MANATEE HARBOR, FLORIDA
LIMITED REEVALUATION REPORT

APPENDIX C

MAINTENANCE DREDGING AND DISPOSAL

1. 0 Summary of Assumptions Related to Calculation of Maintenance Dredging

Maintenance dredging costs associated with the project are as follows:

a. 1999 Phase I maintenance
b. 2003 Phase I maintenance
c. Phase I and Phase II maintenance beginning in 2007 and occurring every three years throughout the 50 year project life

Mr. Osvaldo Rodriguez of CESAJ-DP-C provided total maintenance costs of $5,443,412 for item a above to CESAJ-PD-PN on 5/25/03.

Total maintenance costs of $4,917,000 for item b above was obtained from the current 2003 contract.

A decision was made by CESAJ-EN and CESAJ-CO to assume for this level of analysis, that future maintenance quantities would best be approximated by the amounts shown in the attached table for all plans. The maintenance quantity estimate was provided by CESAJ-CO and tabulated by CESAJ-PD-PN. A MCACES estimate for future maintenance for item c above was provided to CESAJ-PD-PN on 5/23/03 and is included in the Engineering Appendix (Appendix B).

5/27 Revised O&M Quantities

Year	now (55')**	2007	2010	2013	2016	2019	2022	2025	2028	2031	2034	2037 to 2057
Capacity Available	5,253,000	1,738,533	1,172,033	605,533	797,383	1,097,383	1,397,383	1,697,383	1,182,383	667,383	152,383	7 cycles
Channel already in disposal area												
Channel O&M 2003-04	398,000											
Channel O&M per cycle*		199,000	199,000	199,000	181,000	181,000	181,000	181,000	181,000	181,000	181,000	181,000
LRR Turning Basin	1,344,467											
LRR Turning Basin O&M per cycle*		140,000	140,000	140,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000
Wideners	1,414,000											
Wideners O&M per cycle*		101,000	101,000	101,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000
Sponsor New Berths	243,000											
Sponsor Berth O&M 2003-2004	115,000											
Sponsor Berths O&M per cycle*		126,500	126,500	126,500	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000
Bulking factor (last O&M cycle only)				1.10								
Trucking per cycle				815,000	815,000	815,000	815,000					
Offshore disposal/cycle											515,000	515,000

Channel already in disposal area	
Channel O&M/cycle*	181,000 (provided by DP) times 1.10 (10% increase for each of first three cycles) = 199,000
Channel O&M 2003-04	From Advertised Contract
LRR Turning Basin	Largest alternative's quantity provided by EN-DL
LRR Turning Basin O&M/cycle*	127,000 (provided by DP) times 1.10 (10% increase for each of first three cycles) = 140,000
Wideners	From Advertised Contract
Wideners O&M/cycle*	92,000 (provided by DP) times 1.10 (10% increase for each of first three cycles) = 101,000
Sponsor New Berths	From Advertised Contract
Sponsor Berth O&M 2003-04	From Advertised Contract
Sponsor Berths O&M/cycle*	115,000 (provided by DP) times 1.10 (10% increase for each of first three cycles = 126,500
Bulking factor (last O&M cycle only)	Provided by EN-DL for use during last O&M dredging cycle to go into disposal area
Trucking per cycle	To evacuate disposal area based upon capacity (cu yds) of Pit Areas provided by EN-DL of: 3,275,600

*Widener, Channel, and Turning Basin O&M dredging equals 400,000 cu yds per cycle (from DP) plus 10% increase in first 3 cycles (from CO-OM)
**Capacity Available from 3/03 Memo Recommending Raising of the Confined Disposal Facility not including 600,000 cy into Cockroach
If project's total O&M (Phase I and Phase II) are combined in future years to begin in 2007 17 cycles completes 50 yr disposal in 2057
If first O&M event is in 2007 (3 yrs after contract completion), last O&M dredging cycle that will fit in disposal area with 55' dike occurs in 2025
Disposal area will receive complete cycles not to exceed 55' trucked quantity is four cycles (815,000 cu yd/cycle) beginning after 2013 disposal
Offshore disposal quantity will begin in 2034 and continue thru 2057 (515,000 cu yd/cycle)