Table 2. Emission Source Data for Alternative 1.

Activity/Equipment Type/ Disposal Alternative	*HorsePower (Hp)*	*Load Factor*	*Number Active*	*Hp-Hours*	*Fuel Use (Gal/Hr)*	*Hours Per Day*	*Work Days*	*Total Fuel Usage*
Dredging								
Clamshell Dredge	5,000	0.75	2	7,500	420.0	22.0	313.2	2,894,182
Work Tug	400	0.50	2	400	22.4	22.0	313.2	154,356
Barge Equipment	95	0.50	2	95	5.3	22.0	313.2	36,660
Hopper Dredge	2,000	0.75	1	1,500	84.0	16.8	157.3	221,667
Support Boat	850	0.50	3	1,275	71.4	12.0	261.2	223,833
Ocean Site								
Transport/Disposal								
Tug Boat	2,300	0.75	3	5,175	289.8	22.0	170.9	1,089,769
Barge Equipment	95	0.50	3	143	8.0	22.0	170.9	30,008
In-Bay Site								
Transport/Disposal								
Tug Boat	1,050	0.75	2	1,575	88.2	22.0	49.5	96,009
Barge Equipment	95	0.50	2	95	5.3	22.0	49.5	5,791
Hopper Dredge	2,000	0.75	1	1,500	84.0	5.2	157.3	68,994
Habitat Restoration Site								
Transport								
Tug Boat	1,050	0.75	2	1,575	88.2	16.5	40.8	59,535
Barge Equipment	95	0.50	2	95	5.3	16.5	40.8	3,591
Disposal								
Tug Boat	1,050	0.20	2	420	23.5	5.5	40.8	5,248
Barge Equipment	95	0.50	2	95	5.3	5.5	40.8	1,187
Hydraulic Unloader	1,500	0.75	1	1,125	63.0	10.9	40.8	28,116
Booster Pump	1,500	0.75	2	2,250	126.0	10.9	40.8	56,231
Work Tug	400	0.50	1	200	11.2	10.9	40.8	4,998
Generator	69	0.50	1	35	1.9	10.9	40.8	862
Support Boat	250	0.50	1	125	7.0	10.9	40.8	3,124
Levee Site								
Transport								
Tug Boat	1,050	0.75	4	3,150	176.4	17.3	38.8	118,482
Barge Equipment	95	0.50	4	190	10.6	17.3	38.8	7,147
Disposal								
Tug Boat	1,050	0.20	4	840	47.0	4.7	38.8	8,553
Barge Equipment	95	0.50	4	190	10.6	4.7	38.8	1,935
Clamshell Crane	5,000	0.75	1	3,750	210.0	18.7	38.8	152,727
Grader	200	0.50	1	100	5.6	18.7	38.8	4,073
Scraper	330	0.50	1	165	9.2	18.7	38.8	6,720
Bulldozer	285	0.50	2	285	16.0	18.7	38.8	11,607

Table 3. Emission Source Data for Alternative 2.

Activity/Equipment Type/ Disposal Alternative	*HorsePower (Hp)*	*Load Factor*	*Number Active*	*Hp-Hours*	*Fuel Use (Gal/Hr)*	*Hours Per Day*	*Work Days*	*Total Fuel Usage*
Dredging								
Clamshell Dredge	5,000	0.75	2	7,500	420.0	22.0	313.2	2,894,182
Work Tug	400	0.50	2	400	22.4	22.0	313.2	154,356
Barge Equipment	95	0.50	2	95	5.3	22.0	313.2	36,660
Hopper Dredge	2,000	0.75	1	1,500	84.0	16.8	157.3	221,667
Support Boat	850	0.50	3	1,275	71.4	12.0	261.2	223,833
Ocean Site								
Transport/Disposal								
Tug Boat	2,300	0.75	3	5,175	289.8	22.0	85.5	544,884
Barge Equipment	95	0.50	3	143	8.0	22.0	85.5	15,004
In-Bay Site								
Transport/Disposal								
Tug Boat	1,050	0.75	2	1,575	88.2	22.0	49.5	96,009
Barge Equipment	95	0.50	2	95	5.3	22.0	49.5	5,791
Hopper Dredge	2,000	0.75	1	1,500	84.0	5.2	157.3	68,994
Habitat Restoration Site								
Transport								
Tug Boat	1,050	0.75	2	1,575	88.2	16.5	90.0	131,198
Barge Equipment	95	0.50	2	95	5.3	16.5	90.0	7,914
Disposal								
Tug Boat	1,050	0.20	2	420	23.5	5.5	90.0	11,566
Barge Equipment	95	0.50	2	95	5.3	5.5	90.0	2,616
Hydraulic Unloader	1,500	0.75	1	1,125	63.0	10.9	90.0	61,959
Booster Pump	1,500	0.75	2	2,250	126.0	10.9	90.0	123,917
Work Tug	400	0.50	1	200	11.2	10.9	90.0	11,015
Generator	69	0.50	1	35	1.9	10.9	90.0	1,900
Support Boat	250	0.50	1	125	7.0	10.9	90.0	6,884
Levee Site								
Transport								
Tug Boat	1,050	0.75	4	3,150	176.4	17.3	38.8	118,482
Barge Equipment	95	0.50	4	190	10.6	17.3	38.8	7,147
Disposal								
Tug Boat	1,050	0.20	4	840	47.0	4.7	38.8	8,553
Barge Equipment	95	0.50	4	190	10.6	4.7	38.8	1,935
Clamshell Crane	5,000	0.75	1	3,750	210.0	18.7	38.8	152,727
Grader	200	0.50	1	100	5.6	18.7	38.8	4,073
Scraper	330	0.50	1	165	9.2	18.7	38.8	6,720
Bulldozer	285	0.50	2	285	16.0	18.7	38.8	11,607
Rehandling Facility Site								
Transport								
Tug Boat	1,050	0.75	3	2,363	132.3	17.4	18.2	41,895
Barge Equipment	95	0.50	3	143	8.0	17.4	18.2	2,527
Offload/Dewater								
Tug Boat	1,050	0.20	3	630	35.3	4.6	18.2	2,916
Barge Equipment	95	0.50	3	143	8.0	4.6	18.2	660
Hydraulic Unloader	1,500	0.75	1	1,125	63.0	13.7	18.2	15,620
Booster Pump	1,500	0.75	2	2,250	126.0	13.7	18.2	31,240
Work Tug	400	0.50	1	200	11.2	13.7	18.2	2,777
Generator	69	0.50	1	35	1.9	13.7	18.2	479
Support Boat	250	0.50	1	125	7.0	13.7	18.2	1,736
Scraper	330	0.50	1	165	9.2	13.7	18.2	2,291
Bulldozer	285	0.50	2	285	16.0	13.7	18.2	3,957
Load and Transport to Landfill								
Front-end Loader	215	0.50	2	215	12.0	22.0	90.9	24,080
Haul Truck (a)	24	18.86	14	NA	NA	15.1	6,335.9	576,000
Haul Truck (b)	NA	NA	14	NA	NA	3.1	44.0	4,000
Disposal at Landfill								
Haul Truck (b)	NA	NA	14	NA	NA	1.6	22.0	1,999
Grader	200	0.50	1	100	5.6	22.0	90.9	11,200
Scraper	330	0.50	1	165	9.2	22.0	90.9	18,480
Bulldozer	285	0.50	2	285	16.0	22.0	90.9	31,921

(a) For this source, Horsepower is equal to roundtrip distance, Load Factor is the number of roundtrips per truck per day, Work Days is the total daily mileage, and Total Fuel Usage is total miles.

(b) For this source, Work Days is the total number of hours per day at idle and Total Fuel Usage is total number of hours at idle.

Table 4. Emission Source Data for Alternative 3.

Activity/Equipment Type/ Disposal Alternative	HorsePower (Hp)	Load Factor	No. Active	Hp-Hours	Fuel Use (Gal/Hr)	Hours Per Day	Work Days	Total Fuel Usage
Dredging								
Clamshell Dredge	5,000	0.75	2	7,500	420.0	22.0	313.2	2,894,182
Work Tug	400	0.50	2	400	22.4	22.0	313.2	154,356
Barge Equipment	95	0.50	2	95	5.3	22.0	313.2	36,660
Hopper Dredge	2,000	0.75	1	1,500	84.0	16.8	157.3	221,667
Support Boat	850	0.50	3	1,275	71.4	12.0	261.2	223,833
Ocean Site								
Transport/Disposal								
Tug Boat	2,300	0.75	3	5,175	289.8	22.0	170.9	1,089,769
Barge Equipment	95	0.50	3	143	8.0	22.0	170.9	30,008
In-Bay Site								
Transport/Disposal								
Hopper Dredge	2,000	0.75	1	1,500	84.0	5.2	157.3	68,994
Habitat Restoration Site								
Transport								
Tug Boat	1,050	0.75	2	1,575	88.2	16.5	90.0	131,198
Barge Equipment	95	0.50	2	95	5.3	16.5	90.0	7,914
Disposal								
Tug Boat	1,050	0.20	2	420	23.5	5.5	90.0	11,566
Barge Equipment	95	0.50	2	95	5.3	5.5	90.0	2,616
Hydraulic Unloader	1,500	0.75	1	1,125	63.0	10.9	90.0	61,959
Booster Pump	1,500	0.75	2	2,250	126.0	10.9	90.0	123,917
Work Tug	400	0.50	1	200	11.2	10.9	90.0	11,015
Generator	69	0.50	1	35	1.9	10.9	90.0	1,900
Support Boat	250	0.50	1	125	7.0	10.9	90.0	6,884
Levee Site								
Transport								
Tug Boat	1,050	0.75	4	3,150	176.4	17.3	38.8	118,482
Barge Equipment	95	0.50	4	190	10.6	17.3	38.8	7,147
Disposal								
Tug Boat	1,050	0.20	4	840	47.0	4.7	38.8	8,553
Barge Equipment	95	0.50	4	190	10.6	4.7	38.8	1,935
Clamshell Crane	5,000	0.75	1	3,750	210.0	18.7	38.8	152,727
Grader	200	0.50	1	100	5.6	18.7	38.8	4,073
Scraper	330	0.50	1	165	9.2	18.7	38.8	6,720
Bulldozer	285	0.50	2	285	16.0	18.7	38.8	11,607
Rehandling Facility Site								
Transport								
Tug Boat	1,050	0.75	3	2,363	132.3	17.4	18.2	41,895
Barge Equipment	95	0.50	3	143	8.0	17.4	18.2	2,527
Offload/Dewater								
Tug Boat	1,050	0.20	3	630	35.3	4.6	18.2	2,916
Barge Equipment	95	0.50	3	143	8.0	4.6	18.2	660
Hydraulic Unloader	1,500	0.75	1	1,125	63.0	13.7	18.2	15,620
Booster Pump	1,500	0.75	2	2,250	126.0	13.7	18.2	31,240
Work Tug	400	0.50	1	200	11.2	13.7	18.2	2,777
Generator	69	0.50	1	35	1.9	13.7	18.2	479
Support Boat	250	0.50	1	125	7.0	13.7	18.2	1,736
Scraper	330	0.50	1	165	9.2	13.7	18.2	2,291
Bulldozer	285	0.50	2	285	16.0	13.7	18.2	3,957
Load and Transport to Landfill								
Front-end Loader	215	0.50	2	215	12.0	22.0	90.9	24,080
Haul Truck (a)	24	18.86	14	NA	NA	15.1	6,335.9	576,000
Haul Truck (b)	NA	NA	14	NA	NA	3.1	44.0	4,000
Disposal at Landfill								
Haul Truck (b)	NA	NA	14	NA	NA	1.6	22.0	1,999
Grader	200	0.50	1	100	5.6	22.0	90.9	11,200
Scraper	330	0.50	1	165	9.2	22.0	90.9	18,480
Bulldozer	285	0.50	2	285	16.0	22.0	90.9	31,921

(a) For this source, Horsepower is equal to roundtrip distance, Load Factor is the number of roundtrips per truck per day, Work Days is the total daily mileage, and Total Fuel Usage is total miles.

(b) For this source, Work Days is the total number of hours per day at idle and Total Fuel Usage is total number of hours at idle.

Table 5. Equipment Emission Factors for Sources Associated with the LTMS Program.

Equipment Type	*Fuel Type*	*Emission Factors (Pounds/1000 Gallons)*							
		TOG	*ROG*	*CO*	*NOx*	*SO2*	*PM*	*PM10*	*Source*
Clamshell Dredge	D	12.33	11.84	110.99	424.79	27.68	10.46	6.80	(a)
Hopper Dredge	D	59.10	56.74	43.70	364.00	27.00	10.46	6.80	(b)
Tugs	D	45.70	43.87	70.20	407.50	28.50	33.00	31.68	(c)
Barge Equipment	D	58.93	56.57	130.18	604.30	39.74	42.48	40.78	(d)
Support Boat	D	45.70	43.87	70.20	407.50	28.50	33.00	31.68	(c)
Hydraulic Unloader	D	59.10	56.74	43.70	364.00	27.00	10.46	6.80	(b)
Booster Pump	D	12.33	11.84	110.99	424.79	27.68	10.46	6.80	(a)
Generator	D	40.48	38.86	153.51	258.60	31.20	27.30	26.21	(e)
Clamshell Crane	D	12.33	11.84	110.99	424.79	27.68	10.46	6.80	(a)
Grader	D	17.04	16.36	54.65	253.84	31.10	22.20	21.31	(e)
Scraper	D	28.69	27.54	84.60	368.01	31.10	30.10	28.90	(e)
Bulldozer	D	33.82	32.47	78.50	284.92	31.10	25.30	24.29	(e)
Front-end Loader	D	50.33	48.32	98.66	321.23	31.20	29.30	28.13	(e)
Haul Truck (f)	D	2.30	2.21	8.78	10.41	0.00	2.11	2.03	(g)
Haul Truck (h)	D	31.00	29.76	178.80	92.85	0.00	10.55	10.13	(i)

Notes:
(a) AP-42, Tables 3.4-1 and 3.4-5, Vol. I (EPA 1993).
(b) TOG, CO, NOx, and SO2 from AP-42, Table II-3.4, Vol. II (EPA, 1985). PM/PM10 from Table 3.4-5, Vol. I (EPA, 1993). Assumes the use of 500-kW diesel-powered electrical generators operating at 75 percent load.
(c) ARB (1984), except SO2 and PM from Scott Environmental Technology (1981).
(d) AP-42, Table 3.3-1, Vol. I (EPA 1993).
(e) AP-42, Table II-7.1, Vol. II (EPA 1985).
(f) Emission factors are in grams/mile.
(g) EMFAC7F for year 2000 heavy duty diesel trucks at 30 mph.
(h) Emission factors are in grams/hour for idle condition.
(i) EMFAC7F for year 2000 heavy duty diesel trucks at 5 mph (equivalent to idle).

D = Diesel
TOG = Total Organic Gases
ROG = Reactive Organic Gases
CO = Carbon Monoxide
NOx = Nitrogen Oxides
SO2 = Sulfur Dioxide
PM = Particulate Matter
PM10 = Particulates less than 10 Microns in Diameter

Table 6. Daily Emissions for the No-Action Alternative.

Activity/Equipment Type/ Disposal Alternative	*Daily Emissions (Pounds/Day)*						
	TOG	*ROG*	*CO*	*NOx*	*SO2*	*PM*	*PM10*
Dredging							
Clamshell Dredge	114	109	1,026	3,925	256	97	63
Work Tug	23	22	35	201	14	16	16
Barge Equipment	7	7	15	71	5	5	5
Hopper Dredge	83	80	62	513	38	15	10
Support Boat	39	38	60	349	24	28	27
Total	266	255	1,197	5,059	337	161	120
Ocean Site							
Transport/Disposal							
Tug Boat	291	280	448	2,598	182	210	202
Barge Equipment	10	10	23	106	7	7	7
Total	302	290	470	2,704	189	218	209
In-Bay Site							
Transport/Disposal							
Tug Boat	89	85	136	791	55	64	61
Barge Equipment	7	7	15	71	5	5	5
Hopper Dredge	26	25	19	160	12	5	3
Total	121	117	171	1,021	72	74	69
Habitat Restoration Site							
Transport							
Tug Boat	67	64	102	594	42	48	46
Barge Equipment	5	5	11	53	3	4	4
Disposal							
Tug Boat	6	6	9	52	4	4	4
Barge Equipment	2	2	4	18	1	1	1
Hydraulic Unloader	41	39	30	251	19	7	5
Booster Pump	17	16	153	585	38	14	9
Work Tug	6	5	9	50	3	4	4
Generator	1	1	3	5	1	1	1
Support Boat	3	3	5	31	2	3	2
Total	147	141	327	1,640	113	86	76
Levee Site							
Transport							
Tug Boat	140	134	214	1,245	87	101	97
Barge Equipment	11	10	24	111	7	8	8
Disposal							
Tug Boat	10	10	15	90	6	7	7
Barge Equipment	3	3	6	30	2	2	2
Clamshell Crane	49	47	437	1,672	109	41	27
Grader	2	2	6	27	3	2	2
Scraper	5	5	15	64	5	5	5
Bulldozer	10	10	23	85	9	8	7
Total	229	220	741	3,324	230	174	155
Peak Daily (a)	568	545	1,938	8,383	566	379	329

(a) Transport and disposal for Ocean, In-Bay, Habitat Restoration, and Levee sites occur at only one site at a time. Peak daily CO, NOx, and SO2 emissions occur during dredging, transport, and disposal to Levee site. Peak daily emissions of all other pollutants occur during dredging, transport, and disposal to Ocean site.

Table 7. Daily Emissions for Alternative 1.

Activity/Equipment Type/ Disposal Alternative	*Daily Emissions (Pounds/Day)*						
	TOG	*ROG*	*CO*	*NOx*	*SO2*	*PM*	*PM10*
Dredging							
Clamshell Dredge	114	109	1,026	3,925	256	97	63
Work Tug	23	22	35	201	14	16	16
Barge Equipment	7	7	15	71	5	5	5
Hopper Dredge	83	80	62	513	38	15	10
Support Boat	39	38	60	349	24	28	27
Total	266	255	1,197	5,059	337	161	120
Ocean Site							
Transport/Disposal							
Tug Boat	291	280	448	2,598	182	210	202
Barge Equipment	10	10	23	106	7	7	7
Total	302	290	470	2,704	189	218	209
In-Bay Site							
Transport/Disposal							
Tug Boat	89	85	136	791	55	64	61
Barge Equipment	7	7	15	71	5	5	5
Hopper Dredge	26	25	19	160	12	5	3
Total	121	117	171	1,021	72	74	69
Habitat Restoration Site							
Transport							
Tug Boat	67	64	102	594	42	48	46
Barge Equipment	5	5	11	53	3	4	4
Disposal							
Tug Boat	6	6	9	52	4	4	4
Barge Equipment	2	2	4	18	1	1	1
Hydraulic Unloader	41	39	30	251	19	7	5
Booster Pump	17	16	153	585	38	14	9
Work Tug	6	5	9	50	3	4	4
Generator	1	1	3	5	1	1	1
Support Boat	3	3	5	31	2	3	2
Total	147	141	327	1,640	113	86	76
Levee Site							
Transport							
Tug Boat	140	134	214	1,245	87	101	97
Barge Equipment	11	10	24	111	7	8	8
Disposal							
Tug Boat	10	10	15	90	6	7	7
Barge Equipment	3	3	6	30	2	2	2
Clamshell Crane	49	47	437	1,672	109	41	27
Grader	2	2	6	27	3	2	2
Scraper	5	5	15	64	5	5	5
Bulldozer	10	10	23	85	9	8	7
Total	229	220	741	3,324	230	174	155
Peak Daily (a)	568	545	1,938	8,383	566	379	329

(a) Transport and disposal for Ocean, In-Bay, Habitat Restoration, and Levee sites occur at only one site at a time. Peak daily CO, NOx, and SO2 emissions occur during dredging, transport, and disposal to Levee site. Peak daily emissions of all other pollutants occur during dredging, transport, and disposal to Ocean site.

Table 8. Daily Emissions for Alternative 2.

Activity/Equipment Type/ Disposal Alternative	Daily Emissions (Pounds/Day)						
	TOG	ROG	CO	NOx	SO2	PM	PM10
Dredging							
Clamshell Dredge	114	109	1,026	3,925	256	97	63
Work Tug	23	22	35	201	14	16	16
Barge Equipment	7	7	15	71	5	5	5
Hopper Dredge	83	80	62	513	38	15	10
Support Boat	39	38	60	349	24	28	27
Total	266	255	1,197	5,059	337	161	120
Ocean Site							
Transport/Disposal							
Tug Boat	291	280	448	2,598	182	210	202
Barge Equipment	10	10	23	106	7	7	7
Total	302	290	470	2,704	189	218	209
In-Bay Site							
Transport/Disposal							
Tug Boat	89	85	136	791	55	64	61
Barge Equipment	7	7	15	71	5	5	5
Hopper Dredge	26	25	19	160	12	5	3
Total	121	117	171	1,021	72	74	69
Habitat Restoration Site							
Transport							
Tug Boat	67	64	102	594	42	48	46
Barge Equipment	5	5	11	53	3	4	4
Disposal							
Tug Boat	6	6	9	52	4	4	4
Barge Equipment	2	2	4	18	1	1	1
Hydraulic Unloader	41	39	30	251	19	7	5
Booster Pump	17	16	153	585	38	14	9
Work Tug	6	5	9	50	3	4	4
Generator	1	1	3	5	1	1	1
Support Boat	3	3	5	31	2	3	2
Total	147	141	327	1,640	113	86	76
Levee Site							
Transport							
Tug Boat	140	134	214	1,245	87	101	97
Barge Equipment	11	10	24	111	7	8	8
Disposal							
Tug Boat	10	10	15	90	6	7	7
Barge Equipment	3	3	6	30	2	2	2
Clamshell Crane	49	47	437	1,672	109	41	27
Grader	2	2	6	27	3	2	2
Scraper	5	5	15	64	5	5	5
Bulldozer	10	10	23	85	9	8	7
Total	229	220	741	3,324	230	174	155
Rehandling Facility Site							
Transport							
Tug Boat	105	101	162	941	66	76	73
Barge Equipment	8	8	18	84	6	6	6
Offload/Dewater							
Tug Boat	7	7	11	65	5	5	5
Barge Equipment	2	2	5	22	1	2	1
Hydraulic Unloader	51	49	38	313	23	9	6
Booster Pump	21	20	191	731	48	18	12
Work Tug	7	7	11	62	4	5	5
Generator	1	1	4	7	1	1	1
Support Boat	4	4	7	39	3	3	3
Scraper	4	3	11	46	4	4	4
Bulldozer	7	7	17	62	7	6	5
Load and Transport to Landfill							
Front-end Loader	13	13	26	85	8	8	7
Haul Truck	35	34	140	154	0	30	29
Disposal at Landfill							
Haul Truck	2	1	9	5	0	1	0
Grader	2	2	7	31	4	3	3
Scraper	6	6	17	75	6	6	6
Bulldozer	12	11	28	100	11	9	9
Total	288	277	700	2,823	196	191	175
Peak Daily (a)	368	345	1,938	8,383	566	379	329

(a) Transport and disposal for Ocean, In-Bay, Habitat Restoration, Levee, and Rehandling Facility sites occur at only one site at a time. Peak daily CO, NOx, and SO2 emissions occur during dredging, transport, and disposal to Levee site. Peak daily emissions of all other pollutants occur during dredging, transport, and disposal to Ocean site.

Table 9. Daily Emissions for Alternative 3.

Activity/Equipment Type/ Disposal Alternative	*Daily Emissions (Pounds/Day)*						
	TOG	*ROG*	*CO*	*NOx*	*SO2*	*PM*	*PM10*
Dredging							
Clamshell Dredge	114	109	1,026	3,925	256	97	63
Work Tug	23	22	35	201	14	16	16
Barge Equipment	7	7	15	71	5	5	5
Hopper Dredge	83	80	62	513	38	15	10
Support Boat	39	38	60	349	24	28	27
Total	266	255	1,197	5,059	337	161	120
Ocean Site							
Transport/Disposal							
Tug Boat	291	280	448	2,598	182	210	202
Barge Equipment	10	10	23	106	7	7	7
Total	302	290	470	2,704	189	218	209
In-Bay Site							
Transport/Disposal							
Hopper Dredge	26	25	19	160	12	5	3
Total	26	25	19	160	12	5	3
Habitat Restoration Site							
Transport							
Tug Boat	67	64	102	594	42	48	46
Barge Equipment	5	5	11	53	3	4	4
Disposal							
Tug Boat	6	6	9	52	4	4	4
Barge Equipment	2	2	4	18	1	1	1
Hydraulic Unloader	41	39	30	251	19	7	5
Booster Pump	17	16	153	585	38	14	9
Work Tug	6	5	9	50	3	4	4
Generator	1	1	3	5	1	1	1
Support Boat	3	3	5	31	2	3	2
Total	147	141	327	1,640	113	86	76
Levee Site							
Transport							
Tug Boat	140	134	214	1,245	87	101	97
Barge Equipment	11	10	24	111	7	8	8
Disposal							
Tug Boat	10	10	15	90	6	7	7
Barge Equipment	3	3	6	30	2	2	2
Clamshell Crane	49	47	437	1,672	109	41	27
Grader	2	2	6	27	3	2	2
Scraper	5	5	15	64	5	5	5
Bulldozer	10	10	23	85	9	8	7
Total	229	220	741	3,324	230	174	155
Rehandling Facility Site							
Transport							
Tug Boat	105	101	162	941	66	76	73
Barge Equipment	8	8	18	84	6	6	6
Offload/Dewater							
Tug Boat	7	7	11	65	5	5	5
Barge Equipment	2	2	5	22	1	2	1
Hydraulic Unloader	51	49	38	313	23	9	6
Booster Pump	21	20	191	731	48	18	12
Work Tug	7	7	11	62	4	5	5
Generator	1	1	4	7	1	1	1
Support Boat	4	4	7	39	3	3	3
Scraper	4	3	11	46	4	4	4
Bulldozer	7	7	17	62	7	6	5
Load and Transport to Landfill							
Front-end Loader	13	13	26	85	8	8	7
Haul Truck	35	34	140	154	0	30	29
Disposal at Landfill							
Haul Truck	2	1	9	5	0	1	0
Grader	2	2	7	31	4	3	3
Scraper	6	6	17	75	6	6	6
Bulldozer	12	11	28	100	11	9	9
Total	288	277	700	2,823	196	191	175
Peak Daily (a)	568	545	1,938	8,383	566	379	329

(a) Transport and disposal for Ocean, In-Bay, Habitat Restoration, Levee, and Rehandling Facility sites occur at only one site at a time. Peak daily CO, NOx, and SO2 emissions occur during dredging, transport, and disposal to Levee site. Peak daily emissions of all other pollutants occur during dredging, transport, and disposal to Ocean site.

Table 10. Total Emissions for No-Action Alternative.

Activity/Equipment Type/ Disposal Alternative	*Total Emissions (tons)*						
	TOG	*ROG*	*CO*	*NOx*	*SO2*	*PM*	*PM10*
Dredging							
Clamshell Dredge	17.84	17.13	160.61	614.71	40.06	15.14	9.84
Work Tug	3.53	3.39	5.42	31.45	2.20	2.55	2.45
Barge Equipment	1.08	1.04	2.39	11.08	0.73	0.78	0.75
Hopper Dredge	6.55	6.29	4.84	40.34	2.99	1.16	0.75
Support Boat	5.11	4.91	7.86	45.61	3.19	3.69	3.55
Total	34.11	32.75	181.12	743.19	49.17	23.31	17.33
Ocean Site							
Transport/Disposal							
Tug Boat	9.31	8.93	14.29	82.97	5.80	6.72	6.45
Barge Equipment	0.33	0.32	0.73	3.39	0.22	0.24	0.23
Total	9.64	9.25	15.02	86.36	6.03	6.96	6.68
In-Bay Site							
Transport/Disposal							
Tug Boat	5.47	5.25	8.41	48.80	3.41	3.95	3.79
Barge Equipment	0.43	0.41	0.94	4.37	0.29	0.31	0.29
Hopper Dredge	2.04	1.96	1.51	12.56	0.93	0.36	0.23
Total	7.94	7.62	10.85	65.72	4.63	4.62	4.32
Habitat Restoration Site							
Transport							
Tug Boat	1.01	0.97	1.55	8.99	0.63	0.73	0.70
Barge Equipment	0.08	0.08	0.17	0.80	0.05	0.06	0.05
Disposal							
Tug Boat	0.09	0.09	0.14	0.79	0.06	0.06	0.06
Barge Equipment	0.03	0.02	0.06	0.27	0.02	0.02	0.02
Hydraulic Unloader	0.62	0.59	0.46	3.79	0.28	0.11	0.07
Booster Pump	0.26	0.25	2.31	8.85	0.58	0.22	0.14
Work Tug	0.08	0.08	0.13	0.75	0.05	0.06	0.06
Generator	0.01	0.01	0.05	0.08	0.01	0.01	0.01
Support Boat	0.05	0.05	0.08	0.47	0.03	0.04	0.04
Total	2.22	2.13	4.94	24.79	1.71	1.30	1.15
Levee Site							
Transport							
Tug Boat	2.10	2.01	3.22	18.71	1.31	1.52	1.45
Barge Equipment	0.16	0.16	0.36	1.67	0.11	0.12	0.11
Disposal							
Tug Boat	0.15	0.15	0.23	1.35	0.09	0.11	0.10
Barge Equipment	0.04	0.04	0.10	0.45	0.03	0.03	0.03
Clamshell Crane	0.73	0.70	6.57	25.14	1.64	0.62	0.40
Grader	0.03	0.03	0.09	0.40	0.05	0.04	0.03
Scraper	0.07	0.07	0.22	0.96	0.08	0.08	0.08
Bulldozer	0.15	0.15	0.35	1.28	0.14	0.11	0.11
Total	3.44	3.30	11.14	49.97	3.45	2.62	2.32
Grand Total .	57.35	55.06	223.08	970.03	64.98	38.81	31.81

Table 11. Total Emissions for Alternative 1.

Activity/Equipment Type/ Disposal Alternative	*Total Emissions (tons)*						
	TOG	*ROG*	*CO*	*NOx*	*SO2*	*PM*	*PM10*
Dredging							
Clamshell Dredge	17.84	17.13	160.61	614.71	40.06	15.14	9.84
Work Tug	3.53	3.39	5.42	31.45	2.20	2.55	2.45
Barge Equipment	1.08	1.04	2.39	11.08	0.73	0.78	0.75
Hopper Dredge	6.55	6.29	4.84	40.34	2.99	1.16	0.75
Support Boat	5.11	4.91	7.86	45.61	3.19	3.69	3.55
Total	34.11	32.75	181.12	743.19	49.17	23.31	17.33
Ocean Site							
Transport/Disposal							
Tug Boat	24.90	23.91	38.25	222.04	15.53	17.98	17.26
Barge Equipment	0.88	0.85	1.95	9.07	0.60	0.64	0.61
Total	25.79	24.75	40.20	231.11	16.13	18.62	17.87
In-Bay Site							
Transport/Disposal							
Tug Boat	2.19	2.11	3.37	19.56	1.37	1.58	1.52
Barge Equipment	0.17	0.16	0.38	1.75	0.12	0.12	0.12
Hopper Dredge	2.04	1.96	1.51	12.56	0.93	0.36	0.23
Total	4.40	4.23	5.25	33.87	2.41	2.07	1.87
Habitat Restoration Site							
Transport							
Tug Boat	1.36	1.31	2.09	12.13	0.85	0.98	0.94
Barge Equipment	0.11	0.10	0.23	1.09	0.07	0.08	0.07
Disposal							
Tug Boat	0.12	0.12	0.18	1.07	0.07	0.09	0.08
Barge Equipment	0.03	0.03	0.08	0.36	0.02	0.03	0.02
Hydraulic Unloader	0.83	0.80	0.61	5.12	0.38	0.15	0.10
Booster Pump	0.35	0.33	3.12	11.94	0.78	0.29	0.19
Work Tug	0.11	0.11	0.18	1.02	0.07	0.08	0.08
Generator	0.02	0.02	0.07	0.11	0.01	0.01	0.01
Support Boat	0.07	0.07	0.11	0.64	0.04	0.05	0.05
Total	3.00	2.88	6.67	33.47	2.31	1.76	1.55
Levee Site							
Transport							
Tug Boat	2.71	2.60	4.16	24.14	1.69	1.95	1.88
Barge Equipment	0.21	0.20	0.47	2.16	0.14	0.15	0.15
Disposal							
Tug Boat	0.20	0.19	0.30	1.74	0.12	0.14	0.14
Barge Equipment	0.06	0.05	0.13	0.58	0.04	0.04	0.04
Clamshell Crane	0.94	0.90	8.48	32.44	2.11	0.80	0.52
Grader	0.03	0.03	0.11	0.52	0.06	0.05	0.04
Scraper	0.10	0.09	0.28	1.24	0.10	0.10	0.10
Bulldozer	0.20	0.19	0.46	1.65	0.18	0.15	0.14
Total	4.44	4.26	14.38	64.47	4.45	3.38	3.00
Grand Total	71.74	68.87	247.62	1,106.10	74.46	49.14	41.63