

CHAPTER II

SECTION 2 TABLES

Table II-2.1-1
Difference Between Actual and Design Elevations

CU	Average Difference (ft.)	Maximum Undercut (ft.)	Maximum Overcut (ft.)	Standard Deviation (ft.)
1	6.3	3.7	12.9	3
2	1.7	3.5	9.2	2.1
3	2.1	4.7	8.8	1.7
4	2.2	4.2	13.2	2.2
5	1.2	3.6	7.8	1.9
6	0.7	5.4	3.9	0.9
7	2	6.7	8.2	1.5
8	1.5	5.4	6.2	1.5
17	0.8	4.8	5.1	1
18	0.8	3.6	5.9	0.8

**Table II-2.1.1-1
Difference between Actual and Design Cut Elevations**

CU	Average Design Dredging Depth (ft.)	Average Actual Dredging Depth (ft.)	Difference (ft.)	Maximum Deviation Shallower than DoC (ft.) ¹	Maximum Deviation Deeper than DoC (ft.)	Standard Deviation (ft.)
1	2.7	8.9	6.3	0.6	12.9	3.0
2	1.8	3.5	1.7	2.4	9.2	2.1
3	3.3	5.4	2.1	4.7	8.8	1.7
4	2.4	4.6	2.2	2.6	13.2	2.2
5	1	2.2	1.2	3.6	7.8	1.9
6	0.9	1.6	0.7	2.2	3.9	0.9
7	1.5	3.4	2.0	2.5	8.2	1.5
8	1.4	2.9	1.5	3.8	6.2	1.5
17	1.1	1.9	0.8	2	5.1	1.0
18	1.5	2.4	0.8	3.6	5.9	0.8

¹ Maximum deviation shallower than DoC shown in this table do not include small distortions present at the edge of design prisms. Also, changes in the dredging depth due to presence of riprap and structural offsets have been accounted for.

**Table II-2.1-2
Summary of Volume Dredged**

CU	DP1		DP2		DP3		DP4		DP5		Total	Net ²	GE Estimate - Planned Removal Volume-2005 Bathymetry (cy) ³	GE Original Estimate Adjusted for 2009 Bathymetry and Rip-Rap Offsets, Excluding Side Slopes (cy)	Ratio of Actual Volume to Design Volume	Ratio of Actual Volume to Adjusted Design Volume
	Volume	Percent of Total	Volume	Percent of Total	Volume	Percent of Total	Volume	Percent of Total	Volume	Percent of Total						
1	14,800	30%	4,700	10%	9,400	19%	13,900	29%	5,700	12%	48,600	48,500	13,000	13,900	3.7	3.5
2 ¹	13,400	47%	8,100	28%	5,500	19%	1,400	5%	0		28,500	28,400	14,500	14,500	2.0	2.0
3 ¹	26,000	61%	10,900	25%	6,000	14%	0		0		42,900	43,100	26,700	25,900	1.6	1.7
4 ¹	17,300	53%	14,300	43%	1,200	4%	0		0		32,900	33,000	18,300	17,100	1.8	1.9
5	5,900	35%	9,200	55%	1,700	10%	0		0		16,700	16,700	9,500	7,300	1.8	2.3
6	4,900	40%	6,600	54%	700	6%	0		0		12,200	12,200	9,100	7,200	1.3	1.7
7 ¹	10,200	44%	7,800	33%	5,100	22%	300	1%	0		23,400	23,500	15,500	9,800	1.5	2.4
8 ¹	10,600	45%	7,000	30%	4,500	19%	1,400	6%	0		23,500	23,300	14,200	10,700	1.6	2.2
17 ¹	10,200	65%	3,900	25%	1,500	10%	0		0		15,700	15,700	11,300	9,200	1.4	1.7
18 ¹	16,900	72%	6,300	27%	300	1%	0		0		23,500	23,500	18,200	14,800	1.3	1.6
Total	130,200		78,800		35,900		17,000		5,700		267,900	267,900	150,300	130,400	1.8	2.1
Percentage of Total Volume	49%		29%		13%		6%		2%							
Total without CU-1	115,400		74,100		26,500		3,100		0		219,300	219,400	137,300	116,500	1.6	1.9
Percentage of Total Volume without CU-1	53%		34%		12%		1%		0%							

Notes:

¹ CUs where the 2005 predredge bathymetry was used in conjunction with the 2009 predredge bathymetry to estimate the volume of dredged sediment.

² Net Volume is calculated by subtracting the final dredge elevation from the pre-dredge elevations.

³ Planned volume to be removed was taken from 2009-07-15 Resuspension Engineering Evaluation Report from GE to EPA

Table II-2.3-1: Confidence Level of SSAP Cores

CU	SSAP Cores including Abandoned SSAP Core Sites					SSAP Cores excluding SSAP Abandoned Core Sites				
	Level 1A	Level 2A	Total Number of Cores	Percent of Level 1A Cores	Percent of Level 1A & 2A Cores	Level 1A	Level 2A	Total Number of Cores	Percent of Level 1A Cores	Percent of Level 1A & 2A Cores
CU-01	2	11	33	6%	39%	2	11	25	8%	52%
CU-02	27	10	60	45%	62%	27	10	51	53%	73%
CU-03	43	14	77	56%	74%	43	14	69	62%	83%
CU-04	37	10	62	60%	76%	37	10	56	66%	84%
CU-05	4	9	23	17%	57%	4	9	17	24%	76%
CU-06	7	3	32	22%	31%	7	3	25	28%	40%
CU-07	11	6	32	34%	53%	11	6	23	48%	74%
CU-08	30	4	54	56%	63%	30	4	48	63%	71%
CU-17	38	3	41	93%	100%	38	3	41	93%	100%
CU-18	50	0	52	96%	96%	50	0	52	96%	96%
Total	249	70	466	53%	68%	249	70	407	61%	78%

Table II-2.3-2

SSAP Core Percent Recovery vs. Required Additional Dredging Depth

SSAP Core Percent Recovery	Average Additional Dredging Depth Below Design Cut Line (ft.)	Average Additional Dredging Depth below SSAP Core DoC (ft.)
41-50%	2.28	2.43
51-60%	1.95	1.83
61-70%	1.27	1.54
71-80%	1.16	1.56
81-90%	1.34	1.33
91-100%	1.21	1.49

Table II-2.6-1a

Summary of Change in Bathymetric Elevation from 2001 to 2005

CU	Average (ft.)	Minimum (ft.)	Maximum (ft.)	Std. Dev. (ft.)
1	-0.4	-8.8	5.1	1.4
2	-0.6	-6.9	7.4	1.8
3	-0.5	-5.1	3.2	0.9
4	-0.1	-11.6	7.4	2.0
5	-0.3	-3.7	3.0	0.8
6	-0.1	-4.3	4.9	0.9
7	-0.1	-4.5	8.0	1.4
8	-0.6	-7.0	7.3	1.4
17	-0.1	-5.2	4.3	0.6
18	0.0	-1.7	3.9	0.4

Table II-2.6-1b

Summary of Change in Design Dredging Volume 2001 to 2005

CU	Volume Eroded (cy)	Volume Deposited (cy)	Net Change (cy)
1	-4,091	1,690	-2,401
2	-9,589	4,132	-5,457
3	-5,015	1,256	-3,759
4	-6,120	4,941	-1,180
5	-5,057	1,728	-3,329
6	-3,700	2,734	-966
7	-4,089	3,593	-496
8	-7,424	2,172	-5,252
17	-2,881	1,931	-950
18	-1,951	1,741	-210
Total	-49,918	25,919	-23,999

Table II-2.6-1c**Summary of Change in Pre-Dredging Elevations from 2005 to 2009**

CU	Mean (ft.)	Min (ft.)	Max (ft.)	Standard Deviation (ft.)
1	0.3	-10.1	3.3	0.5
2	0.1	-4.8	3.3	0.6
3	0.0	-3.3	3.1	0.4
4	-0.1	-5.3	5.8	1.0
5	-0.2	-2.5	1.1	0.2
6	-0.2	-4.0	7.5	0.3
7	-0.2	-5.9	5.6	0.4
8	-0.2	-6.4	5.8	0.4
17	-0.2	-2.1	2.3	0.2
18	-0.3	-1.9	1.9	0.1

Table II-2.6-1d**Summary of Sediment Volumes Eroded/Deposited between 2005 and 2009**

CU	Volume Eroded (cy)	Volume Deposited (cy)	Net Change (cy)	CU Area (acres)	Area of 30 ft. Buffer (acres)
1	-500	3,200	2,700	3.4	4.8
2	-1,500	2,100	600	5.1	7.7
3	-1,400	1,200	-300	4.9	6.1
4	-3,100	2,100	-1,000	4.5	6.1
5	-2,700	100	-2,600	4.8	7.1
6	-1,600	300	-1,300	4.9	6.2
7	-2,000	400	-1,600	4.7	5.3
8	-2,700	300	-2,300	4.9	8
17	-2,400	100	-2,300	5	8.2
18	-3,400	-	-3,400	6.1	8.2
Total	-21,300	9,800	-11,500	48	68

Table II-2.8-1 Cores with Non-Detect Surface TPCB Concentration by Dredge Pass

CU	First Pass		Second Pass		Third Pass		Fourth Pass		Fifth Pass	
	Cores with ND	Total Cores	Cores with ND	Total Cores	Cores with ND	Total Cores	Cores with ND	Total Cores	Cores with ND	Total Cores
CU001	0	43	0	38	0	10	0	39	0	32
CU002	0	40	0	31	0	24	0	6		
CU003	0	47	0	26	0	10				
CU004	0	42	1	41	0	3				
CU005	0	28	0	15	0	7				
CU006	0	30	0	22	0	4				
CU007	0	41	0	39	4	31	0	2		
CU008	0	52	0	20	0	20	0	13		
CU017	1	40	0	11	0	5				
CU018	0	43	0	18	0	1				
Total	1	406	1	261	4	115	0	60	0	32

Dredging Pass	Nodes less than 1 mg/kg	Nodes that are ND
1	50	1
2	45	1
3	17	4
4	5	0
5	0	0
Total (nodes)	117	6
Percent of total nodes	26%	1%
Equivalent Phase 2 Area (square yards)	555,000	28,000
Estimated Volume	139,000	7,000

Table II-2.9-1 Calculation of clean material that may be removed by over-dredging

Dredging Pass	Nodes less than 1 mg/kg Tri+ PCBs	Nodes that are ND	Abandoned Nodes
1	50	1	-33
2	45	1	-43
3	17	4	-52
4	5	0	-8
5	0	0	-2
Total (of 443 total Phase 1 nodes)	117	6	-138
Percent of total Nodes	26%	1%	-31%
Equivalent Phase 2 Area (yards ²)	555,000	28,000	-654,000
Estimated Volume (CY)	139,000	7,000	-164,000