

Dredging & Sediment Cost Review - Appendix 7

Source:

Moffatt & Nichol 2007. Deschutes Estuary Feasibility Study, Phase 3, Engineering Design and Cost Estimates, Final Report. Section 6, Table 8, page 36

Table 8
PERIODIC MAINTENANCE COSTS - 2006 PRICES

ALTERNATIVES A & B

ITEM DESCRIPTION	UNIT	QUANTITY			UNIT PRICE			MEAN TOTAL PRICE	PRICE VARIATION			
		LOW	MEAN	HIGH	LOW	MEAN	HIGH		LOW (10%)	MEAN	HIGH (90%)	
TOTAL - 3-YEAR INITIAL DREDGING												
61 DREDGING - MARINA & PORT (3-YEAR)	CY	0	90,000	180,000	\$18	\$25	\$40	\$4,914,000	\$1,710,000	\$4,910,000	\$8,440,000	
62 CONTAMINATED MATERIAL DISPOSAL	CY	0	9,000	22,500	\$66	\$170	\$273	\$2,250,000				
CONTINGENCY AT 30%								\$1,530,000				
								\$1,134,000				
TOTAL - DREDGING EVERY 10-YEARS												
63 DREDGING - MARINA & PORT (10-YEAR)	CY	300,000	360,000	500,000	\$18	\$25	\$40	\$19,656,000	\$10,870,000	\$19,680,000	\$30,830,000	
64 CONTAMINATED MATERIAL DISPOSAL	CY	0	36,000	90,000	\$66	\$170	\$273	\$9,000,000				
CONTINGENCY AT 30%								\$6,120,000				
								\$4,536,000				
PROJECT TOTALS IN 2006 DOLLARS		3-YEAR INITIAL DREDGING			DREDGING EVERY 10-YEARS							
DESCRIPTION		LOW (10%)	MEAN	HIGH (90%)	LOW (10%)	MEAN	HIGH (90%)					
ESTIMATE OF CONTRACTOR'S BID		\$1,710,000	\$4,910,000	\$8,440,000	\$10,870,000	\$19,680,000	\$30,830,000					
CONSTRUCTION CONTINGENCY	5%	\$85,500	\$245,500	\$422,000	\$543,500	\$984,000	\$1,541,500					
SALES TAX	9%	\$153,900	\$441,900	\$759,600	\$978,300	\$1,771,200	\$2,774,700					
CONSTRUCTION ENGINEERING	10%	\$171,000	\$491,000	\$844,000	\$1,087,000	\$1,968,000	\$3,083,000					
PERMITTING, ENGINEERING	15%	\$256,500	\$736,500	\$1,266,000	\$1,630,500	\$2,952,000	\$4,624,500					
PORT OVERSIGHT	3%	\$51,300	\$147,300	\$253,200	\$326,100	\$590,400	\$924,900					
PROJECT TOTAL (2006 DOLLARS)		\$2,400,000	\$7,000,000	\$12,000,000	\$15,400,000	\$27,900,000	\$43,800,000					

ALTERNATIVE D

ITEM DESCRIPTION	UNIT	QUANTITY			UNIT PRICE			MEAN TOTAL PRICE	PRICE VARIATION			
		LOW	MEAN	HIGH	LOW	MEAN	HIGH		LOW (10%)	MEAN	HIGH (90%)	
TOTAL - 3-YEAR INITIAL DREDGING												
61 DREDGING - MARINA & PORT (3-YEAR)	CY	0	120,000	240,000	\$18	\$25	\$40	\$6,552,000	\$2,350,000	\$6,540,000	\$11,220,000	
62 CONTAMINATED MATERIAL DISPOSAL	CY	0	12,000	30,000	\$66	\$170	\$273	\$3,000,000				
CONTINGENCY AT 30%								\$2,040,000				
								\$1,512,000				
TOTAL - DREDGING EVERY 10-YEARS												
63 DREDGING - MARINA & PORT (10-YEAR)	CY	300,000	400,000	600,000	\$18	\$25	\$40	\$21,840,000	\$11,710,000	\$21,870,000	\$34,790,000	
64 CONTAMINATED MATERIAL DISPOSAL	CY	0	40,000	100,000	\$66	\$170	\$273	\$10,000,000				
CONTINGENCY AT 30%								\$6,800,000				
								\$5,040,000				
PROJECT TOTALS IN 2006 DOLLARS		3-YEAR INITIAL DREDGING			DREDGING EVERY 10-YEARS							
DESCRIPTION		LOW (10%)	MEAN	HIGH (90%)	LOW (10%)	MEAN	HIGH (90%)					
ESTIMATE OF CONTRACTOR'S BID		\$2,350,000	\$6,540,000	\$11,220,000	\$11,710,000	\$21,870,000	\$34,790,000					
CONSTRUCTION CONTINGENCY	5%	\$117,500	\$327,000	\$561,000	\$585,500	\$1,093,500	\$1,739,500					
SALES TAX	9%	\$211,500	\$588,600	\$1,009,800	\$1,053,900	\$1,968,300	\$3,131,100					
CONSTRUCTION ENGINEERING	10%	\$235,000	\$654,000	\$1,122,000	\$1,171,000	\$2,187,000	\$3,479,000					
PERMITTING, ENGINEERING	15%	\$352,500	\$981,000	\$1,683,000	\$1,756,500	\$3,280,500	\$5,218,500					
PORT OVERSIGHT	3%	\$70,500	\$196,200	\$336,600	\$351,300	\$656,100	\$1,043,700					
PROJECT TOTAL (2006 DOLLARS)		\$3,300,000	\$9,300,000	\$15,900,000	\$16,600,000	\$31,100,000	\$49,400,000					