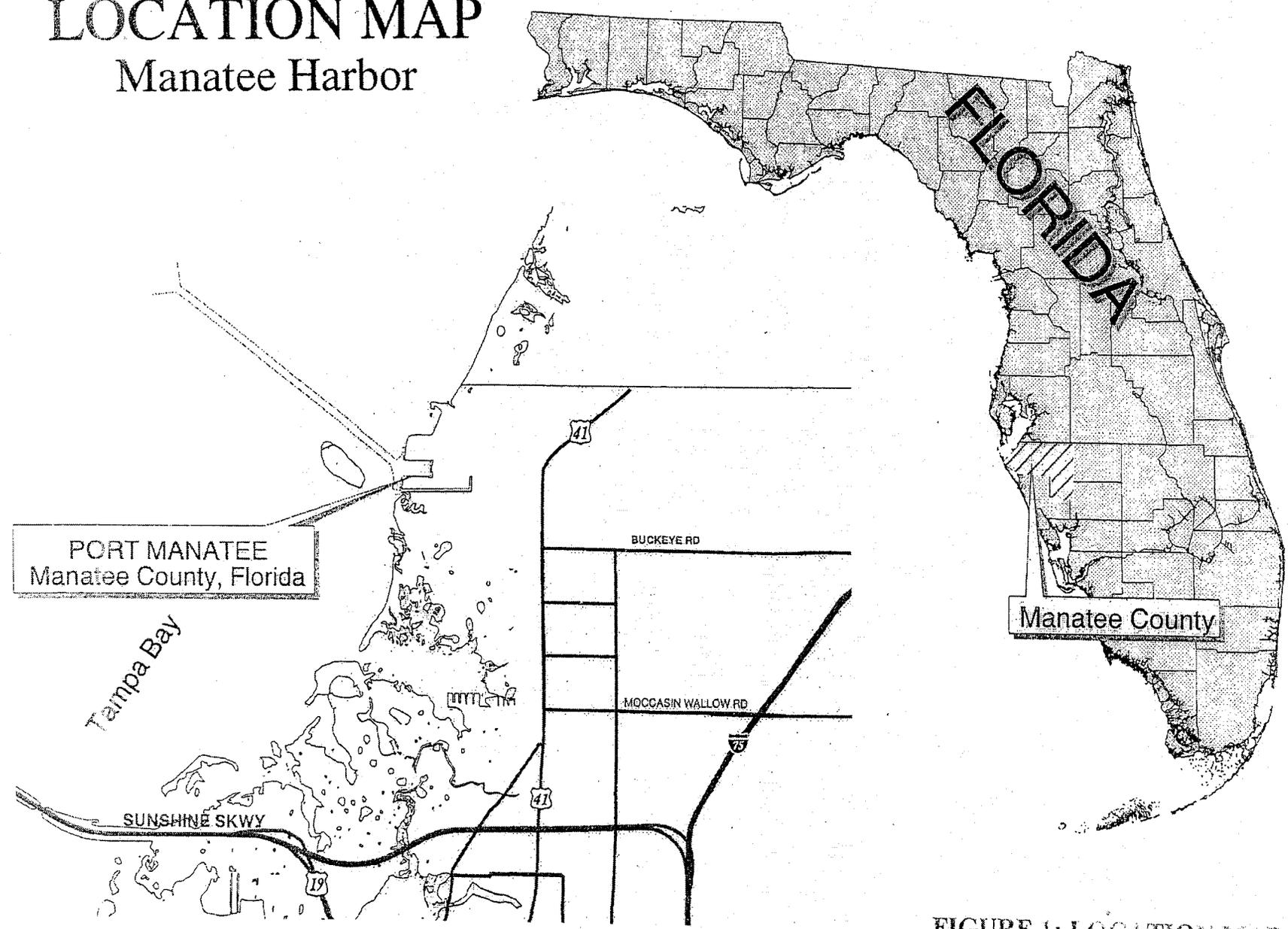


FIGURE 1: LOCATION MAP



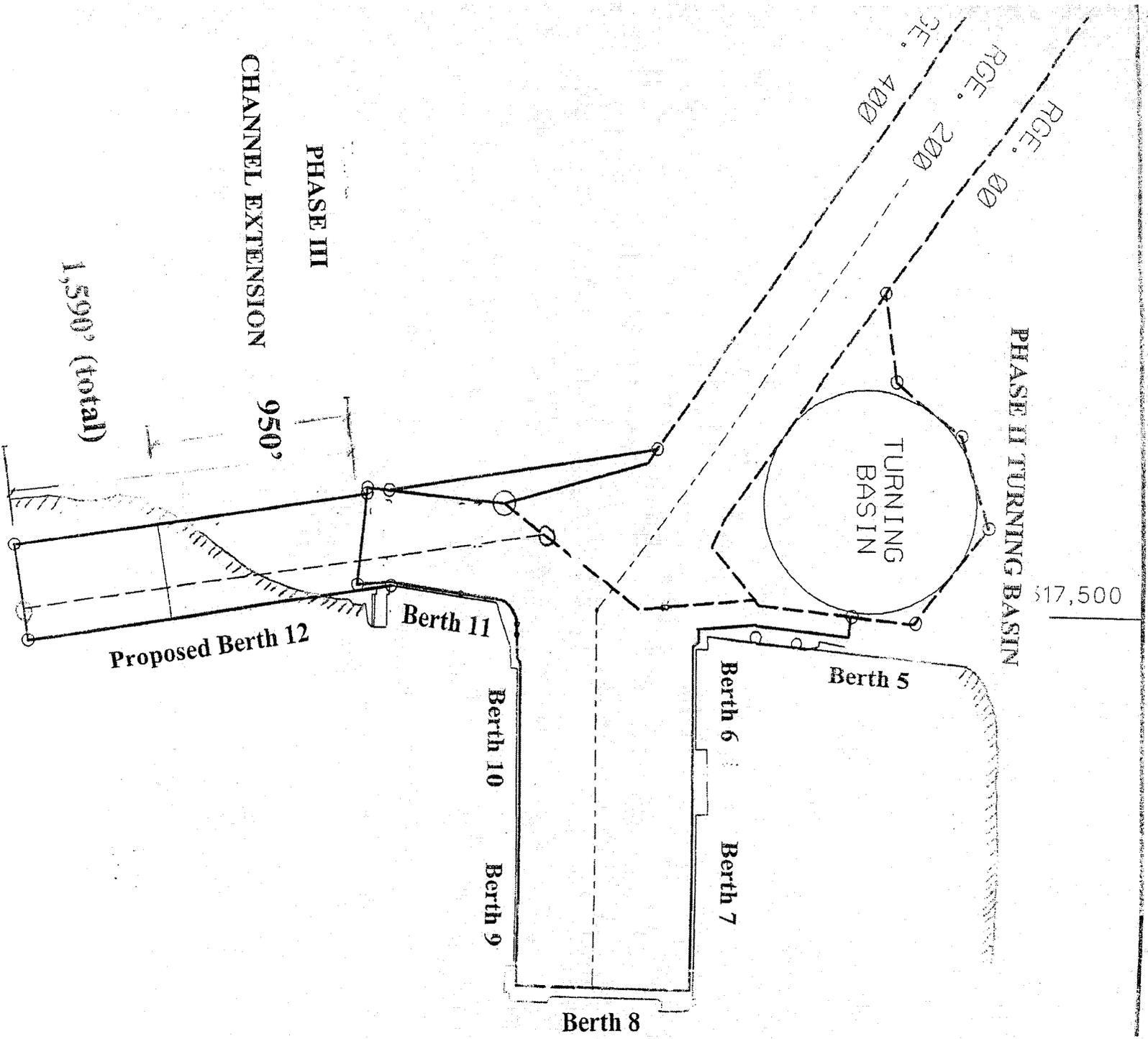


FIGURE 3: TURNING BASIN AND CHANNEL EXTENSION