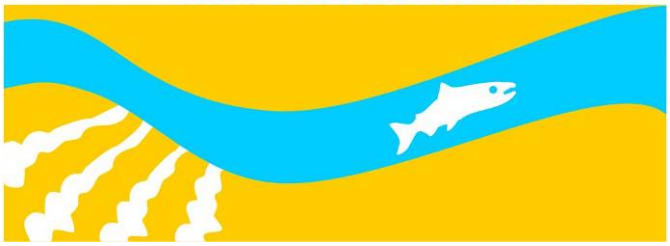
Mendota Pool Bypass and Reach 2B Improvements Project

Final
Environmental Impact Statement/Report

Part V – Appendices to the EIS/R

SAN JOAQUIN RIVER
RESTORATION PROGRAM



Final
July 2016

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Mendota Pool Bypass and Reach 2B Improvements Project

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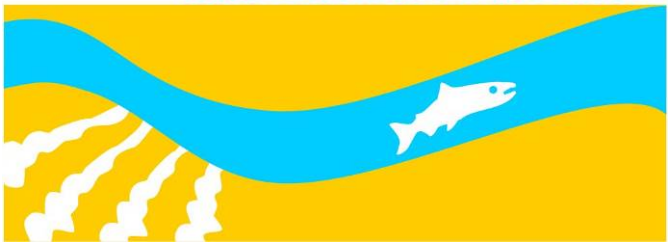
Appendix 4-A Air Quality Summary Tables

SAN JOAQUIN RIVER
RESTORATION PROGRAM



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Construction Offroad Emissions - Onsite Equipment

Schedule Name	Year	CO	NOX	ROG	SOX	PM	CO2
		tons					Metric tons
2	2014	10.01	27.86	2.21	0.02	1.05	2,340.88
2	2015	32.66	86.39	7.18	0.09	3.28	8,102.61
2	2016	33.26	93.00	7.99	0.10	3.60	9,088.61
2	2017	12.45	34.77	3.03	0.04	1.35	3,478.90
4	2014	11.30	31.13	2.50	0.03	1.17	2,670.14
4	2015	37.20	99.55	8.32	0.10	3.80	9,389.71
4	2016	30.34	85.68	7.42	0.09	3.33	8,487.36
4	2017	13.36	36.73	3.18	0.04	1.43	3,651.31
4	2018	4.36	12.75	1.12	0.01	0.50	1,298.30
7	2018	17.93	48.02	3.90	0.04	1.82	4,183.76
7	2019	18.14	49.41	4.18	0.05	1.86	4,938.91
7	2020	40.20	109.40	9.27	0.11	4.16	10,662.16
7	2021	35.91	98.07	8.39	0.10	3.74	9,719.92
7	2022	15.82	43.64	3.72	0.05	1.66	4,288.85
7	2023	11.45	32.16	2.79	0.03	1.24	3,234.45
8	2018	17.93	48.02	3.90	0.04	1.82	4,183.76
8	2019	18.10	49.32	4.17	0.05	1.85	4,930.36
8	2020	26.92	73.20	6.18	0.08	2.77	7,163.81
8	2021	18.70	50.42	4.31	0.05	1.92	5,025.10
8	2022	15.87	43.95	3.76	0.05	1.68	4,388.79
8	2023	9.89	27.82	2.42	0.03	1.08	2,790.45
9	2018	7.90	21.11	1.72	0.02	0.80	1,890.13
9	2019	28.82	78.08	6.54	0.08	2.96	7,476.20
9	2020	24.55	66.94	5.70	0.07	2.55	6,523.27
9	2021	33.53	92.02	7.82	0.09	3.50	8,990.41
9	2022	16.12	45.12	3.87	0.05	1.74	4,416.27

Alternative	Year	CO	NOX	ROG	SOX	PM	CO2
		tons					Metric tons
A	2014	10.01	27.86	2.21	0.02	1.05	2,340.88
A	2015	32.66	86.39	7.18	0.09	3.28	8,102.61
A	2016	33.26	93.00	7.99	0.10	3.60	9,088.61
A	2017	12.45	34.77	3.03	0.04	1.35	3,478.90
A	2018	17.93	48.02	3.90	0.04	1.82	4,183.76
A	2019	18.14	49.41	4.18	0.05	1.86	4,938.91
A	2020	40.20	109.40	9.27	0.11	4.16	10,662.16
A	2021	35.91	98.07	8.39	0.10	3.74	9,719.92
A	2022	15.82	43.64	3.72	0.05	1.66	4,288.85
A	2023	11.45	32.16	2.79	0.03	1.24	3,234.45
B	2014	11.30	31.13	2.50	0.03	1.17	2,670.14
B	2015	37.20	99.55	8.32	0.10	3.80	9,389.71
B	2016	30.34	85.68	7.42	0.09	3.33	8,487.36
B	2017	13.36	36.73	3.18	0.04	1.43	3,651.31
B	2018	22.29	60.77	5.02	0.06	2.32	5,482.06
B	2019	18.10	49.32	4.17	0.05	1.85	4,930.36
B	2020	26.92	73.20	6.18	0.08	2.77	7,163.81
B	2021	18.70	50.42	4.31	0.05	1.92	5,025.10
B	2022	15.87	43.95	3.76	0.05	1.68	4,388.79
B	2023	9.89	27.82	2.42	0.03	1.08	2,790.45
C	2014	10.01	27.86	2.21	0.02	1.05	2,340.88
C	2015	32.66	86.39	7.18	0.09	3.28	8,102.61
C	2016	33.26	93.00	7.99	0.10	3.60	9,088.61
C	2017	12.45	34.77	3.03	0.04	1.35	3,478.90
C	2018	7.90	21.11	1.72	0.02	0.80	1,890.13
C	2019	28.82	78.08	6.54	0.08	2.96	7,476.20
C	2020	24.55	66.94	5.70	0.07	2.55	6,523.27
C	2021	33.53	92.02	7.82	0.09	3.50	8,990.41
C	2022	16.12	45.12	3.87	0.05	1.74	4,416.27
D	2014	11.30	31.13	2.50	0.03	1.17	2,670.14
D	2015	37.20	99.55	8.32	0.10	3.80	9,389.71
D	2016	30.34	85.68	7.42	0.09	3.33	8,487.36
D	2017	13.36	36.73	3.18	0.04	1.43	3,651.31
D	2018	12.26	33.86	2.85	0.03	1.30	3,188.43
D	2019	28.82	78.08	6.54	0.08	2.96	7,476.20
D	2020	24.55	66.94	5.70	0.07	2.55	6,523.27
D	2021	33.53	92.02	7.82	0.09	3.50	8,990.41
D	2022	16.12	45.12	3.87	0.05	1.74	4,416.27
A	Total	227.83	622.71	52.66	0.63	23.76	60,039.05
B	Total	203.98	558.55	47.29	0.57	21.35	53,979.09
C	Total	199.29	545.29	46.07	0.55	20.83	52,307.27
D	Total	207.48	569.10	48.21	0.58	21.77	54,793.09

Notes:

1. Activity data was provided by DWR according to 5 report schedules with a specified combination of report schedules for a given alternative. The second report added for an alternative had a start date assumed of 9/1/2018.

2. On-site equipment includes all construction equipment specified on DWR report schedules except hauling trucks associated with potential off-site borrow material hauling activities.

3. Emission factors are based on OFFROAD 2011 as compiled in the Roadway Model. The emission factors are all from year 2014 regardless of the calendar year contained in the schedule to be conservative and flexible with scheduling of specific construction phases.

Construction Offroad Emissions - Borrow Material Hauling Trucks On-road

Schedule Name	Year	CO	NOX	ROG	SOX	PM	CO2
		tons					Metric tons
2	2014	1.31	3.86	0.34	0.004	0.15	393.94
2	2015	0.62	1.82	0.16	0.002	0.07	185.96
2	2016	0.70	2.06	0.18	0.002	0.08	210.18
2	2017	-	-	-	-	-	-
4	2014	1.31	3.86	0.34	0.004	0.15	393.94
4	2015	0.78	2.30	0.20	0.002	0.09	234.50
4	2016	0.42	1.22	0.11	0.001	0.05	124.89
4	2017	-	-	-	-	-	-
4	2018	-	-	-	-	-	-
7	2018	1.02	3.01	0.26	0.003	0.12	307.07
7	2019	0.40	1.16	0.10	0.001	0.04	118.74
7	2020	0.97	2.84	0.25	0.003	0.11	290.03
7	2021	0.20	0.59	0.05	0.001	0.02	59.79
7	2022	0.42	1.24	0.11	0.001	0.05	126.25
7	2023	0.08	0.22	0.02	0.0002	0.01	22.86
8	2018	1.02	3.01	0.26	0.003	0.12	307.07
8	2019	0.40	1.16	0.10	0.001	0.04	118.74
8	2020	0.22	0.66	0.06	0.001	0.03	67.36
8	2021	0.31	0.92	0.08	0.001	0.04	94.09
8	2022	0.31	0.90	0.08	0.001	0.03	91.96
8	2023	0.08	0.22	0.02	0.0002	0.01	22.86
9	2018	0.43	1.28	0.11	0.001	0.05	130.24
9	2019	0.56	1.63	0.14	0.002	0.06	166.83
9	2020	3.02	8.87	0.78	0.010	0.34	906.06
9	2021	1.69	4.95	0.44	0.005	0.19	505.98
9	2022	0.14	0.40	0.04	0.000	0.02	40.96

Alternative	Year	CO	NOX	ROG	SOX	PM	CO2
		tons					Metric tons
A	2014	1.31	3.86	0.34	0.00	0.15	393.94
A	2015	0.62	1.82	0.16	0.00	0.07	185.96
A	2016	0.70	2.06	0.18	0.00	0.08	210.18
A	2017	-	-	-	-	-	-
A	2018	1.02	3.01	0.26	0.00	0.12	307.07
A	2019	0.40	1.16	0.10	0.00	0.04	118.74
A	2020	0.97	2.84	0.25	0.00	0.11	290.03
A	2021	0.20	0.59	0.05	0.00	0.02	59.79
A	2022	0.42	1.24	0.11	0.00	0.05	126.25
A	2023	0.08	0.22	0.02	0.00	0.01	22.86
B	2014	1.31	3.86	0.34	0.00	0.15	393.94
B	2015	0.78	2.30	0.20	0.00	0.09	234.50
B	2016	0.42	1.22	0.11	0.00	0.05	124.89
B	2017	-	-	-	-	-	-
B	2018	1.02	3.01	0.26	0.00	0.12	307.07
B	2019	0.40	1.16	0.10	0.00	0.04	118.74
B	2020	0.22	0.66	0.06	0.00	0.03	67.36
B	2021	0.31	0.92	0.08	0.00	0.04	94.09
B	2022	0.31	0.90	0.08	0.00	0.03	91.96
B	2023	0.08	0.22	0.02	0.00	0.01	22.86
C	2014	1.31	3.86	0.34	0.00	0.15	393.94
C	2015	0.62	1.82	0.16	0.00	0.07	185.96
C	2016	0.70	2.06	0.18	0.00	0.08	210.18
C	2017	-	-	-	-	-	-
C	2018	0.43	1.28	0.11	0.00	0.05	130.24
C	2019	0.56	1.63	0.14	0.00	0.06	166.83
C	2020	3.02	8.87	0.78	0.01	0.34	906.06
C	2021	1.69	4.95	0.44	0.01	0.19	505.98
C	2022	0.14	0.40	0.04	0.00	0.02	40.96
D	2014	1.31	3.86	0.34	0.00	0.15	393.94
D	2015	0.78	2.30	0.20	0.00	0.09	234.50
D	2016	0.42	1.22	0.11	0.00	0.05	124.89
D	2017	-	-	-	-	-	-
D	2018	0.43	1.28	0.11	0.00	0.05	130.24
D	2019	0.56	1.63	0.14	0.00	0.06	166.83
D	2020	3.02	8.87	0.78	0.01	0.34	906.06
D	2021	1.69	4.95	0.44	0.01	0.19	505.98
D	2022	0.14	0.40	0.04	0.00	0.02	40.96
A	Total	5.72	16.79	1.48	0.02	0.64	1,714.81
B	Total	4.86	14.25	1.25	0.02	0.55	1,455.40
C	Total	8.48	24.88	2.19	0.03	0.95	2,540.15
D	Total	8.35	24.52	2.15	0.03	0.94	2,503.41

Notes:

1. Activity data was provided by DWR according to 5 report schedules with a specified combination of report schedules for a given alternative. The second report added for an alternative had a start date assumed of 9/1/2018.

2. Borrow material hauling trucks include only haul trucks associated with potential off-site borrow material hauling activities as specified on DWR report schedules. Borrow material hauling activity and emissions are assumed to occur on roadways between project areas.

3. Emission factors are based on OFFROAD 2011 as compiled in the Roadway Model. The emission factors are all from year 2014 regardless of the calendar year contained in the schedule to be conservative and flexible with scheduling of specific construction phases.

Construction Offroad Emission Factors

EquipID	Equipment Name	OFFROAD Equipment Name	AvgHP	LF	CO	CO2	NOX	PM	ROG	SOX
					g/hp-hr					
1	Pickup	Off-Highway Trucks	372	0.38	0.6099	201.4303	1.7895	0.0686	0.1573	0.0019
2	Flatrack Truck	Off-Highway Trucks	372	0.38	0.6099	201.4303	1.7895	0.0686	0.1573	0.0019
3	Air Compressor (Sullair 125)	Air Compressors	78	0.48	1.8614	272.7838	2.6861	0.2370	0.4312	0.0032
4	Loader JD 210C 4x4 (Cat 416)	Tractors/Loaders/Backhoes	83	0.37	0.9137	195.0935	2.0565	0.1616	0.2245	0.0019
5	Loader/Backhoe JD 710 (Cat 446)	Tractors/Loaders/Backhoes	83	0.37	0.9137	195.0935	2.0565	0.1616	0.2245	0.0019
6	Excavator Cat 330L	Excavators	218	0.38	0.9736	199.9869	1.6704	0.0530	0.1176	0.0019
7	Excavator Cat 345	Excavators	329	0.38	0.9697	199.1718	1.2804	0.0413	0.0930	0.0019
8	Loader Cat 950	Rubber Tired Loaders	206	0.36	0.8853	188.3234	1.9882	0.0676	0.1540	0.0018
9	Loader Cat 966	Rubber Tired Loaders	320	0.36	0.8824	187.6982	1.8793	0.0708	0.1595	0.0018
10	Loader Cat 980	Rubber Tired Loaders	320	0.36	0.8824	187.6982	1.8793	0.0708	0.1595	0.0018
11	Dozer Cat D6	Rubber Tired Dozers	211	0.40	0.9733	208.0791	3.1514	0.1551	0.2984	0.0020
12	Dozer Cat D8	Rubber Tired Dozers	354	0.40	0.9821	209.9459	3.1854	0.1485	0.2926	0.0020
13	Dozer Cat D10	Rubber Tired Dozers	584	0.40	0.9692	207.1907	2.8252	0.1018	0.2123	0.0020
14	Scraper Cat 613	Scrapers	225	0.48	1.1299	250.4320	4.2523	0.1944	0.3746	0.0024
15	Scraper Cat 623	Scrapers	381	0.48	1.1398	252.6332	3.0068	0.1213	0.2417	0.0024
16	Scraper Cat 631	Scrapers	381	0.48	1.1398	252.6332	3.0068	0.1213	0.2417	0.0024
17	Scraper Cat 657 Push-Pull	Scrapers	1923	0.48	1.1631	257.7962	3.5284	0.1323	0.2572	0.0025
18	Motor Grader Cat 140H	Graders	204	0.41	1.1213	216.0922	2.3459	0.0757	0.1667	0.0021
19	Motor Grader Cat 143H	Graders	204	0.41	1.1213	216.0922		0.0757	0.1667	0.0021
20	Motor Grader Cat 14H	Graders	204	0.41	1.1213	216.0922	2.3459	0.0757	0.1667	0.0021
21	Asphalt Paver	Pavers	158	0.42	1.2801	217.2863	2.3829	0.1192	0.2184	0.0021
22	Oil Distributor Truck	Off-Highway Trucks	372	0.38	0.6099	201.4303	1.7895	0.0686	0.1573	0.0019
23	Shuttle Buggy (Roadtec MTV)	Paving Equipment	339	0.36	1.1657	184.4846	1.6394	0.0584	0.1166	0.0018
24	Roller 1-3 Ton	Rollers	36	0.38	1.1807	218.6858	2.0235	0.1814	0.5137	0.0021
25	Roller 4-6 Ton	Rollers	36	0.38	1.1807	218.6858	2.0235	0.1814	0.5137	0.0021
26	Roller 7-9 Ton	Rollers	87	0.38	1.0638	197.0340	2.3977	0.1785	0.2729	0.0019
27	Roller 10+ Ton	Rollers	144	0.38	1.0593	196.2001	1.7724	0.0822	0.1445	0.0019
28	Rubber Tire Roller	Rollers	87	0.38	1.0638	197.0340	2.3977	0.1785	0.2729	0.0019
29	66" Single Drum Roller	Rollers	87	0.38	1.0638	197.0340	2.3977	0.1785	0.2729	0.0019
30	84" Single Drum Roller	Rollers	144	0.38	1.0593	196.2001	1.7724	0.0822	0.1445	0.0019
31	Compactor Cat 815	Other Construction Equipment	217	0.42	1.2029	218.8062	2.3973	0.0882	0.1763	0.0021
32	Compactor Cat 825	Other Construction Equipment	357	0.42	1.2042	219.0521	1.8946	0.0698	0.1433	0.0021
33	Power Kick Brooms	Sweepers/Scrubbers	36	0.46	1.5435	265.1539	2.6204	0.2746	0.8428	0.0025
34	Street Sweeper/Pickup Broom	Sweepers/Scrubbers	303	0.46	1.3870	238.2645	2.7437	0.1185	0.2180	0.0023
35	Water Truck (2,000 Gal)	Water Trucks	372	0.38	0.6099	201.4303	1.7895	0.0686	0.1573	0.0019
36	Water Truck (4,000 Gal)	Water Trucks	372	0.38	0.6099	201.4303	1.7895	0.0686	0.1573	0.0019
37	Double Bottom Dump Truck (25 TN)	Off-Highway Trucks	372	0.38	0.6099	201.4303	1.7895	0.0686	0.1573	0.0019
38	Transfer Truck (25 TN)	Off-Highway Trucks	372	0.38	0.6099	201.4303	1.7895	0.0686	0.1573	0.0019
39	Semi End Dump Truck (25 TN)	Off-Highway Trucks	372	0.38	0.6099	201.4303	1.7895	0.0686	0.1573	0.0019
40	Low Bed Truck	Off-Highway Trucks	372	0.38	0.6099	201.4303	1.7895	0.0686	0.1573	0.0019
41	Pump (Diesel 3" x 3")	Pumps	21	0.74	2.0479	420.5420	3.6948	0.2147	0.7055	0.0053
42	Fork Lift Cat TH560B Telescopic Handler	Rough Terrain Forklifts	96	0.40	1.1447	210.4867	1.7958	0.1049	0.1476	0.0020
43	Crane Grove RT990	Cranes	336	0.29	0.7523	150.6500	1.8047	0.0748	0.1456	0.0014
45	Sheet Pile Driver Power Bruce PQ-700V	Generator Sets	586	0.74	0.8525	420.5419	2.7473	0.0784	0.2129	0.0042
49	Hydraulic Pile Driver Power Bruce PQ-700V	Generator Sets	586	0.74	0.8525	420.5419	2.7473	0.0784	0.2129	0.0042
51	Excavator with Auger Attachment Cat 330L	Excavators	218	0.38	0.9736	199.9869	1.6704	0.0530	0.1176	0.0019
52	Excavator with Driver Attachment Cat 330L	Excavators	218	0.38	0.9736	199.9869	1.6704	0.0530	0.1176	0.0019
53	Skid Steer Loader Cat 277B	Skid Steer Loaders	71	0.37	1.2340	192.8723	1.4789	0.0864	0.1173	0.0018
54	Concrete Pump Mack Truck & 36-47M Pump	Other Construction Equipment	357	0.42	1.2042	219.0521	1.8946	0.0698	0.1433	0.0021

Notes:

1. Equipment was supplied by DWR for various construction schedule phases. This included the horsepower and load factor.
2. Emission factors are from OFFROAD 2011 for 2014

Construction Phase Mapping to Model Sources

Alternative	Schedule Name	Group	SRCID
A	2	GROUP 1	CNS
A	2	GROUP 2	CNS
A	2	GROUP 3	CHILLA
A	2	GROUP 4	SMCROSS
A	2	GROUP 5	LONE
A	2	GROUP 6	CNS
A	2	GROUP 7	CNS
A	2	GROUP 8	CNS
A	7	GROUP 1	CCANAL
A	7	GROUP 10	CNS
A	7	GROUP 11	CCANAL
A	7	GROUP 12	SCANAL
A	7	GROUP 13	CCANAL
A	7	GROUP 14	CCANAL
A	7	GROUP 15	SCANAL
A	7	GROUP 16	CNS
A	7	GROUP 2	CCANAL
A	7	GROUP 3	CCANAL
A	7	GROUP 4	CCANAL
A	7	GROUP 5	CHILLA
A	7	GROUP 6	CHILLA
A	7	GROUP 7	CNS
A	7	GROUP 8	CCANAL
A	7	GROUP 9	SCANAL
B	4	Group 1	CWB
B	4	Group 2	CWB
B	4	Group 3	CHILLA
B	4	Group 4	SMCROSS
B	4	Group 5	LONE
B	4	Group 6	CWB
B	4	Group 7	CWB
B	4	Group 8	CWB
B	8	GROUP 1	CCANAL
B	8	GROUP 10	CWB
B	8	GROUP 11	CCANAL
B	8	GROUP 12	CCANAL
B	8	GROUP 13	CCANAL
B	8	GROUP 14	CHILLA
B	8	GROUP 15	CCANAL
B	8	GROUP 16	CWB
B	8	GROUP 2	CCANAL
B	8	GROUP 3	CWB
B	8	GROUP 4	CCANAL
B	8	GROUP 5	CHILLA
B	8	GROUP 6	CCANAL
B	8	GROUP 7	CWB
B	8	GROUP 8	CCANAL
B	8	GROUP 9	CCANAL
C	2	GROUP 1	FNS
C	2	GROUP 2	FNS
C	2	GROUP 3	CHILLA

Construction Phase Mapping to Model Sources

Alternative	Schedule Name	Group	SRCID
C	2	GROUP 4	SMCROSS
C	2	GROUP 5	LONE
C	2	GROUP 6	FNS
C	2	GROUP 7	FNS
C	2	GROUP 8	FNS
C	9	GROUP 1	FNS
C	9	GROUP 10	FSDC
C	9	GROUP 11	FSDC
C	9	GROUP 12	FSDC
C	9	GROUP 13	FSDC
C	9	GROUP 14	FNS
C	9	GROUP 2	FNS
C	9	GROUP 3	FNS
C	9	GROUP 4	FSDC
C	9	GROUP 5	CHILLA
C	9	GROUP 6	FSDC
C	9	GROUP 7	FSDC
C	9	GROUP 8	FSDC
C	9	GROUP 9	FSDC
D	4	Group 1	FWN
D	4	Group 2	FWN
D	4	Group 3	CHILLA
D	4	Group 4	SMCROSS
D	4	Group 5	LONE
D	4	Group 6	FWN
D	4	Group 7	FWN
D	4	Group 8	FWN
D	9	GROUP 1	FWN
D	9	GROUP 10	NCANAL
D	9	GROUP 11	FSDC
D	9	GROUP 12	FSDC
D	9	GROUP 13	NCANAL
D	9	GROUP 14	FWN
D	9	GROUP 2	FWN
D	9	GROUP 3	FWN
D	9	GROUP 4	FSDC
D	9	GROUP 5	CHILLA
D	9	GROUP 6	FSDC
D	9	GROUP 7	NCANAL
D	9	GROUP 8	NCANAL
D	9	GROUP 9	FSDC

Notes:

1. The construction phase and Alternative was used to map the emissions from a given phase to a modeled work location.

Construction Onroad Vehicle Emissions

Alternative	Year	CO (Ton)	NOx (Ton)	VOC (Ton)	SOx (Ton)	PM10 (Ton)	PM2.5 (Ton)	CO2 (Metric Ton)	CH4 (Metric Ton)	CO2e (Metric Ton)
	2014	1.36	0.91	0.13	0.003	0.06	0.04	303.93	0.01	304
	2015	4.09	2.74	0.40	0.010	0.17	0.13	911.80	0.03	913
	2016	4.09	2.74	0.40	0.010	0.17	0.13	911.80	0.03	913
	2017	3.75	2.51	0.36	0.009	0.16	0.12	835.82	0.03	836
	2018	1.61	1.66	0.18	0.005	0.10	0.07	424.61	0.01	425
	2019	4.84	4.97	0.53	0.014	0.29	0.22	1,273.82	0.04	1,275
	2020	4.84	4.97	0.53	0.014	0.29	0.22	1,273.82	0.04	1,275
	2021	4.84	4.97	0.53	0.014	0.29	0.22	1,273.82	0.04	1,275
	2022	4.84	4.97	0.53	0.014	0.29	0.22	1,273.82	0.04	1,275
A	2023	4.44	4.55	0.49	0.013	0.26	0.21	1,167.67	0.04	1,168
	2014	1.32	0.79	0.12	0.003	0.05	0.04	283.70	0.01	284
	2015	3.95	2.36	0.37	0.009	0.16	0.11	851.09	0.03	852
	2016	3.95	2.36	0.37	0.009	0.16	0.11	851.09	0.03	852
	2017	3.95	2.36	0.37	0.009	0.16	0.11	851.09	0.03	852
	2018	3.25	2.62	0.33	0.009	0.16	0.12	775.75	0.03	776
	2019	4.81	4.90	0.53	0.014	0.28	0.22	1,263.38	0.04	1,264
	2020	4.81	4.90	0.53	0.014	0.28	0.22	1,263.38	0.04	1,264
	2021	4.81	4.90	0.53	0.014	0.28	0.22	1,263.38	0.04	1,264
	2022	4.81	4.90	0.53	0.014	0.28	0.22	1,263.38	0.04	1,264
B	2023	3.61	3.68	0.39	0.010	0.21	0.17	947.53	0.03	948
	2014	1.36	0.91	0.13	0.003	0.06	0.04	303.79	0.01	304
	2015	4.09	2.73	0.40	0.010	0.17	0.13	911.38	0.03	912
	2016	4.09	2.73	0.40	0.010	0.17	0.13	911.38	0.03	912
	2017	3.75	2.51	0.36	0.009	0.16	0.12	835.43	0.03	836
	2018	1.50	1.33	0.16	0.004	0.08	0.06	371.76	0.01	372
	2019	4.51	3.99	0.47	0.012	0.24	0.18	1,115.28	0.04	1,116
	2020	4.51	3.99	0.47	0.012	0.24	0.18	1,115.28	0.04	1,116
	2021	4.51	3.99	0.47	0.012	0.24	0.18	1,115.28	0.04	1,116
C	2022	4.51	3.99	0.47	0.012	0.24	0.18	1,115.28	0.04	1,116
	2014	1.32	0.79	0.12	0.003	0.05	0.04	283.59	0.01	284
	2015	3.95	2.36	0.37	0.009	0.15	0.11	850.78	0.03	851
	2016	3.95	2.36	0.37	0.009	0.15	0.11	850.78	0.03	851
	2017	3.95	2.36	0.37	0.009	0.15	0.11	850.78	0.03	851
	2018	3.15	2.31	0.31	0.008	0.14	0.11	725.94	0.03	726
	2019	4.51	3.98	0.47	0.012	0.24	0.18	1,114.33	0.04	1,115
	2020	4.51	3.98	0.47	0.012	0.24	0.18	1,114.33	0.04	1,115
	2021	4.51	3.98	0.47	0.012	0.24	0.18	1,114.33	0.04	1,115
D	2022	4.51	3.98	0.47	0.012	0.24	0.18	1,114.33	0.04	1,115

Notes:

1. Construction on-road vehicles include delivery trucks, concrete trucks, and worker commute vehicles.
2. The number of trip and trip lengths for workers and material hauling is shown in Construction Vehicle Trips and Trip Lengths table
3. Emission factors are from EMFAC2007 for calendar year 2014.

Construction Vehicle Trips and Trip Lengths

Alternative	Report	Off-Highway Trucks[1]	Delivery Trucks[2]		Concrete Trucks[3]		Worker Vehicles[4]				
		Off-Highway Truck VMT	Delivery Truck Trips	Delivery Truck VMT	Concrete Truck Trips	Concrete Truck VMT	Worker Trips Per Day	Days	Trip length Work	Total Worker Trips	Worker VMT
A	2	9,131,501	6,221	737,796	1,448	13,378	200	702	35	140,400	4,914,000
A	7	14,651,517	16,753	2,346,134	2,172	20,067	200	1134	35	226,800	7,938,000
B	4	10,439,027	6,086	717,426	1,218	11,249	200	810	35	162,000	5,670,000
B	8	11,399,576	15,814	2,242,033	1,828	16,874	200	1098	35	219,600	7,686,000
C	2	9,131,501	6,221	737,796	1,358	12,540	200	702	35	140,400	4,914,000
C	9	12,075,477	11,894	1,520,675	1,698	15,675	200	936	35	187,200	6,552,000
D	4	10,439,027	6,086	717,426	1,144	10,557	200	810	35	162,000	5,670,000
D	9	12,075,477	11,894	1,520,675	1,428	13,195	200	936	35	187,200	6,552,000

Notes:

1. Off-highway truck VMT represents the movement of all project trucks (haul trucks, concrete trucks, delivery trucks, etc.) on-site and between project areas and is calculated based on equipment schedule and usage provided by DWR and an assumed on-site travel speed of 25 mph.
2. Delivery truck trips and VMT by report is based on delivery truck trip data provided by DWR.
3. Concrete truck trips and VMT by report is based on information provided by DWR including the amount of concrete to be produced per year and the planned location of the concrete batch plant at the intersection of Highway 180 and West Belmont Ave.
4. The number of daily worker commute trips by report is based on information provided by DWR and is consistent with assumptions used in the traffic analysis. Worker trip length was assumed to be 35 miles which is the approximate distance from Madera or Fresno.

Construction Vehicle Emission Factors

Pollutant	Emission Type	Vehicle Class	Type	Speed	EF	Units
CH4	Running	HHDT	Exhaust	25	0.055	g/mile
CH4	Running	Worker	Exhaust	25	0.02475	g/mile
CH4	Running	HHDT	Exhaust	55	0.026	g/mile
CH4	Running	Worker	Exhaust	55	0.01675	g/mile
CH4	Starting	HHDT	Exhaust	25	0.143	g/trip
CH4	Starting	Worker	Exhaust	25	0.04225	g/trip
CH4	Starting	HHDT	Exhaust	55	0.143	g/trip
CH4	Starting	Worker	Exhaust	55	0.04225	g/trip
CO	Running	HHDT	Exhaust	25	4.584	g/mile
CO	Running	Worker	Exhaust	25	2.3855	g/mile
CO	Running	HHDT	Exhaust	55	2.862	g/mile
CO	Running	Worker	Exhaust	55	1.69725	g/mile
CO	Starting	HHDT	Exhaust	25	42.041	g/trip
CO	Starting	Worker	Exhaust	25	8.86475	g/trip
CO	Starting	HHDT	Exhaust	55	42.041	g/trip
CO	Starting	Worker	Exhaust	55	8.86475	g/trip
CO2	Running	HHDT	Exhaust	25	2026.279	g/mile
CO2	Running	Worker	Exhaust	25	432.63475	g/mile
CO2	Running	HHDT	Exhaust	55	1648.397	g/mile
CO2	Running	Worker	Exhaust	55	344.39225	g/mile
CO2	Starting	HHDT	Exhaust	25	57.439	g/trip
CO2	Starting	Worker	Exhaust	25	230.3475	g/trip
CO2	Starting	HHDT	Exhaust	55	57.439	g/trip
CO2	Starting	Worker	Exhaust	55	230.3475	g/trip
Nox	Running	HHDT	Exhaust	25	10.379	g/mile
Nox	Running	Worker	Exhaust	25	0.234	g/mile
Nox	Running	HHDT	Exhaust	55	9.211	g/mile
Nox	Running	Worker	Exhaust	55	0.2195	g/mile
NOx	Starting	HHDT	Exhaust	25	1.879	g/trip
NOx	Starting	Worker	Exhaust	25	0.3825	g/trip
NOx	Starting	HHDT	Exhaust	55	1.879	g/trip
NOx	Starting	Worker	Exhaust	55	0.3825	g/trip
PM10	Brake wear	HHDT	Fugitive	25	0.028	g/mile
PM10	Brake wear	Worker	Fugitive	25	0.013	g/mile
PM10	Brake wear	HHDT	Fugitive	55	0.028	g/mile
PM10	Brake wear	Worker	Fugitive	55	0.013	g/mile
PM10	Running	HHDT	Exhaust	25	0.395	g/mile
PM10	Running	Worker	Exhaust	25	0.02	g/mile
PM10	Running	HHDT	Exhaust	55	0.402	g/mile
PM10	Running	Worker	Exhaust	55	0.0115	g/mile
PM10	Starting	HHDT	Exhaust	25	0.004	g/trip
PM10	Starting	Worker	Exhaust	25	0.02275	g/trip
PM10	Starting	HHDT	Exhaust	55	0.004	g/trip
PM10	Starting	Worker	Exhaust	55	0.02275	g/trip
PM10	Tire wear	HHDT	Fugitive	25	0.036	g/mile
PM10	Tire wear	Worker	Fugitive	25	0.008	g/mile
PM10	Tire wear	HHDT	Fugitive	55	0.036	g/mile
PM10	Tire wear	Worker	Fugitive	55	0.008	g/mile
PM2.5	Brake wear	HHDT	Fugitive	25	0.012	g/mile
PM2.5	Brake wear	Worker	Fugitive	25	0.005	g/mile
PM2.5	Brake wear	HHDT	Fugitive	55	0.012	g/mile

Construction Vehicle Emission Factors

Pollutant	Emission Type	Vehicle Class	Type	Speed	EF	Units
PM2.5	Brake wear	Worker	Fugitive	55	0.005	g/mile
PM2.5	Running	HHDT	Exhaust	25	0.363	g/mile
PM2.5	Running	Worker	Exhaust	25	0.01825	g/mile
PM2.5	Running	HHDT	Exhaust	55	0.37	g/mile
PM2.5	Running	Worker	Exhaust	55	0.01075	g/mile
PM2.5	Starting	HHDT	Exhaust	25	0.003	g/trip
PM2.5	Starting	Worker	Exhaust	25	0.0205	g/trip
PM2.5	Starting	HHDT	Exhaust	55	0.003	g/trip
PM2.5	Starting	Worker	Exhaust	55	0.0205	g/trip
PM2.5	Tire wear	HHDT	Fugitive	25	0.009	g/mile
PM2.5	Tire wear	Worker	Fugitive	25	0.002	g/mile
PM2.5	Tire wear	HHDT	Fugitive	55	0.009	g/mile
PM2.5	Tire wear	Worker	Fugitive	55	0.002	g/mile
ROG	Diurnal	HHDT	Evaporative	25	0	g/start
ROG	Diurnal	Worker	Evaporative	25	0.708	g/start
ROG	Diurnal	HHDT	Evaporative	55	0	g/start
ROG	Diurnal	Worker	Evaporative	55	0.708	g/start
ROG	Hot Soak	HHDT	Evaporative	25	0.017	g/trip
ROG	Hot Soak	Worker	Evaporative	25	0.2275	g/trip
ROG	Hot Soak	HHDT	Evaporative	55	0.017	g/trip
ROG	Hot Soak	Worker	Evaporative	55	0.2275	g/trip
ROG	Resting	HHDT	Evaporative	25	0	g/start
ROG	Resting	Worker	Evaporative	25	0.345	g/start
ROG	Resting	HHDT	Evaporative	55	0	g/start
ROG	Resting	Worker	Evaporative	55	0.345	g/start
ROG	Running	HHDT	Exhaust	25	0.947	g/mile
ROG	Running	HHDT	Evaporative	25	0.0024	g/mile
ROG	Running	Worker	Evaporative	25	0.1026	g/mile
ROG	Running	Worker	Exhaust	25	0.07425	g/mile
ROG	Running	HHDT	Exhaust	55	0.543	g/mile
ROG	Running	HHDT	Evaporative	55	0.00109091	g/mile
ROG	Running	Worker	Evaporative	55	0.04663636	g/mile
ROG	Running	Worker	Exhaust	55	0.046	g/mile
ROG	Starting	HHDT	Exhaust	25	2.43	g/trip
ROG	Starting	Worker	Exhaust	25	0.74325	g/trip
ROG	Starting	HHDT	Exhaust	55	2.43	g/trip
ROG	Starting	Worker	Exhaust	55	0.74325	g/trip
SOx	Running	HHDT	Exhaust	25	0.019	g/mile
SOx	Running	Worker	Exhaust	25	0.0045	g/mile
SOx	Running	HHDT	Exhaust	55	0.016	g/mile
SOx	Running	Worker	Exhaust	55	0.0035	g/mile
SOX	Starting	HHDT	Exhaust	25	0.001	g/trip
SOX	Starting	Worker	Exhaust	25	0.0025	g/trip
SOX	Starting	HHDT	Exhaust	55	0.001	g/trip
SOX	Starting	Worker	Exhaust	55	0.0025	g/trip

Notes:

1. Emission Factors are based on EMFAC 2007.

Emissions from Grading and Bulldozing[1]

Schedule Name	Year	PM10 (ton)	PM2.5 (ton)
2	2014	0.92	0.30
2	2015	2.29	0.68
2	2016	1.27	0.44
2	2017	0.22	0.02
4	2014	1.04	0.34
4	2015	2.33	0.69
4	2016	0.90	0.33
4	2017	0.31	0.03
7	2018	2.75	1.14
7	2019	1.05	0.49
7	2020	3.03	1.35
7	2021	1.94	0.89
7	2022	0.67	0.28
7	2023	0.14	0.04
8	2018	2.75	1.14
8	2019	1.05	0.49
8	2020	1.09	0.36
8	2021	0.95	0.47
8	2022	0.28	0.08
8	2023	0.12	0.03
9	2018	0.71	0.23
9	2019	2.26	0.93
9	2020	2.60	1.30
9	2021	1.97	0.83
9	2022	0.55	0.20

Alternative	Year	PM10	PM2.5
	2014	0.92	0.30
	2015	2.29	0.68
	2016	1.27	0.44
	2017	0.22	0.02
	2018	2.75	1.14
	2019	1.05	0.49
	2020	3.03	1.35
	2021	1.94	0.89
	2022	0.67	0.28
A	2023	0.14	0.04
	2014	1.04	0.34
	2015	2.33	0.69
	2016	0.90	0.33
	2017	0.31	0.03
	2018	2.75	1.14
	2019	1.05	0.49
	2020	1.09	0.36
	2021	0.95	0.47
	2022	0.28	0.08
B	2023	0.12	0.03
	2014	0.92	0.30
	2015	2.29	0.68
	2016	1.27	0.44
	2017	0.22	0.02
	2018	0.71	0.23
	2019	2.26	0.93
	2020	2.60	1.30
	2021	1.97	0.83
C	2022	0.55	0.20
	2014	1.04	0.34
	2015	2.33	0.69
	2016	0.90	0.33
	2017	0.31	0.03
	2018	0.71	0.23
	2019	2.26	0.93
	2020	2.60	1.30
	2021	1.97	0.83
D	2022	0.55	0.20

Notes:
1. Emissions were caclulated following the AP-42 Chapter 11.9 assuming overburden.

Emissions from Loading and Unloading Material[1]

Alternative	Year	Volume of Material Loaded (cubic yards)	Weighting	EF PM10 (lb/ton)	Emissions PM10 (ton)	EF PM2.5 (lb/ton)	Emissions PM2.5 (ton)
A	2014	345,200	0.06	0.00012	0.003	0.0000182	0.001
	2015		0.36		0.019		0.003
	2016		0.44		0.023		0.003
	2017		0.14		0.007		0.001
	2018	269,700	0.06		0.003		0.000
	2019		0.14		0.006		0.001
	2020		0.21		0.009		0.001
	2021		0.26		0.011		0.002
	2022		0.19		0.008		0.001
	2023		0.14		0.006		0.001
B	2014	328,600	0.06		0.003		0.000
	2015		0.45		0.022		0.003
	2016		0.32		0.016		0.002
	2017		0.12		0.006		0.001
	2018	555,500	0.11		0.004		0.001
	2019	226,900	0.14		0.005		0.001
	2020		0.22		0.007		0.001
	2021		0.27		0.009		0.001
	2022		0.20		0.007		0.001
	2023		0.11		0.004		0.001
C	2014	317,500	0.06		0.003		0.000
	2015		0.36		0.017		0.003
	2016		0.44		0.021		0.003
	2017		0.14		0.007		0.001
	2018	224,500	0.04		0.001		0.000
	2019		0.14		0.005		0.001
	2020		0.34		0.012		0.002
	2021		0.23		0.008		0.001
	2022		0.25		0.008		0.001
D	2014	272,000	0.06		0.002		0.000
	2015		0.45		0.019		0.003
	2016		0.32		0.013		0.002
	2017		0.12		0.005		0.001
	2018	460,250	0.09		0.003		0.000
	2019	188,250	0.14		0.004		0.001
	2020		0.34		0.010		0.001
	2021		0.23		0.007		0.001
	2022		0.25		0.007		0.001

1. Emissions follow the methodology from AP-42 Chapter 11.9.

Emissions from Road Dust[1]

Alternative	Year	PM10 (ton)	PM2.5 (ton)
A	2014	0.54	0.13
	2015	3.02	0.75
	2016	3.71	0.93
	2017	1.16	0.29
	2018	0.90	0.22
	2019	1.99	0.50
	2020	3.02	0.76
	2021	3.70	0.92
	2022	2.69	0.67
	2023	1.92	0.48
B	2014	0.57	0.14
	2015	4.31	1.08
	2016	3.09	0.77
	2017	1.17	0.29
	2018	1.21	0.30
	2019	1.72	0.43
	2020	2.63	0.66
	2021	3.26	0.81
	2022	2.47	0.62
	2023	1.31	0.33
C	2014	0.54	0.13
	2015	3.02	0.75
	2016	3.71	0.93
	2017	1.16	0.29
	2018	0.46	0.12
	2019	1.65	0.41
	2020	3.92	0.98
	2021	2.62	0.66
	2022	2.82	0.71
D	2014	0.57	0.14
	2015	4.31	1.08
	2016	3.09	0.77
	2017	1.17	0.29
	2018	0.91	0.23
	2019	1.65	0.41
	2020	3.92	0.98
	2021	2.62	0.65
	2022	2.82	0.71

1. Emissions follow AP-42 Chpater 2.1.

Total Construction Emissions

Alternative	Year	CO	NOx	VOC	SOx	Total PM10	Total PM2.5	CO_2e
		Tons per Year						Metric Tons per Year
	2014	12.69	32.63	2.69	0.03	2.72	1.67	3038.99
	2015	37.37	90.94	7.74	0.10	8.85	4.92	9201.07
	2016	38.05	97.79	8.56	0.11	8.86	5.17	10211.29
	2017	16.20	37.28	3.39	0.05	2.90	1.79	4315.36
	2018	20.57	52.68	4.34	0.05	5.68	3.37	4915.71
	2019	23.37	55.54	4.81	0.07	5.23	3.12	6332.30
	2020	46.01	117.20	10.05	0.13	10.61	6.60	12226.83
	2021	40.95	103.62	8.98	0.12	9.70	5.80	11054.36
	2022	21.08	49.85	4.36	0.06	5.37	2.89	5689.75
A	2023	15.96	36.94	3.30	0.05	3.58	1.98	4425.74
	2014	13.94	35.77	2.96	0.04	2.99	1.84	3348.01
	2015	41.94	104.20	8.90	0.11	10.70	5.78	10475.98
	2016	34.71	89.27	7.90	0.10	7.54	4.59	9464.02
	2017	17.32	39.09	3.56	0.05	3.07	1.87	4503.08
	2018	26.57	66.39	5.61	0.07	6.56	4.00	6565.43
	2019	23.31	55.39	4.80	0.07	4.96	3.04	6313.29
	2020	31.96	78.76	6.77	0.09	6.82	4.04	8495.37
	2021	23.83	56.24	4.92	0.07	6.46	3.47	6383.39
	2022	20.99	49.75	4.37	0.06	4.74	2.63	5744.95
B	2023	13.57	31.72	2.83	0.04	2.72	1.61	3761.47
	2014	12.69	32.63	2.69	0.03	2.72	1.67	3038.84
	2015	37.36	90.94	7.74	0.10	8.85	4.92	9200.64
	2016	38.05	97.79	8.56	0.11	8.85	5.17	10210.86
	2017	16.20	37.27	3.39	0.05	2.90	1.79	4314.97
	2018	9.83	23.72	1.99	0.03	2.10	1.25	2392.39
	2019	33.89	83.70	7.16	0.09	7.17	4.55	8759.08
	2020	32.09	79.80	6.95	0.09	9.67	5.36	8545.38
	2021	39.73	100.96	8.72	0.11	8.53	5.36	10612.44
C	2022	20.77	49.51	4.38	0.06	5.37	2.84	5573.29
	2014	13.94	35.77	2.96	0.04	2.99	1.84	3347.91
	2015	41.93	104.20	8.90	0.11	10.70	5.77	10475.67
	2016	34.71	89.26	7.90	0.10	7.54	4.59	9463.71
	2017	17.31	39.09	3.56	0.05	3.07	1.87	4502.77
	2018	15.84	37.45	3.27	0.04	3.11	1.91	4045.15
	2019	33.88	83.70	7.16	0.09	7.17	4.55	8758.14
	2020	32.08	79.80	6.95	0.09	9.67	5.36	8544.44
	2021	39.73	100.96	8.72	0.11	8.52	5.36	10611.49
D	2022	20.77	49.51	4.38	0.06	5.37	2.84	5572.34
CEQA Threshold		100	10	10	27	15	15	NA
General Conformity de minimis Threshold		NA	10	10	NA	100	100	NA

1. Offroad PM is assumed to be the same for PM_{10} and $PM_{2.5}$.
2. Highlighted values exceed the CEQA Threshold.

Total Operational Emissions

Alternative	CO	NOx	VOC	SOx	PM10 Exhaust	PM10 Fugitive	PM10 Total	PM2.5 Exhaust	PM2.5 Fugitive	PM2.5 Total	CO2	CH4	CO2e
	tons										Metric Tons		
A	0.032	0.004	0.002	0.0001	0.0005	0.024	0.0243	0.0003	0.006	0.0062	5.21	0.00027	5.21
B	0.032	0.004	0.002	0.0001	0.0005	0.025	0.0256	0.0003	0.006	0.0066	5.21	0.00027	5.21
C	0.032	0.004	0.002	0.0001	0.0005	0.025	0.0257	0.0003	0.006	0.0066	5.21	0.00027	5.21
D	0.031	0.004	0.002	0.0001	0.0005	0.026	0.0262	0.0003	0.006	0.0067	5.01	0.00026	5.02
CEQA Threshold	100	10	10	27	NA	NA	15	NA	NA	15	NA	NA	NA
General Conformity de minimis Threshold	NA	10	10	NA	NA	NA	100	NA	NA	100	NA	NA	NA

Notes:

1. Trips and trip length is based on information provided by DWR and is consistent with traffic section assumptions.
2. Emission factors are based on EMFAC 2007 for 2014.
3. Fugitive dust emissions are from travel on paved roads based on AP-42 Chapter 13.1.

Operational Vehicle Trips and Trip Length

Alternative	Location	Activity	Trips/Activity	Frequency of Activity	Note	Total Trips	VMT
A	South Canal - river side control structure	Inspection of gates, seals	2	12	1	24	840
A	South Canal - river side control structure	Make adjustments	2	12	1	24	840
A	South Canal - river side control structure	Assessment after flows	2	12	1	24	840
A	South Canal - river side control structure	Inspection of ladder	2	12	1	24	840
A	South Canal - canal side control structure	Inspection of gates, seals	2	12	1	24	840
A	South Canal - canal side control structure	Make adjustments	2	12	1	24	840
A	South Canal - canal side control structure	Assessment after flows	2	12	1	24	840
A	San Mateo Avenue	Road closure	2	2		4	140
A	Screens Estimate	Inspections, flow verification, clear debris	2	120		240	8400
A	Screens Estimate	Velocity measurements	4	8		32	1120
A	Barriers Estimate	Inspection, flow verification, clear debris	2	120		240	8400
A	Barriers Estimate	Install/Remove barrier screens	4	10		40	1400
A	South Canal - river side control structure	Sediment removal from channel	4	2		8	280
A	South Canal - river side control structure	Lube gates	4	1		4	140
A	South Canal - river side control structure	Fish Ladder Cleaning	4	12	1	48	1680
A	South Canal - river side control structure	Fish attraction pipeline Cleaning	4	12	1	48	1680
A	South Canal - canal side control structure	Sediment removal from channel	8	5		40	1400
A	South Canal - canal side control structure	Lube gates	4	1		4	140
A	South Canal - canal side control structure	Channel Survey	8	5		40	1400
A	South Canal - canal side control structure	Channel reshaping	8	5		40	1400
A	San Mateo Avenue	Cleaning out culverts	8	2		16	560
A	San Mateo Avenue	Cleaning of debris off roadway	4	12	1	48	1680
A	Screens Estimate	Sediment removal from channel	4	2		8	280
A	Screens Estimate	Screens removal for cleaning	6	2		12	420
A	Screens Estimate	Screens removal for cleaning	2	2		4	140
A	Screens Estimate	Screens removal for cleaning	2	2		4	140
A	Screens Estimate	Grease and inspect pump/motor	4	12		48	1680
A	Screens Estimate	Brush inspection	4	12		48	1680
A	Screens Estimate	Trash Rack	4	12		48	1680
B	South Canal - river side control structure	Inspection of gates, seals	2	12	1	24	840
B	South Canal - river side control structure	Make adjustments	2	12	1	24	840
B	South Canal - river side control structure	Assessment after flows	2	12	1	24	840
B	South Canal - river side control structure	Inspection of ladder	2	12	1	24	840
B	South Canal - canal side control structure	Inspection of gates, seals	2	12	1	24	840
B	South Canal - canal side control structure	Make adjustments	2	12	1	24	840
B	South Canal - canal side control structure	Assessment after flows	2	12	1	24	840
B	San Mateo Avenue	Road closure	2	2		4	140
B	Chowchilla - river side control structure	Inspection of gates, seals	2	12	1	24	840
B	Chowchilla - river side control structure	Make adjustments	2	12	1	24	840
B	Chowchilla - river side control structure	Assessment after flows	2	12	1	24	840
B	Chowchilla - river side control structure	Inspection of ladder	2	12	1	24	840
B	Screens Estimate	Inspections, flow verification, clear debris	2	120		240	8400
B	Screens Estimate	Velocity measurements	4	8		32	1120
B	Barriers Estimate	Inspection, flow verification, clear debris	2	120		240	8400
B	Barriers Estimate	Install/Remove barrier screens	4	10		40	1400
B	Bifurcation - river side control structure	Sediment removal from channel	4	2		8	280
B	Bifurcation - river side control structure	Lube gates	4	1		4	140
B	Bifurcation - river side control structure	Fish Ladder Cleaning	4	12	1	48	1680

Operational Vehicle Trips and Trip Length

Alternative	Location	Activity	Trips/Activity	Frequency of Activity	Note	Total Trips	VMT
B	Bifurcation - river side control structure	Fish attraction pipeline Cleaning	4	12	1	48	1680
B	Bifurcation - canal side control structure	Sediment removal from channel	8	1		8	280
B	Bifurcation - canal side control structure	Lube gates	4	1		4	140
B	Bifurcation - canal side control structure	Channel Survey	8	5		40	1400
B	Bifurcation - canal side control structure	Channel reshaping	8	5		40	1400
B	San Mateo Avenue	Cleaning out culverts	8	2		16	560
B	San Mateo Avenue	Cleaning of debris off roadway	4	12	1	48	1680
B	Screens Estimate	Sediment removal from channel	4	2		8	280
B	Screens Estimate	Screens removal for cleaning	6	2		12	420
B	Screens Estimate	Screens removal for cleaning	2	2		4	140
B	Screens Estimate	Screens removal for cleaning	2	2		4	140
B	Screens Estimate	Grease and inspect pump/motor	4	12		48	1680
B	Screens Estimate	Brush inspection	4	12		48	1680
B	Screens Estimate	Trash Rack	4	12		48	1680
C	Fresno Slough Dam Estimate	Inspection of gates, seals	2	12	1	24	840
C	Fresno Slough Dam Estimate	Make adjustments	2	12	1	24	840
C	Fresno Slough Dam Estimate	Monitor for seepage	2	12	1	24	840
C	Short Canal - canal side control structure	Inspection of gates, seals	2	12	1	24	840
C	Short Canal - canal side control structure	Make adjustments	2	12	1	24	840
C	Short Canal - canal side control structure	Assessment after flows	2	12	1	24	840
C	Mendota Dam	Installation/Removal of Flashboards	2	12	1	24	840
C	Mendota Dam	Make adjustments	2	12	1	24	840
C	Mendota Dam	Assessment after flows	2	12	1	24	840
C	Mendota Dam	Inspection of ladder	2	12	1	24	840
C	San Mateo Avenue	Road closure	2	2		4	140
C	Chowchilla - river side control structure	Inspection of gates, seals	2	12	1	24	840
C	Chowchilla - river side control structure	Make adjustments	2	12	1	24	840
C	Chowchilla - river side control structure	Assessment after flows	2	12	1	24	840
C	Chowchilla - river side control structure	Inspection of ladder	2	12	1	24	840
C	Screens Estimate	Inspections, flow verification, clear debris	2	120		240	8400
C	Screens Estimate	Velocity measurements	4	8		32	1120
C	Barriers Estimate	Inspection, flow verification, clear debris	2	120		240	8400
C	Barriers Estimate	Install/Remove barrier screens	4	10		40	1400
C	Fresno Slough Dam Estimate	Sediment removal from channel	4	2		8	280
C	Fresno Slough Dam Estimate	Lube gates	4	1		4	140
C	Short Canal - canal side control structure	Sediment removal from channel	8	5		40	1400
C	Short Canal - canal side control structure	Lube gates	4	1		4	140
C	San Mateo Avenue	Cleaning out culverts	8	2		16	560
C	San Mateo Avenue	Cleaning of debris off roadway	4	12	1	48	1680
C	Chowchilla Bifurcation Structure Estimate	Sediment removal from channel	8	2		16	560
C	Chowchilla Bifurcation Structure Estimate	Lube gates	8	1		8	280
C	Mendota Dam	Fish Ladder Cleaning	4	12	1	48	1680
C	Mendota Dam	Sediment removal from channel	4	2		8	280
C	Screens Estimate	Sediment removal from channel	4	2		8	280
C	Screens Estimate	Screens removal for cleaning	6	2		12	420
C	Screens Estimate	Screens removal for cleaning	2	2		4	140
C	Screens Estimate	Screens removal for cleaning	2	2		4	140
C	Screens Estimate	Grease and inspect pump/motor	4	12		48	1680

Operational Vehicle Trips and Trip Length

Alternative	Location	Activity	Trips/Activity	Frequency of Activity	Note	Total Trips	VMT
C	Screens Estimate	Brush inspection	4	12		48	1680
C	Screens Estimate	Trash Rack	4	12		48	1680
D	Fresno Slough Dam Estimate	Inspection of gates, seals	2	12	1	24	840
D	Fresno Slough Dam Estimate	Make adjustments	2	12	1	24	840
D	Fresno Slough Dam Estimate	Monitor for seepage	2	12	1	24	840
D	Mendota Dam	Inspection of ladder	2	12	1	24	840
D	North Canal - river side control structure	Inspection of gates, seals	2	12	1	24	840
D	North Canal - river side control structure	Make adjustments	2	12	1	24	840
D	North Canal - river side control structure	Assessment after flows	2	12	1	24	840
D	North Canal - river side control structure	Inspection of ladder	2	12	1	24	840
D	North Canal - canal side control structure	Inspection of gates, seals	2	12	1	24	840
D	North Canal - canal side control structure	Make adjustments	2	12	1	24	840
D	North Canal - canal side control structure	Assessment after flows	2	12	1	24	840
D	Screens Estimate	Inspections, flow verification, clear debris	2	120		240	8400
D	Screens Estimate	Velocity measurements	4	8		32	1120
D	Barriers Estimate	Inspection, flow verification, clear debris	2	120		240	8400
D	Barriers Estimate	Install/Remove barrier screens	4	10		40	1400
D	Fresno Slough Dam Estimate	Sediment removal from channel	4	2		8	280
D	Fresno Slough Dam Estimate	Lube gates	4	1		4	140
D	North Canal - river side control structure	Sediment removal from channel	4	2		8	280
D	North Canal - river side control structure	Lube gates	4	1		4	140
D	North Canal - river side control structure	Fish Ladder Cleaning	4	12	1	48	1680
D	North Canal - river side control structure	Fish attraction pipeline Cleaning	4	12	1	48	1680
D	North Canal - canal side control structure	Sediment removal from channel	8	5		40	1400
D	North Canal - canal side control structure	Lube gates	4	1		4	140
D	North Canal - canal side control structure	Channel Survey	8	5		40	1400
D	North Canal - canal side control structure	Channel reshaping	8	5		40	1400
D	Mendota Dam	Fish Ladder Cleaning	4	12	1	48	1680
D	Mendota Dam	Sediment removal from channel	4	2		8	280
D	Screens Estimate	Sediment removal from channel	4	2		8	280
D	Screens Estimate	Screens removal for cleaning	6	2		12	420
D	Screens Estimate	Screens removal for cleaning	2	2		4	140
D	Screens Estimate	Screens removal for cleaning	2	2		4	140
D	Screens Estimate	Grease and inspect pump/motor	4	12		48	1680
D	Screens Estimate	Brush inspection	4	12		48	1680
D	Screens Estimate	Trash Rack	4	12		48	1680

Notes:

1. Trips are based on information provided by DWR and the Project Description. For those designated with a note of 1 these did not specify a frequency and the frequency was assumed to average once per month.
2. Trip length was assumed to be 35 miles which is the approximate distance from Madera or Fresno.

Annual Average Concentration of DPM at Maximum Exposed Sensitive Receptor

Alternative	Receptor Type	UTMX	UTMY	Year	Concentration (ug/m^3)
A		733752	4071015	2014	0.046
A		733752	4071015	2015	0.033
A		733752	4071015	2016	0.038
A		733752	4071015	2017	0.006
A		733752	4071015	2018	0.040
A		733752	4071015	2019	0.020
A		733752	4071015	2020	0.052
A		733752	4071015	2021	0.029
A		733752	4071015	2022	0.022
A	School Child	733752	4071015	2023	0.010
A		735610	4074256	2014	0.046
A		735610	4074256	2015	0.114
A		735610	4074256	2016	0.152
A		735610	4074256	2017	0.058
A		735610	4074256	2018	0.354
A		735610	4074256	2019	0.261
A		735610	4074256	2020	0.313
A		735610	4074256	2021	0.296
A		735610	4074256	2022	0.220
A	Resident Child	735610	4074256	2023	0.088
B		733752	4071015	2014	0.047
B		733752	4071015	2015	0.041
B		733752	4071015	2016	0.028
B		733752	4071015	2017	0.007
B		733752	4071015	2018	0.043
B		733752	4071015	2019	0.020
B		733752	4071015	2020	0.019
B		733752	4071015	2021	0.018
B		733752	4071015	2022	0.017
B	School Child	733752	4071015	2023	0.007
B		735610	4074256	2014	0.049
B		735610	4074256	2015	0.130
B		735610	4074256	2016	0.134
B		735610	4074256	2017	0.059
B		735610	4074256	2018	0.246
B		735610	4074256	2019	0.295
B		735610	4074256	2020	0.342
B		735610	4074256	2021	0.283
B		735610	4074256	2022	0.208
B	Resident Child	735610	4074256	2023	0.090
C		733752	4071015	2014	0.046
C		733752	4071015	2015	0.033
C		733752	4071015	2016	0.038
C		733752	4071015	2017	0.006

C		733752	4071015	2018	0.017
C		733752	4071015	2019	0.031
C		733752	4071015	2020	0.108
C		733752	4071015	2021	0.070
C	School Child	733752	4071015	2022	0.013
C		735610	4074256	2014	0.042
C		735610	4074256	2015	0.105
C		735610	4074256	2016	0.139
C		735610	4074256	2017	0.053
C		735610	4074256	2018	0.032
C		735610	4074256	2019	0.200
C		735610	4074256	2020	0.339
C		735610	4074256	2021	0.572
C	Resident Child	735610	4074256	2022	0.211
D		733752	4071015	2014	0.047
D		733752	4071015	2015	0.041
D		733752	4071015	2016	0.028
D		733752	4071015	2017	0.006
D		733752	4071015	2018	0.020
D		733752	4071015	2019	0.031
D		733752	4071015	2020	0.109
D		733752	4071015	2021	0.074
D	School Child	733752	4071015	2022	0.013
D		739738	4072804	2014	0.097
D		739738	4072804	2015	0.239
D		739738	4072804	2016	0.228
D		739738	4072804	2017	0.097
D		739738	4072804	2018	0.094
D		739738	4072804	2019	0.152
D		739738	4072804	2020	0.207
D		739738	4072804	2021	0.503
D	Resident Child	739738	4072804	2022	0.058

Health Risk Assessment Exposure and Toxicity Values

Population	Year	Age	DBR	EF	TAF	CF	A	ED	AT	ASF
	2014		361	350	1	0.000001	1	1	25,550	10
	2015	1	1090	350	1	0.000001	1	1	25,550	10
	2016	2	1090	350	1	0.000001	1	1	25,550	10
	2017	3	861	350	1	0.000001	1	1	25,550	3
	2018	4	861	350	1	0.000001	1	1	25,550	3
	2019	5	861	350	1	0.000001	1	1	25,550	3
	2020	6	861	350	1	0.000001	1	1	25,550	3
	2021	7	861	350	1	0.000001	1	1	25,550	3
	2022	8	861	350	1	0.000001	1	1	25,550	3
Resident Child	2023	9	861	350	1	0.000001	1	1	25,550	3
	2014		520	180	4.2	0.000001	1	1	25,550	3
	2015		520	180	4.2	0.000001	1	1	25,550	3
	2016		520	180	4.2	0.000001	1	1	25,550	3
	2017		520	180	4.2	0.000001	1	1	25,550	3
	2018		520	180	4.2	0.000001	1	1	25,550	3
	2019		520	180	4.2	0.000001	1	1	25,550	3
	2020		520	180	4.2	0.000001	1	1	25,550	3
	2021		520	180	4.2	0.000001	1	1	25,550	3
	2022		520	180	4.2	0.000001	1	1	25,550	3
School Child	2023		520	180	4.2	0.000001	1	1	25,550	3

1. Values for exposure are based on recommendations from SJVAPCD 2015 & OEHHA 2015.
2. The averaging time (AT) is for a 70 year exposure duration (70 years x 365 days = 25,550).

Abbreviations:
A = Inhalation absorption factor (unitless)
ASF = Age sensitivity factor (unitless)
AT = Averaging Time (days)
CF = Conversion Factor (m3/L and mg/ µg)
DBR = Daily Breathing Rate (L/kg-day)
EF = Exposure Frequency (days/year)
ED = Exposure Duration (years)
TAF = Time Adjustment Factor (unitless)

Health Impacts at Maximally Exposed Sensitive Receptor

Receptor Type	Alternative	UTM X (m)	UTM Y (m)	Maximum Cancer Risk at Receptor in a million	Chronic HI
Resident Child	A	735610	4074256	108.08	0.07
	B	735610	4074256	105.35	0.07
	C	735610	4074256	97.13	0.11
	D	739738	4072804	125.13	0.10
School Child	A	733752	4071015	15.06	0.01
	B	733752	4071015	12.56	0.01
	C	733752	4071015	18.39	0.02
	D	733752	4071015	18.72	0.02

Notes:

1. The risk is based on a cancer potency factor for DPM of 1.1. Individual years concentration and age specific factors were used to arrive at the total risk.

2. The Chronic HI is based on a REL for DPM of 5. The year with the highest concentration was used to calculate HI.

Model Source Parameters

Source ID	Location Type	Model Source Type	Number of Sources	Emission Rate (grams/second)	Length of Side (meters)	Release Height (meters)	Initial Lateral Dimension (meters)	Initial Vertical Dimension (meters)
CCANAL	Construction Area	Volume	589	0.0017	50	5	23.26	1.4
CHILLA	Construction Area	Volume	56	0.0179	50	5	23.26	1.4
CNS	Construction Area	Volume	254	0.0039	200	5	93.02	1.4
CWB	Construction Area	Volume	412	0.0024	200	5	93.02	1.4
FNS	Construction Area	Volume	272	0.0037	200	5	93.02	1.4
FSDC	Construction Area	Volume	989	0.0010	50	5	23.26	1.4
FWN	Construction Area	Volume	368	0.0027	200	5	93.02	1.4
LONE	Construction Area	Volume	4	0.2500	50	5	23.26	1.4
NCANAL	Construction Area	Volume	1044	0.0010	50	5	23.26	1.4
SCANAL	Construction Area	Volume	711	0.0014	50	5	23.26	1.4
SMCROSS	Construction Area	Volume	35	0.0286	50	5	23.26	1.4
BASS	Road	Volume	145	0.0069	13.5	2.55	6.28	2.37
HI180E	Road	Volume	457	0.0022	13.5	2.55	6.28	2.37
HI180W	Road	Volume	149	0.0067	13.5	2.55	6.28	2.37
OVERLAP	Road	Volume	32	0.0313	13.5	2.55	6.28	2.37
SANMATEO	Road	Volume	318	0.0031	13.5	2.55	6.28	2.37

Notes:

1. Construction areas were modeled as adjacent volume sources to cover the area contained by construciton activities
2. Roads were modeled as adjacent volume sources with a road width of 7.5 meters and 6 meter buffer.

Sensitive Receptors

UTM X (meter)	UTM Y (Meter)	Name	Type
733694	4071080	Washington Elementary	School Child
733752	4071015	Washington Elementary	School Child
733538	4070955	Washington Elementary	School Child
733603	4070867	Washington Elementary	School Child
734294	4070090	Mendota High	School Child
734235	4071367	Migrant Head Start	School Child
733005	4070881	Community Day	School Child
732939	4070783	HeadStart	School Child
733270	4071359	Mccabe	School Child
733256	4071101	Mccabe	School Child
733758	4072290	Mendota Elementary	School Child
733806	4072192	Mendota Elementary	School Child
733670	4072095	Mendota Elementary	School Child
736165	4076646	Resident	Resident Child
736142	4076652	Resident	Resident Child
736119	4076657	Resident	Resident Child
736101	4076662	Resident	Resident Child
736268	4076567	Resident	Resident Child
733522	4075870	Resident	Resident Child
733503	4075810	Resident	Resident Child
733490	4075730	Resident	Resident Child
733478	4075697	Resident	Resident Child
734427	4075111	Resident	Resident Child
743494	4075470	Resident	Resident Child
733964	4075622	Resident	Resident Child
734243	4072940	Resident	Resident Child
734224	4072962	Resident	Resident Child
734188	4072900	Resident	Resident Child
743177	4072824	Resident	Resident Child
734718	4073308	Resident	Resident Child
737247	4072216	Resident	Resident Child
735610	4074256	Resident	Resident Child
738884	4071994	Resident	Resident Child
739812	4071686	Resident	Resident Child
739802	4072537	Resident	Resident Child
739762	4072580	Resident	Resident Child
739738	4072804	Resident	Resident Child
742097	4072010	Resident	Resident Child
734441	4075063	Resident	Resident Child
734441	4075077	Resident	Resident Child
734433	4075098	Resident	Resident Child

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Appendix 4-B Air Quality Health Risk Assessment

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Health Risk Assessment

The construction equipment and material hauling vehicles emit diesel particulate matter that is classified as a toxic air contaminant (TAC). Gasoline-fueled vehicles emit various TACs in much smaller quantities and health toxicity compared to diesel particulate matter (DPM). Thus, gasoline fueled emission sources have not been included further in this health risk assessment (HRA). The emissions of DPM sources are used in the HRA and the details of the emission rates used are contained in Appendix 4-A – Tables.

In order to evaluate the impacts of DPM on nearby sensitive receptors, a HRA was conducted consistent with the California Office of Environmental Health Hazard Assessment (OEHHA2012, 2003, and 2015) and San Joaquin Valley Air Pollution Control District guidelines as most recently updated in 2015 (SJVAPCD 2006, 2015) for determining local community risks and hazards. The HRA evaluated the health risks associated with the Project emissions from construction equipment and material hauling vehicles.

Dispersion Modeling

The dispersion of emissions was simulated using the U.S. Environmental Protection Agency (EPA) regulatory approved model called AERMOD. The model inputs and assumptions are summarized below. AERMOD input files can be found in Appendix 4-C – AERMOD Input Files.

- **Meteorological Data:** AERMOD requires meteorological data as an input into the model. This is typically processed using AERMET, a pre-processor to AERMOD. AERMET requires surface meteorological data, upper air meteorological data and surface parameter data. The SJVAPCD has several meteorological data sets that have been processed using AERMET available on its website[1]. For this Project the pre-processed data for Fresno was utilized since it is one of the closest data sets available and has the most conservative wind speeds. Five years of meteorological data from 2005 through 2009 was utilized.
- **Terrain**: Elevation and land use data was imported from the National Elevation Dataset (NED) maintained by the United States Geological Survey (USGS). An important consideration in an air dispersion modeling analysis is the selection of rural or urban dispersion coefficients. Based on the rural location of the project, rural dispersion coefficients were selected for in the model..
- **Receptors:** Receptors were modeled at discrete receptor locations. Receptors were modeled at a height of 1.5 meters.
- **Source Parameters:** Volume sources were utilized to model construction work areas. A work area was divided into adjacent volume sources with a release height of 5 meters. Roads were modeled using adjacent volume sources with a side length of 13.5 meters based on an average road width of 7.5 meters plus 6 feet buffer as recommended by EPA

[1] In December of 2012, the EPA released a new version of AERMET and AERMOD which included some updates involving the meteorological data. At the time of preparation of this document, the SJVAPCD has not reprocessed the meteorological data sets. Communication with Glenn Reed at SJVAPCD recommended that users continue to use the older and currently available meteorological data sets with the new version of AERMOD until updated guidance has been provided by SJVAPCD (Reed 2013).

(EPA 2012). Sources were assumed to be rural sources. Details of source parameters are available in Appendix 4-A – Tables.

- **Emission rates:** Emissions were modeled using the χ/Q ("chi over q") method, such that each source has unit emission rates (i.e., 1 gram per second [g/s]), and the model estimates dispersion factors (with units of [ug/m^3]/[g/s]). For annual average ambient air concentrations, the estimated annual average dispersion factors were multiplied by the annual average emission rates for each source. For simplicity, the model assumes a constant emission rate during the entire year. Air concentrations are calculated as follows:

$$\text{Conc} = \left({}^{\chi}/_{Q}\right) \times (ER)$$

Where:

Conc = Chemical concentration in air (µg/m^3)

${}^{\chi}/_{Q}$ = Modeled dispersion factor in (ug/m^3)/(g/s)

ER = Chemical emission rate for modeled source (g/s)

Exposure Factors

Potential sensitive receptors such as residents, school children, day cares, and hospitals were searched for in the vicinity of the Project. Schools and day cares were identified using data available from the San Joaquin Valley Unified Air Pollution Control District[2]. This information was also compared to information available for the City of Mendota from several State databases (Department of Education 2013, Automated Licensing Information and Report Tracking System 2013, and California Community Care Licensing Division 2013) which includes schools, day cares, and health care facilities. A search of key words using a web-based search engine verified that there were no additional schools, day cares, or health facilities in the area. There are a large number of residential houses located in the City of Mendota. There are a few isolated locations of residential units located closer to the Project vicinity. These were identified and added as discrete sensitive receptors to the air dispersion model. The maximally exposed residential or school receptor was reported.

The exposure parameters used for estimating excess lifetime cancer risks and chronic non-cancer Hazard Index (HI) for all potentially exposed populations were obtained using risk assessment guidelines from SJVAPCD and OEHHA, unless otherwise noted, and are presented in Appendix 4-A – Tables.

The inhalation dose is a function of the concentration of a chemical and the intake of that chemical. The dose can be calculated as follows:

$$Dose = \frac{Conc * TAF * DBR * A * EF * ED * CF}{AT}$$

[2] KML files are available in the Inventory and Modeling Resources page (SJVAPCD 2013). Available at www.valleyair.org/busind/pto/Resources/Resources_idx.htm

Where:

Dose	=	Dose of chemical (mg/kg-day)
Conc	=	Chemical concentration in air (µg/m^3)
TAF	=	Time Adjustment Factor[3] (unitless)
DBR	=	Daily Breathing Rate (L/kg-day)
A	=	Inhalation Absorption Factor (unitless)
EF	=	Exposure Frequency (days/year)
ED	=	Exposure Duration (years)
AT	=	Averaging Time (days)
CF	=	Conversion Factor (m^3/L and mg/ µg)

Toxicity Assessment

The toxicity assessment characterizes the relationship between the magnitude of exposure and the nature and magnitude of adverse health effects that may result from such exposure. For purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories: cancer and non-cancer endpoints. Toxicity values used to estimate the likelihood of adverse effects occurring in humans at different exposure levels are identified as part of the toxicity assessment component of a risk assessment.

In this HRA, diesel exhaust, a complex mixture that includes hundreds of individual constituents, is identified by the State as a known carcinogen is the only chemical of potential concern quantified. Under California regulatory guidelines, DPM is used as a surrogate measure of carcinogen exposure for the mixture of chemicals that make up diesel exhaust as a whole.

The estimated excess lifetime cancer risk for a resident child, daycare child, and school child were adjusted using the age sensitivity factors (ASFs) recommended by OEHHA (OEHHA 2015). This approach accounts for an "anticipated special sensitivity to carcinogens" of infants and children. Cancer risk estimates are weighted by a factor of ten (10) for exposures that occur from the third trimester of pregnancy to two years of age and by a factor of three (3) for exposures that occur from two years through 15 years of age. No weighting factor (i.e. an ASF of one, which is equivalent to no adjustment) is applied to ages 16 to 70 years.

Risk Characterization

Excess lifetime cancer risks are estimated as the upper-bound incremental probability that an individual would develop cancer over a lifetime as a direct result of exposure to potential

[3] This adjusts the concentration to account for overlap in time of sources and receptors. This is used for the school and daycare receptors and is consistent with OEHHA's worker modeled concentration adjustment factor for an operating schedule of 8 hrs per day and 5 days per week.

carcinogens. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF).

The equation used to calculate the potential excess lifetime cancer risk for the inhalation pathway is as follows:

$$Risk_i = Dose * CPF_i * ASF$$

Where:

$Risk_i$ = Cancer Risk; incremental probability of an individual developing cancer as a result of inhalation exposure to a particular potential carcinogen (unitless)

Dose = Dose of chemical (mg/kg-day)

CPF_i = Cancer Potency Factor for $Chemical_i$ (mg chemical/kg body weight-day)$^{-1}$

ASF = Age Sensitivity Factor (unitless)

The potential for exposure to result in chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration (which is equivalent to the average daily air concentration) to the chemical-specific non-cancer chronic reference exposure levels (RELs). When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient (HQ). To evaluate the potential for adverse chronic non-cancer health effects from simultaneous exposure to multiple chemicals, the HQs for all chemicals are summed, yielding an HI. For evaluation of the Project, DPM is the only pollutant evaluated for chronic non-cancer risks; therefore the HQ for DPM is the same as the overall HI.

The equations used to calculate the chemical-specific HQs and the overall HI are:

$$Chronic\ HQ_i = C_i / REL_i$$

$$Chronic\ HI = \sum HQ_i$$

Where:

Chronic HQ_i = Chronic Hazard Quotient for $Chemical_i$ (unitless)

Chronic HI = Hazard Index (unitless)

Ci = Annual Average Air Concentration for $Chemical_i$ ($\mu g/m^3$)

REL_i = Chronic Non-cancer Reference Exposure Level for $Chemical_i$ ($\mu g/m^3$)

No acute non-cancer impacts were estimated since there is no acute reference exposure level for DPM.

References

Automated Licensing Information and Report Tracking System. 2013. Available at: http://www.alirts.oshpd.ca.gov/AdvSearch.aspx

California Community Care Licensing Division (CCLD). 2013. *CCLD Facility Search Form*. Available at: https://secure.dss.cahwnet.gov/ccld/securenet/ccld_search/ccld_search.aspx

Office of Environmental Health Hazard Assessment (OEHHA). 2003. *Air Toxics Hot Spots Program Risk Assessment Guidelines The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.* August.

Office of Environmental Health Hazard Assessment (OEHHA). 2009. *Technical Support Document for Cancer Potency Factors: Methodologies for Derivation, Listing of Available Values, and Adjustment to Allow for Early Life Stage Exposures*, May.

Office of Environmental Health Hazard Assessment (OEHHA). 2012. *Air Toxics Hot Spots Program Risk Assessment Guidelines Technical Support Document for Exposure Assessment and Stochastic Analysis.* August.

Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments.* February.

Reed, G., pers. comm. 2013. Personal Communication with Glenn Reed, SJVAPCD Senior Air Quality Specialist.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2006. *Draft Guidance for Air Dispersion Modeling*. August.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Final Staff Report, Update to District's Risk Management Policy to Address ORHHA's Revised Risk Assessment Guidance Document. May.

U.S. Environmental Protection Agency (EPA). 2012. *Haul Road Work Group Final Report Submission into EPA-OAQPS.* March.

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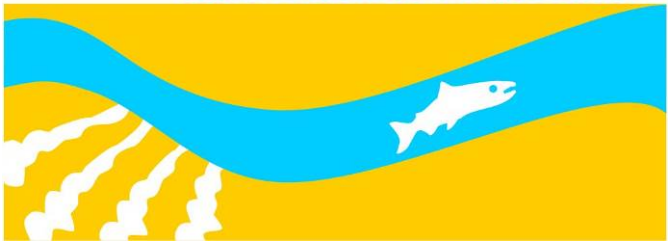
Appendix 17-A Certification of Calibration for Ambient Noise Survey Equipment

SAN JOAQUIN RIVER
RESTORATION PROGRAM



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CERTIFICATE OF CALIBRATION
17235-1
FOR BRÜEL & KJÆR
HANDHELD ANALYZER

Model **2250** Serial No. **2672071**
ID No. **N/A**
With Microphone **4189** Serial No. **2662748**
With Preamplifier **ZC0032** ID# **10617**
P.O. # **Verbal**

Customer: **URS Corporation**
Santa Ana, CA 92705

was tested and met factory specifications at the points tested
according to the Referenced Test Procedure

on **17 FEB 2010** **BY HAROLD LYNCH**
Service Manager

As received condition: Within Specification.
Re-calibration due on: **17 FEB 2012**

Certified References*

Mfg.	Type	Serial No.	Date Due
B&K	2636	1423390	05 JAN 2011
B&K	1049	1464545	09 JUN 2010
HP	34401A	3146A48348	18 JUN 2010
HP	3458A	2823A07179	23 JUN 2010
B&K	4226	2141942	07 DEC 2010
B&K	4231	1723623	30 JUN 2010

Performed in Compliance with ANSI, NCSL Z-540-1, 1994
and ISO 17025, ISO 9001:2000 Certification NQA No. 11252
*References are traceable to NIST (National Institute of Standards and Technology).

Note: For calibration data see enclosed pages.
The data represent both "as found" and "as left" conditions.

Reference Test Procedure: **ACCT Procedure 2250 Ver. 2.0**

Brüel & Kjær Factory Service Instructions: **2250**

Temperature	Relative Humidity	Barometric Pressure
23°C	**32**%	**986.33** hPa

Note: This calibration report shall not be reproduced, except in full, without written consent by Odin Metrology, Inc..

Signed: **ODIN METROLOGY, INC.**

CALIBRATION OF BRÜEL & KJÆR INSTRUMENTS
3533 OLD CONEJO ROAD; SUITE 125 THOUSAND OAKS CA 91320
PHONE: (805) 375-0830 FAX: (805) 375-0405

2250/2270 SOFTWARE LICENSE

	BZ7230 ver. 3.x
License/Lizenz/Licence/Licencia/Licenza	0526 9F64 75AF CA02
Serial No./Seriennummer/Numéro de série Nº de Serie/Nr. di serie	2672071

BR1625-11

Brüel & Kjær

MANUFACTURER'S CERTIFICATE OF CONFORMANCE

We certify that Brüel & Kjær -2250--- Serial No 2672071 has been tested and passed all production tests, confirming compliance with the manufacturer's published specification at the date of the test.

The final test has been performed using calibrated equipment, traceable to National or International Standards or by ratio measurements.

Brüel & Kjær is certified under ISO 9001:2000 assuring that all calibration data for test equipment are retained on file and are available for inspection upon request.

Nærum 28-jan-2009

Torben Bjørn
Vice President
Operations

Please note that this document is not a calibration certificate, for information on our calibration services please contact your nearest Brüel & Kjær Service Center.

BA0238-15

WORLD HEADQUARTERS: DK-2850 Nærum · Denmark

Brüel & Kjær

PCB PIEZOTRONICS
A PCB GROUP COMPANY

Certificate of Calibration and Conformance

Certificate Number 2011-151007

Instrument Model CAL200, Serial Number 2794, was calibrated on 02NOV2011. The instrument meets factory specifications per Procedure D0001.8190.

Instrument found to be in calibration as received: YES
Date Calibrated: 02NOV2011
Calibration due: 02NOV2013

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	2559	2504	12 Months	29NOV2011	17865-1
PCB	1502B02FJ15PSIA	1342	12 Months	06DEC2011	3374488329
Larson Davis	2900	0661	12 Months	05APR2012	2011-141857
Hewlett Packard	34401A	3146A10352	12 Months	21AUG2012	5335364
Larson Davis	PRM915	0112	12 Months	09SEP2012	2011-148845
Larson Davis	PRM902	0480	12 Months	09SEP2012	2011-148846
Larson Davis	MTS1000/2201	0111	12 Months	09SEP2012	SM090911

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Environmental test conditions as shown on calibration report.

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

This calibration complies with the requirements of ISO 17025 and ANSI Z540. The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

Before: 114.06 dB, 94.05 dB, 1000.1 Hz @ sea level.
After: Refer to Certificate of Measured Output.

Signed: _____
Technician: Scott Montgomery

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified

PCB PIEZOTRONICS
A PCB GROUP COMPANY

Certificate of Calibration and Conformance

Certificate Number 2011-151300

Instrument Model 820, Serial Number 1768, was calibrated on 08NOV2011. The instrument meets factory specifications per Procedure D0001.8160, ANSI S1.4 1983, IEC 651-Type 1 1979, and IEC 804-Type 1 1985.

Instrument found to be in calibration as received: YES
Date Calibrated: 08NOV2011
Calibration due: 08NOV2013

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	LDSigGn/2239	0099 / 0104	12 Months	18JAN2012	2011-138645

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 23 ° Centigrade

Relative Humidity: 25 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

This calibration complies with the requirements of ISO 17025 and ANSI Z540. The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"AS RECEIVED" data same as shipped data.
Tested with PRM828-2751

Signed: Ron Harris
Technician: Ron Harris

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified

PCB PIEZOTRONICS
A PCB GROUP COMPANY

Certificate of Calibration and Conformance

Certificate Number 2010-131816

Instrument Model 820, Serial Number 1597, was calibrated on 16JUL2010. The instrument meets factory specifications per Procedure D0001.8160, ANSI S1.4 1983, IEC 651-Type 1 1979, and IEC 804-Type 1 1985.

Instrument found to be in calibration as received: YES
Date Calibrated: 16JUL2010
Calibration due: 16JUL2012

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	LDSigGn/2209	0277 / 0109	12 Months	24MAR2011	2010-127832

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 23 ° Centigrade

Relative Humidity: 33 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

This calibration complies with the requirements of ISO 17025 and ANSI Z540. The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"As Received" data is the same as shipped data.
Tested with 828-2491

Signed: Ron Harris
Technician: Ron Harris

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2000 Certified

PCB PIEZOTRONICS
A PCB GROUP COMPANY

Certificate of Calibration and Conformance

Certificate Number 2010-131844

Instrument Model 820, Serial Number 1470, was calibrated on 19JUL2010. The instrument meets factory specifications per Procedure D0001.8160, ANSI S1.4 1983, IEC 651-Type 1 1979, and IEC 804-Type 1 1985.

Instrument found to be in calibration as received: YES
Date Calibrated: 19JUL2010
Calibration due: 19JUL2012

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	LDSigGn/2239	0099 / 0104	12 Months	20JAN2011	2010-125871

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 24 ° Centigrade

Relative Humidity: 34 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

This calibration complies with the requirements of ISO 17025 and ANSI Z540. The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"AS RECEIVED" data same as shipped data.
Tested with 828-917

Signed: Ron Harris

Technician: Ron Harris

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2000 Certified

Mendota Pool Bypass and Reach 2B Improvements Project

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Appendix 17-B Ambient Noise Level Field Measurement Data Sheets

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FIELD MEASUREMENT DATA SHEET

URS

Project Name: Reach 2B San Joaquine River Restoration Job # 18600200.0031

ID

SITE IDENTIFICATION: LT 1 OBSERVER(s): Steve Ryan
START DATE & TIME: 12/28/11 9:12 END DATE & TIME: 12/29/11 10:02
ADDRESS: 13208 East side dr.
GPS coordinates: N 36° 48' 22.4" W 120° 20' 59.3

Weather

TEMP: 42 ° F HUMIDITY: 40 % R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 5 MPH DIR: N NE E SE S SW W NW STEADY GUSTY ____MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other: _____

Acoustic Measurements

INSTRUMENT: 820 Blue TYPE: 1 2 SERIAL #: 1768
CALIBRATOR: 200 SERIAL #: 2794
CALIBRATION CHECK: PRE-TEST 94 dBA SPL POST-TEST 94 dBA SPL WINDSCREEN ___
SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER: _____

Rec #	Start Time / End Time	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	
1	9:12 / 10:02	48.9	82.8	26.5	32.4	38.1	46.8	
___	___ / ___							
___	___ / ___							
___	___ / ___							

COMMENTS: mounted to power pole

Source Info and Traffic Counts

PRIMARY NOISE(S): TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: East side dr., Paved, 2 Lane rd., Lots of Potholes
COUNT DURATION: _____-MINUTE

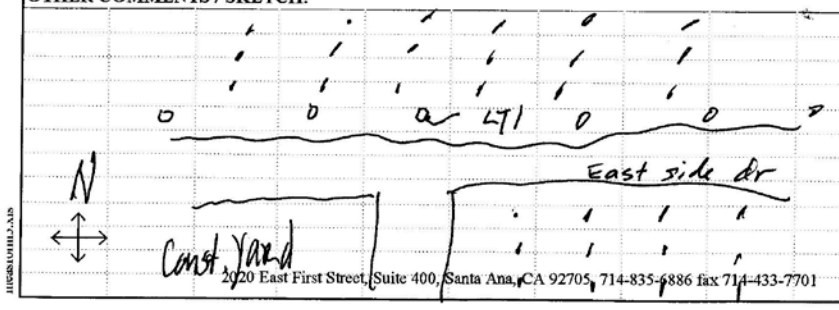
	SPEED (mph) NB / EB / SB / WB	SPEED (mph) NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	___ / ___	___ / ___	___ / ___	___ / ___
MED. TRUCKS:	___ / ___	___ / ___	___ / ___	___ / ___
HVY TRUCKS:	___ / ___	___ / ___	___ / ___	___ / ___
BUSES:	___ / ___	___ / ___	___ / ___	___ / ___
MOTORCYCLES:	___ / ___	___ / ___	___ / ___	___ / ___

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER: _____

Description / Sketch

TERRAIN: HARD SOFT MIXED FLAT OTHER: _____
PHOTOS: _____
OTHER COMMENTS / SKETCH:



2020 East First Street, Suite 400, Santa Ana, CA 92705, 714-835-6886 fax 714-433-7701

FIELD MEASUREMENT DATA SHEET

URS **Project Name:** Reach 2B San Joaquine River Restoration **Job #** 18600200.0031

SITE IDENTIFICATION: LT2 OBSERVER(s): Stan, Ryan
START DATE & TIME: 12/28/11 950 END DATE & TIME: 12/28/11 10:16
ADDRESS: Eastside Dr 2382-2398 N. San Mateo Rd.

GPS coordinates: N 36°46'17.8" W 120°18'51.3"

TEMP: 47 °F HUMIDITY: 63 % R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 6 MPH DIR: N NE E SE S SW W NW STEADY GUSTY ____ MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other: ____

INSTRUMENT: 820 Green TYPE: 1 2 SERIAL #: 1597
CALIBRATOR: 200 SERIAL #: 2794
CALIBRATION CHECK: PRE-TEST 94 dBA SPL POST-TEST 93.8 dBA SPL WINDSCREEN ✓

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER: ____

Rec #	Start Time / End Time	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	
1	950 / 10:16	55.7	89.9	22.8	27.4	36.3	46	
	/							
	/							
	/							

COMMENTS: Mounted to power pole, 5+ dogs from house

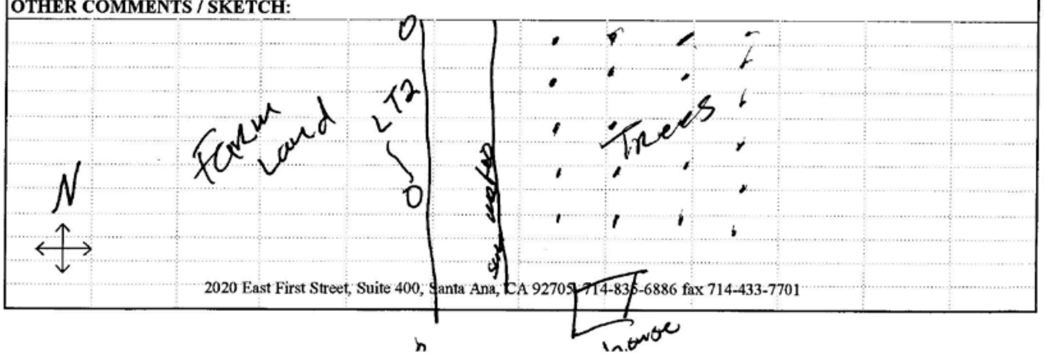
PRIMARY NOISE(S): TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: San Mateo, dirt/Paved, 1 lane Rd.
COUNT DURATION: ____-MINUTE

	NB / EB / SB / WB	SPEED (mph) NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	/	/	/	/
MED. TRUCKS:	/	/	/	/
HVY TRUCKS:	/	/	/	/
BUSES:	/	/	/	/
MOTORCYCLES:	/	/	/	/

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER:

TERRAIN: HARD / SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



2020 East First Street, Suite 400, Santa Ana, CA 92705 714-835-6886 fax 714-433-7701

FIELD MEASUREMENT DATA SHEET

URS Project Name: Reach 2B San Joaquine River Restoration Job # 18600200.0031

ID

SITE IDENTIFICATION: LT3 OBSERVER(s): Stan, Ryan
START DATE & TIME: 12/28/11 1045 END DATE & TIME: 12/29/11 11:06
ADDRESS:
GPS coordinates: N36°47' 32.6" W120°22' 18.5"

Weather

TEMP: 50.2 F HUMIDITY: 44 % R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 0-1 MPH DIR: (N) NE E SE S SW W NW STEADY GUSTY ____MPH
SKY: CLEAR SUNNY DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other: _____

Acoustic Measurements

INSTRUMENT: 820 yellow TYPE: (1) 2 SERIAL #: 1470
CALIBRATOR: 200 SERIAL #: 2794
CALIBRATION CHECK: PRE-TEST 94 dBA SPL POST-TEST 93.8 dBA SPL WINDSCREEN ✓
SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER: _____

Rec #	Start Time	End Time							
1	10:15	11:06	L_{eq} 39.2	L_{max} 115	L_{min} 21.2	L_{90} 26.9	L_{50} 32.3	L_{10} 39.9	
___/___/___			L_{eq} ___	L_{max} ___	L_{min} ___	L_{90} ___	L_{50} ___	L_{10} ___	
___/___/___			L_{eq} ___	L_{max} ___	L_{min} ___	L_{90} ___	L_{50} ___	L_{10} ___	
___/___/___			L_{eq} ___	L_{max} ___	L_{min} ___	L_{90} ___	L_{50} ___	L_{10} ___	

COMMENTS: Marked to dead tree in Creek bed, Barking dogs

Source Info and Traffic Counts

PRIMARY NOISE(S): (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: Paved Rd., Buss Rd, 2 lane Rd.
COUNT DURATION: _____-MINUTE SPEED (mph) #2 COUNT: SPEED (mph)

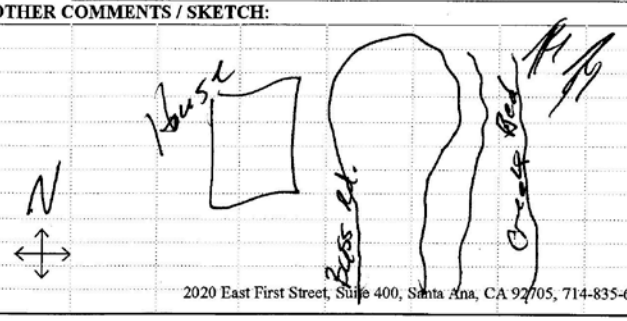
	NB / EB / SB / WB	NB EB / SB WB	NB / EB / SB / WB	NB EB / SB WB
AUTOS:	___/___	___/___	___/___	___/___
MED. TRUCKS:	___/___	___/___	___/___	___/___
HVY TRUCKS:	___/___	___/___	___/___	___/___
BUSES:	___/___	___/___	___/___	___/___
MOTORCYCLES:	___/___	___/___	___/___	___/___

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / RUSTLING LEAVES / distant BARKING DOGS / BIRDS
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER: _____

Description / Sketch

TERRAIN: HARD (SOFT) MIXED FLAT OTHER: _____
PHOTOS: _____
OTHER COMMENTS / SKETCH:



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FIELD MEASUREMENT DATA SHEET

URS Project Name: Reach 2B San Joaquine River Restoration Job # 18600200.0031

ID

SITE IDENTIFICATION: ST1 OBSERVER(s): Ryan, Stan
START DATE & TIME: 12/28/11 10:30 END DATE & TIME:
ADDRESS: Mendota Pool Park
GPS coordinates: N36° 46' 43.6" W120° 22' 23.7"

Weather

TEMP: 54 ° F HUMIDITY: 51.4 % R.H. WIND: CALM (LIGHT) MODERATE VARIABLE
WINDSPEED: 3.5 MPH DIR: N NE E SE (S) SW W NW STEADY GUSTY ____MPH
SKY: (CLEAR) (SUNNY) DARK PARTLY CLOUDY OVRCST FOG DRIZZLE RAIN Other:

Acoustic Measurements

INSTRUMENT: BK 2250 TYPE: (1) 2 SERIAL #: 2672071
CALIBRATOR: 200 SERIAL #: 2794
CALIBRATION CHECK: PRE-TEST 94.1 dBA SPL POST-TEST 94.1 dBA SPL WINDSCREEN X
SETTINGS: (A-WEIGHTED) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

	Rec #	Start Time / End Time							
Reach 2B001	1	10:30 / 12:30	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	
Reach 2B002	2	08:00 / 22:00	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	
Reach 2B003	3	22:00 / 06:00	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	
	/	/	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	

COMMENTS: Mounted to tripod

Source Info and Traffic Counts

PRIMARY NOISE(S): (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER
ROADWAY TYPE: Bass Rd., Paved, 2 Lane Road
COUNT DURATION: ____-MINUTE

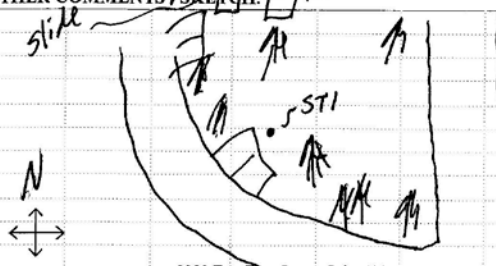
	SPEED (mph) NB EB / SB WB	#2 COUNT: NB / EB / SB / WB	SPEED (mph) NB EB / SB WB
AUTOS:	____ / ____	____ / ____	____ / ____
MED. TRUCKS:	____ / ____	____ / ____	____ / ____
HVY TRUCKS:	____ / ____	____ / ____	____ / ____
BUSES:	____ / ____	____ / ____	____ / ____
MOTORCYCLES:	____ / ____	____ / ____	____ / ____

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER NOISE SOURCES: distant AIRCRAFT overhead / (RUSTLING LEAVES) / distant BARKING DOGS / (BIRDS)
distant CHILDREN PLAYING / distant TRAFFIC / distant LANDSCAPING / distant TRAINS
OTHER:

Description / Sketch

TERRAIN: (HARD) SOFT MIXED FLAT OTHER:
PHOTOS: dead grass
OTHER COMMENTS / SKETCH:



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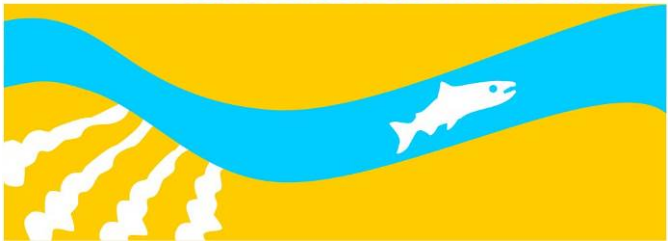
Mendota Pool Bypass and Reach 2B Improvements Project

Final
Environmental Impact Statement/Report

Appendix 17-C Noise Levels and Contour Distances per Scheduled Construction Activity

SAN JOAQUIN RIVER
RESTORATION PROGRAM



Final
July 2016

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Table C-1: Noise Levels for each Scheduled Construction Activity to the 45 and 50 dBA SPL Contours (feet)

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
2	1	GROUP 1	Levee Construction							
2	2	GROUP 1	Levee Construction	Levee Preparation						
2	3	GROUP 1	Levee Construction	Levee Preparation	Clearing & Grubbing			87	6,126	3,445
2	4	GROUP 1	Levee Construction	Levee Preparation	Tree Removal			87	6,126	3,445
2	5	GROUP 1	Levee Construction	Right Setback Levee						
2	6	GROUP 1	Levee Construction	Right Setback Levee	Compacted Embankment			88	6,698	3,766
2	7	GROUP 1	Levee Construction	Right Setback Levee	Slurry Wall (88 Percent Of Total Levee Length)			87	6,126	3,445
2	8	GROUP 1	Levee Construction	Right Setback Levee	USACE Trench Foundation			88	6,698	3,766
2	9	GROUP 1	Levee Construction	Right Setback Levee	Borrow Excavation (< 1 Mile)			88	6,698	3,766
2	10	GROUP 1	Levee Construction	Left Setback Levee						
2	11	GROUP 1	Levee Construction	Left Setback Levee	Compacted Embankment			88	6,698	3,766
2	12	GROUP 1	Levee Construction	Left Setback Levee	Slurry Wall (88 Percent Of Total Levee Length)			87	6,126	3,445
2	13	GROUP 1	Levee Construction	Left Setback Levee	USACE Trench Foundation			88	6,698	3,766
2	14	GROUP 1	Levee Construction	Left Setback Levee	Borrow Excavation (< 1 Mile)			88	6,698	3,766
2	15	GROUP 1	Levee Construction	General						
2	16	GROUP 1	Levee Construction	General	Seeding (Levee Slopes)			88	6,698	3,766
2	17	GROUP 1	Levee Construction	General	Ramps & Turnabouts			88	6,698	3,766
2	18	GROUP 1	Levee Construction	General	Right Levee Aggregate Base Roadway			88	6,698	3,766
2	19	GROUP 1	Levee Construction	General	Left Levee Aggregate Base Roadway			88	7,063	3,972
2	20	GROUP 1	Levee Construction	General	Haul Excess Material By Truck <20 Miles (Drainage Channel)			88	6,698	3,766
2	21	GROUP 1	Levee Construction	General	Mobilization			80	2,963	1,666
2	46	GROUP 2	Levee Removal							
2	47	GROUP 2	Levee Removal	Haul Excess Material By Truck <20 Miles (Levee Removal)				88	6,698	3,766
2	48	GROUP 2	Levee Removal	Mobilization				80	2,963	1,666
2	136	GROUP 3	Chowchilla Bifurcation Structure							

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
2	137	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank						
2	138	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation					
2	139	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Clearing & Grubbing		87	6,126	3,445
2	140	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Cofferdam		103	38,638	21,728
2	141	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Cofferdam Removal		103	38,638	21,728
2	142	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
2	143	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Dewatering		83	4,029	2,266
2	144	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Excavation To Stockpile		88	6,698	3,766
2	145	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Excavation To Disposal Off Site		88	6,698	3,766
2	146	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Concrete Foundation		83	4,029	2,266
2	147	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure					
2	148	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Concrete		83	4,029	2,266
2	149	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Reinforcing Steel		83	4,029	2,266
2	150	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Grating		83	4,029	2,266
2	151	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate		83	4,029	2,266
2	152	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Adjustable Steel Slot Weir		83	4,029	2,266
2	153	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate For Pipe Diversion		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
2	154	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate For Supplemental Flow Pipe		83	4,029	2,266
2	155	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Fish Screen		83	4,029	2,266
2	156	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Trash Rack		83	4,029	2,266
2	157	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Automated Trash Rack Screen Cleaner		83	4,029	2,266
2	158	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Slide Gate Operator Control		83	4,029	2,266
2	159	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	60" Steel Pipe		83	4,029	2,266
2	160	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	84" Steel Pipe (Two @ 270 LF EA)		84	4,462	2,509
2	161	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River					
2	162	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Excavate & Fill Bore Pit (30' x 30' x 22' Deep)		83	4,029	2,266
2	163	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Bore & Jack (Dual 114" Steel Casing Pipes - 250 LF EA)		86	5,460	3,070
2	164	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	84" Steel Carrier Pipe (Two @ 260 LF EA)		84	4,462	2,509
2	165	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Excavate & Fill Receiving pit (30' x 30' x 22' Deep)		83	4,029	2,266
2	166	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Pressure Grout Annular Space		82	3,619	2,035
2	167	GROUP 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Mobilization		80	2,963	1,666
2	107	GROUP 4	San Mateo Retrofit							
2	108	GROUP 4	San Mateo Retrofit	Site Preparation & Construction						
2	109	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Tree Removal			87	6,126	3,445
2	110	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Clearing & Grubbing			87	6,126	3,445
2	111	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Demolition (Existing Culvert)			87	6,126	3,445

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
2	112	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Concrete Box Culverts (5.9' x 24' @ 26' EA)			88	6,698	3,766
2	113	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Structure Concrete			83	4,029	2,266
2	114	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Riprap Approaches - Labor			83	4,029	2,266
2	115	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Site Excavation			88	6,698	3,766
2	116	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Site Fill			88	6,698	3,766
2	117	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Embankment Earthwork Fill			88	6,698	3,766
2	118	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Access Gates			83	4,029	2,266
2	119	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Dust Control			79	2,376	1,336
2	120	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	SWPPP (Storm Water Permit) Report Preparation			82	3,529	1,984
2	121	GROUP 4	San Mateo Retrofit	Site Preparation & Construction	Worker Protection			100	27,367	15,390
2	122	GROUP 4	San Mateo Retrofit	Temporary Bypass Channel						
2	123	GROUP 4	San Mateo Retrofit	Temporary Bypass Channel	Coffer Dams			100	27,503	15,466
2	124	GROUP 4	San Mateo Retrofit	Temporary Bypass Channel	Dewatering (Upstream & Downstream)			86	5,593	3,145
2	125	GROUP 4	San Mateo Retrofit	Temporary Bypass Channel	Channel Excavation			88	6,698	3,766
2	126	GROUP 4	San Mateo Retrofit	Temporary Bypass Channel	Railcar Bridge (Including Labor)			85	5,113	2,875
2	127	GROUP 4	San Mateo Retrofit	Temporary Bypass Channel	Mobilization			82	3,529	1,984
2	128	GROUP 5	Lone Willow Slough Fish Screen							
2	129	GROUP 5	Lone Willow Slough Fish Screen	Fish Screen Structure						
2	130	GROUP 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Concrete			83	4,029	2,266
2	131	GROUP 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Reinforcing Steel			83	4,029	2,266
2	132	GROUP 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Fish Screen			83	4,029	2,266
2	133	GROUP 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Trash Rack			83	4,029	2,266
2	134	GROUP 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Automated Trash Rack Screen Cleaner			82	3,544	1,993
2	135	GROUP 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Mobilization			85	5,244	2,949
2	74	GROUP 6	Relocation/Modifications							

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
2	75	GROUP 6	Relocation/Modifications	Canal						
2	76	GROUP 6	Relocation/Modifications	Canal	Canal Relocations			85	5,113	2,875
2	77	GROUP 6	Relocation/Modifications	Canal	Mobilization			82	3,529	1,984
2	78	GROUP 6	Relocation/Modifications	Utilities						
2	79	GROUP 6	Relocation/Modifications	Utilities	Overhead Electrical Distribution Removal & Replacement			82	3,544	1,993
2	80	GROUP 6	Relocation/Modifications	Utilities	Mobilization			85	5,244	2,949
2	81	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)						
2	82	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation					
2	83	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	Clearing & Grubbing		87	6,126	3,445
2	84	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	Canal/Drain Relocation		86	5,460	3,070
2	85	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	Concrete Lining (Intake & Outfall)		83	4,029	2,266
2	86	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	Rock Riprap At Outfall		83	4,029	2,266
2	87	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	Pump & Sump Relocation		82	3,544	1,993
2	88	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	Replace Electrical Panel		81	3,070	1,727
2	89	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	PG&E Electrical Service		82	3,619	2,035
2	90	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	12"Steel Pipe		81	3,070	1,727
2	91	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations	Site Preparation	Dust Control		82	3,529	1,984

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
				each location)						
2	92	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	Worker Protection		80	2,963	1,666
2	93	GROUP 6	Relocation/Modifications	Pump Station (quantities below reflect 5 pump stations each location)	Site Preparation	Mobilization		85	5,244	2,949
2	94	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)						
2	95	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction					
2	96	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Clearing & Grubbing		87	6,126	3,445
2	97	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Earthwork (Using Loader & Truck)		88	6,698	3,766
2	98	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Revegetation		86	5,460	3,070
2	99	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Pull Pump & Column & Reinstall After Modifications		83	4,029	2,266
2	100	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Column Extension		83	4,029	2,266
2	101	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Casing Extension		83	4,029	2,266
2	102	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Discharge Piping Modifications		82	3,544	1,993

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
2	103	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Replace Electrical Panel		79	2,509	1,411
2	105	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Dust Control		80	2,963	1,666
2	106	GROUP 6	Relocation/Modifications	Deep Well Floodproofing (quantities below reflect 19 wells each location)	Site Preparation & Construction	Mobilization		85	5,244	2,949
2	22	GROUP 7	Bend 10 Revetment							
2	23	GROUP 7	Bend 10 Revetment	Site Preparation						
2	24	GROUP 7	Bend 10 Revetment	Site Preparation	Clearing & Grubbing (Levee Preparation)			87	6,126	3,445
2	25	GROUP 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)						
2	26	GROUP 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)	Compacted Embankment			88	6,698	3,766
2	27	GROUP 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)	Slurry Wall (100 Percent Of Total Levee Length)			87	6,126	3,445
2	28	GROUP 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)	USACE Trench Foundation			88	6,698	3,766
2	29	GROUP 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)	Borrow Excavation (< 1 Mile)			88	6,698	3,766
2	30	GROUP 7	Bend 10 Revetment	General						
2	31	GROUP 7	Bend 10 Revetment	General	Seeding (Levee Slopes)			88	6,698	3,766
2	32	GROUP 7	Bend 10 Revetment	General	Ramps & Turnabouts			88	6,698	3,766
2	33	GROUP 7	Bend 10 Revetment	General	Right Levee Aggregate Base Roadway			88	6,698	3,766
2	34	GROUP 7	Bend 10 Revetment	Revetment (Bend 10) Per Linear Foot						
2	44	GROUP 7	Bend 10 Revetment	Revetment (Bend 10) Per Linear Foot	Revetment (Bend 10) Subtotal Per Linear Foot (Subtotal 35 To 43)			84	4,337	2,439
2	45	GROUP 7	Bend 10 Revetment	Revetment (Bend 10) Per Linear Foot	Mobilization			80	2,963	1,666
2	49	GROUP 8	Vegetation & Irrigation							
2	50	GROUP 8	Vegetation & Irrigation	General Description						
2	51	GROUP 8	Vegetation & Irrigation	General Description	Plant Establishment (12 Months)			81	3,070	1,727
2	52	GROUP 8	Vegetation & Irrigation	General Description	Landscape Maintenance (12 Months Or As Needed)			86	5,305	2,983

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
2	53	GROUP 8	Vegetation & Irrigation	General Description	Agricultural Topsoil (6" Layer)			85	5,113	2,875
2	54	GROUP 8	Vegetation & Irrigation	General Description	Erosion Control Fabric			80	2,963	1,666
2	55	GROUP 8	Vegetation & Irrigation	General Description	Irrigation System			81	3,070	1,727
2	56	GROUP 8	Vegetation & Irrigation	General Description	Beaver Fence			85	5,244	2,949
2	57	GROUP 8	Vegetation & Irrigation	General Description	Seeding			85	5,113	2,875
2	58	GROUP 8	Vegetation & Irrigation	General Description	Pole Cuttings			80	2,963	1,666
2	59	GROUP 8	Vegetation & Irrigation	General Description	Fascine Bundle			80	2,963	1,666
2	60	GROUP 8	Vegetation & Irrigation	General Description	Instream Woody Material			80	2,963	1,666
2	61	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation T8 - Fcf			81	3,070	1,727
2	62	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation T8 - Oag			81	3,070	1,727
2	63	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation T4 - Bbt			81	3,070	1,727
2	64	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation T4 - Cbm			81	3,070	1,727
2	65	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Cmb			81	3,070	1,727
2	66	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Crg			81	3,070	1,727
2	67	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Rbh			81	3,070	1,727
2	68	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Sgf			81	3,070	1,727
2	69	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Fcf			81	3,070	1,727
2	70	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Oag			81	3,070	1,727
2	71	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation D6 - Swt			81	3,070	1,727
2	72	GROUP 8	Vegetation & Irrigation	General Description	Treepot Installation D6 - Bwt			81	3,070	1,727
2	73	GROUP 8	Vegetation & Irrigation	General Description	Mobilization			75	1,581	889
4	1	Group 1	Levee Construction							
4	2	Group 1	Levee Construction	Levee Preparation						
4	3	Group 1	Levee Construction	Levee Preparation	Clearing & Grubbing			87	6,126	3,445
4	4	Group 1	Levee Construction	Levee Preparation	Tree Removal			87	6,126	3,445
4	5	Group 1	Levee Construction	Right Setback Levee						
4	6	Group 1	Levee Construction	Right Setback Levee	Compacted Embankment			88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
4	7	Group 1	Levee Construction	Right Setback Levee	Slurry Wall (76 Percent Of Total Levee Length)			87	6,126	3,445
4	8	Group 1	Levee Construction	Right Setback Levee	USACE Trench Foundation			88	6,698	3,766
4	9	Group 1	Levee Construction	Right Setback Levee	Borrow Excavation (< 1 Mile)			88	6,698	3,766
4	10	Group 1	Levee Construction	Left Setback Levee						
4	11	Group 1	Levee Construction	Left Setback Levee	Compacted Embankment			88	6,698	3,766
4	12	Group 1	Levee Construction	Left Setback Levee	Slurry Wall (76 Percent Of Total Levee Length)			87	6,126	3,445
4	13	Group 1	Levee Construction	Left Setback Levee	USACE Trench Foundation			88	6,698	3,766
4	14	Group 1	Levee Construction	Left Setback Levee	Borrow Excavation (< 1 Mile)			88	6,698	3,766
4	15	Group 1	Levee Construction	General						
4	16	Group 1	Levee Construction	General	Seeding (Levee Slopes)			88	6,698	3,766
4	17	Group 1	Levee Construction	General	Ramps & Turnabouts					
4	18	Group 1	Levee Construction	General	Right Levee Aggregate Base Roadway			88	6,698	3,766
4	19	Group 1	Levee Construction	General	Left Levee Aggregate Base Roadway			88	6,698	3,766
4	20	Group 1	Levee Construction	General	Haul Excess Material By Truck <20 Miles (Drainage Channel)			88	6,698	3,766
4	21	Group 1	Levee Construction	General	Mobilization			80	2,963	1,666
4	46	Group 2	Levee Removal							
4	47	Group 2	Levee Removal	Haul Excess Material By Truck <20 Miles (Levee Removal)				88	6,698	3,766
4	48	Group 2	Levee Removal	Mobilization				80	2,963	1,666
4	136	Group 3	Chowchilla Bifurcation Structure							
4	137	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank						
4	138	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation					
4	139	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Clearing & Grubbing		87	6,126	3,445
4	140	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Cofferdam		103	38,638	21,728

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
4	141	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Cofferdam Removal		103	38,638	21,728
4	142	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
4	143	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Dewatering		83	4,029	2,266
4	144	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Excavation To Stockpile		88	6,698	3,766
4	145	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Excavation To Disposal Off Site		88	6,698	3,766
4	146	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder Preparation	Concrete Foundation		83	4,029	2,266
4	147	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure					
4	148	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Concrete		83	4,029	2,266
4	149	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Reinforcing Steel		83	4,029	2,266
4	150	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Grating		83	4,029	2,266
4	151	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate		83	4,029	2,266
4	152	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Adjustable Steel Slot Weir		83	4,029	2,266
4	153	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate For Pipe Diversion		83	4,029	2,266
4	154	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate For Supplemental Flow Pipe		83	4,029	2,266
4	155	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Fish Screen		83	4,029	2,266
4	156	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Trash Rack		83	4,029	2,266
4	157	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Automated Trash Rack Screen Cleaner		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
4	158	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	Steel Slide Gate Operator Control		83	4,029	2,266
4	159	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	60" Steel Pipe		83	4,029	2,266
4	160	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Fish Ladder & Supplemental Intake Structure	84" Steel Pipe (Two @ 270 LF EA)		84	4,462	2,509
4	161	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River					
4	162	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Excavate & Fill Bore Pit (30' x 30' x 22' Deep)		83	4,029	2,266
4	163	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Bore & Jack (Dual 114" Steel Casing Pipes - 250 LF EA)		86	5,460	3,070
4	164	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	84" Steel Carrier Pipe (Two @ 260 LF EA)		84	4,462	2,509
4	165	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Excavate & Fill Receiving pit (30' x 30' x 22' Deep)		83	4,029	2,266
4	166	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Pressure Grout Annular Space		82	3,619	2,035
4	167	Group 3	Chowchilla Bifurcation Structure	Fish Ladder With Supplemental Flow - Right Bank	Pipe Installation Beneath River	Mobilization		80	2,963	1,666
4	107	Group 4	San Mateo Retrofit							
4	108	Group 4	San Mateo Retrofit	Site Preparation & Construction						
4	109	Group 4	San Mateo Retrofit	Site Preparation & Construction	Tree Removal			87	6,126	3,445
4	110	Group 4	San Mateo Retrofit	Site Preparation & Construction	Clearing & Grubbing			87	6,126	3,445
4	111	Group 4	San Mateo Retrofit	Site Preparation & Construction	Demolition (Existing Culvert)			87	6,126	3,445
4	112	Group 4	San Mateo Retrofit	Site Preparation & Construction	Concrete Box Culverts (5.9' x 24' @ 26' EA)			88	6,698	3,766
4	113	Group 4	San Mateo Retrofit	Site Preparation & Construction	Structure Concrete			83	4,029	2,266
4	114	Group 4	San Mateo Retrofit	Site Preparation & Construction	Riprap Approaches - Labor			83	4,029	2,266
4	115	Group 4	San Mateo Retrofit	Site Preparation & Construction	Site Excavation			88	6,698	3,766
4	116	Group 4	San Mateo Retrofit	Site Preparation & Construction	Site Fill			88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
4	117	Group 4	San Mateo Retrofit	Site Preparation & Construction	Embankment Earthwork Fill			88	6,698	3,766
4	118	Group 4	San Mateo Retrofit	Site Preparation & Construction	Access Gates			83	4,029	2,266
4	119	Group 4	San Mateo Retrofit	Site Preparation & Construction	Dust Control			79	2,376	1,336
4	120	Group 4	San Mateo Retrofit	Site Preparation & Construction	SWPPP (Storm Water Permit) Report Preparation			75	1,581	889
4	121	Group 4	San Mateo Retrofit	Site Preparation & Construction	Worker Protection			82	3,529	1,984
4	122	Group 4	San Mateo Retrofit	Temporary Bypass Channel						
4	123	Group 4	San Mateo Retrofit	Temporary Bypass Channel	Coffer Dams			103	38,638	21,728
4	124	Group 4	San Mateo Retrofit	Temporary Bypass Channel	Dewatering (Upstream & Downstream)			83	4,029	2,266
4	125	Group 4	San Mateo Retrofit	Temporary Bypass Channel	Channel Excavation			88	6,698	3,766
4	126	Group 4	San Mateo Retrofit	Temporary Bypass Channel	Railcar Bridge (Including Labor)			88	6,698	3,766
4	127	Group 4	San Mateo Retrofit	Temporary Bypass Channel	Mobilization			80	2,963	1,666
4	128	Group 5	Lone Willow Slough Fish Screen							
4	129	Group 5	Lone Willow Slough Fish Screen	Fish Screen Structure						
4	130	Group 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Concrete			83	4,029	2,266
4	131	Group 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Reinforcing Steel			83	4,029	2,266
4	132	Group 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Fish Screen			83	4,029	2,266
4	133	Group 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Trash Rack			83	4,029	2,266
4	134	Group 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Automated Trash Rack Screen Cleaner			83	4,029	2,266
4	135	Group 5	Lone Willow Slough Fish Screen	Fish Screen Structure	Mobilization			80	2,963	1,666
4	74	Group 6	Relocation/Modifications							
4	75	Group 6	Relocation/Modifications	Canal						
4	76	Group 6	Relocation/Modifications	Canal	Canal Relocations			88	6,698	3,766
4	77	Group 6	Relocation/Modifications	Canal	Mobilization			80	2,963	1,666
4	78	Group 6	Relocation/Modifications	Utilities						

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
4	79	Group 6	Relocation/Modifications	Utilities	Overhead Electrical Distribution Removal & Replacement			83	4,029	2,266
4	80	Group 6	Relocation/Modifications	Utilities	Mobilization			80	2,963	1,666
4	81	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)						
4	82	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation					
4	83	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	Clearing & Grubbing		87	6,126	3,445
4	84	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	Canal/Drain Relocation		88	6,698	3,766
4	85	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	Concrete Lining (Intake & Outfall)		83	4,029	2,266
4	86	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	Rock Riprap At Outfall		83	4,029	2,266
4	87	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	Pump & Sump Relocation		83	4,029	2,266
4	88	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	Replace Electrical Panel		81	3,070	1,727
4	89	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	PG&E Electrical Service		81	3,070	1,727
4	90	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	12"Steel Pipe		83	4,029	2,266
4	91	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	Dust Control		79	2,376	1,336
4	92	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	Worker Protection		82	3,529	1,984
4	93	Group 6	Relocation/Modifications	Pump Station (Quantities Reflect 6 Pump Stations)	Site Preparation	Mobilization		80	2,963	1,666
4	94	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)						

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
4	95	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction					
4	96	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Clearing & Grubbing		87	6,126	3,445
4	97	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Earthwork (Using Loader & Truck)		88	6,698	3,766
4	98	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Revegetation		88	6,698	3,766
4	99	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Pull Pump & Column & Reinstall After Modifications		83	4,029	2,266
4	100	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Column Extension		83	4,029	2,266
4	101	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Casing Extension		83	4,029	2,266
4	102	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Discharge Piping Modifications		83	4,029	2,266
4	103	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Replace Electrical Panel		81	3,070	1,727
4	104	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	PG&E Electrical Service		81	3,070	1,727
4	105	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Dust Control		79	2,376	1,336
4	106	Group 6	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 27 Wells)	Site Preparation & Construction	Mobilization		80	2,963	1,666
4	22	Group 7	Bend 10 Revetment							
4	23	Group 7	Bend 10 Revetment	Site Preparation						

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
4	24	Group 7	Bend 10 Revetment	Site Preparation	Clearing & Grubbing (Levee Preparation)			87	6,126	3,445
4	25	Group 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)						
4	26	Group 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)	Compacted Embankment			88	6,698	3,766
4	27	Group 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)	Slurry Wall (100 Percent Of Total Levee Length)			87	6,126	3,445
4	28	Group 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)	USACE Trench Foundation			88	6,698	3,766
4	29	Group 7	Bend 10 Revetment	Right Setback Levee (Bend 10 Only)	Borrow Excavation (< 1 Mile)			88	6,698	3,766
4	30	Group 7	Bend 10 Revetment	General						
4	31	Group 7	Bend 10 Revetment	General	Seeding (Levee Slopes)			88	6,698	3,766
4	32	Group 7	Bend 10 Revetment	General	Ramps & Turnabouts			88	6,698	3,766
4	33	Group 7	Bend 10 Revetment	General	Right Levee Aggregate Base Roadway			88	6,698	3,766
4	34	Group 7	Bend 10 Revetment	Revetment (Bend 10) Per Linear Foot						
4	44	Group 7	Bend 10 Revetment	Revetment (Bend 10) Per Linear Foot	Revetment (Bend 10) Subtotal Per Linear Foot (Subtotal 35 To 43)			87	6,126	3,445
4	45	Group 7	Bend 10 Revetment	Revetment (Bend 10) Per Linear Foot	Mobilization			80	2,963	1,666
4	49	Group 8	Vegetation & Irrigation							
4	50	Group 8	Vegetation & Irrigation	General Description						
4	51	Group 8	Vegetation & Irrigation	General Description	Plant Establishment (12 Months)			81	3,070	1,727
4	52	Group 8	Vegetation & Irrigation	General Description	Landscape Maintenance (12 Months Or As Needed)			81	3,070	1,727
4	53	Group 8	Vegetation & Irrigation	General Description	Agricultural Topsoil (6" Layer)			88	6,698	3,766
4	54	Group 8	Vegetation & Irrigation	General Description	Erosion Control Fabric			80	2,963	1,666
4	55	Group 8	Vegetation & Irrigation	General Description	Irrigation System			81	3,070	1,727
4	56	Group 8	Vegetation & Irrigation	General Description	Beaver Fence			80	2,963	1,666
4	57	Group 8	Vegetation & Irrigation	General Description	Seeding			88	6,698	3,766
4	58	Group 8	Vegetation & Irrigation	General Description	Pole Cuttings			80	2,963	1,666
4	59	Group 8	Vegetation & Irrigation	General Description	Fascine Bundle			80	2,963	1,666
4	60	Group 8	Vegetation & Irrigation	General Description	Instream Woody Material			80	2,963	1,666

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
4	61	Group 8	Vegetation & Irrigation	General Description	Treepot Installation T8 - Fcf			81	3,070	1,727
4	62	Group 8	Vegetation & Irrigation	General Description	Treepot Installation T8 - Oag			81	3,070	1,727
4	63	Group 8	Vegetation & Irrigation	General Description	Treepot Installation T4 - Bbt			81	3,070	1,727
4	64	Group 8	Vegetation & Irrigation	General Description	Treepot Installation T4 - Cbm			81	3,070	1,727
4	65	Group 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Cmb			81	3,070	1,727
4	66	Group 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Crg			81	3,070	1,727
4	67	Group 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Rbh			81	3,070	1,727
4	68	Group 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Sgf			81	3,070	1,727
4	69	Group 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Fcf			81	3,070	1,727
4	70	Group 8	Vegetation & Irrigation	General Description	Treepot Installation DP - Oag			81	3,070	1,727
4	71	Group 8	Vegetation & Irrigation	General Description	Treepot Installation D6 - Swt			81	3,070	1,727
4	72	Group 8	Vegetation & Irrigation	General Description	Treepot Installation D6 - Bwt			81	3,070	1,727
4	73	Group 8	Vegetation & Irrigation	General Description	Mobilization			80	2,963	1,666
7	1	GROUP 1	MPB Channel							
7	2	GROUP 1	MPB Channel	Bypass Channel						
7	3	GROUP 1	MPB Channel	Bypass Channel	General					
7	4	GROUP 1	MPB Channel	Bypass Channel	General	Clearing & Grubbing		87	6,126	3,445
7	5	GROUP 1	MPB Channel	Bypass Channel	General	Water For Dust Abatement		79	2,376	1,336
7	6	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation					
7	7	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Course Channel Excavation (Scraper) & Local Haul		88	6,698	3,766
7	8	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Course Channel Excavation (Loader & Dozer)		88	6,698	3,766
7	9	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Fine Channel Excavation & Shaping (Excavator)		84	4,462	2,509
7	10	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Haul Off Site (<20 Miles)		88	6,698	3,766
7	11	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Floodplain Excavation (Scraper) & Local Haul		88	6,698	3,766
7	12	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Floodplain Fill, Grading, & Compaction Between Levees		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	13	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Revetment		87	6,126	3,445
7	14	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures					
7	15	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)				
7	16	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Clearing & Grubbing	87	6,126	3,445
7	17	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Onsite Earthwork For Anchor Systems (Remove & Recompact)	84	4,462	2,509
7	18	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Dewatering	83	4,029	2,266
7	20	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Deliver Materials (CMI Atlanta GA, 2 Trucks)	76	1,774	998
7	21	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Construct Driving Guide & Use As Wales	83	4,029	2,266
7	22	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Sheet Pile Installation (Single Sheet 20'x420')	103	38,638	21,728
7	23	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Caps For Tops (20' Lengths Material & Labor)	83	4,029	2,266
7	24	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Anchor Support System (Pilings, Cable, Wales, Etc)	83	4,029	2,266
7	25	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Dust Control	79	2,376	1,336
7	26	GROUP 1	MPB Channel	Bypass Channel	Other Costs					
7	27	GROUP 1	MPB Channel	Bypass Channel	Other Costs	SWPPP		75	1,581	889
7	28	GROUP 1	MPB Channel	Bypass Channel	Other Costs	Worker Protection		82	3,529	1,984
7	29	GROUP 1	MPB Channel	Bypass Channel	Other Costs	Mobilization		80	2,963	1,666
7	397	GROUP 2	Reach 3							
7	398	GROUP 2	Reach 3	Levee Removal						
7	399	GROUP 2	Reach 3	Levee Removal	Haul Excess material by truck < 20 miles			88	6,698	3,766
7	400	GROUP 2	Reach 3	Levee Preparation						
7	401	GROUP 2	Reach 3	Levee Preparation	Clearing & Grubbing			87	6,126	3,445
7	402	GROUP 2	Reach 3	Levee Preparation	Tree Removal			87	6,126	3,445
7	403	GROUP 2	Reach 3	New Levee						

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	404	GROUP 2	Reach 3	New Levee	Compacted Embankment			88	6,698	3,766
7	405	GROUP 2	Reach 3	New Levee	Slurry Wall (10 Percent Of Total Levee Length)			87	6,126	3,445
7	406	GROUP 2	Reach 3	New Levee	USACE Trench Foundation			88	6,698	3,766
7	407	GROUP 2	Reach 3	New Levee	Borrow Excavation and Haul			88	6,698	3,766
7	408	GROUP 2	Reach 3	General						
7	409	GROUP 2	Reach 3	General	Seeding (Levee Slopes)			88	6,698	3,766
7	410	GROUP 2	Reach 3	General	Ramps & Turnabouts			88	6,698	3,766
7	411	GROUP 2	Reach 3	General	Levee Aggregate Base Roadway			88	6,698	3,766
7	412	GROUP 2	Reach 3	General	Haul Excess Material By Truck < 20 Miles (Drainage Channel)			88	6,698	3,766
7	413	GROUP 2	Reach 3	Mobilization				80	2,963	1,666
7	30	GROUP 3	Levees	Levees						
7	31	GROUP 3	Levees	Levees	Levee Preparation					
7	32	GROUP 3	Levees	Levees	Levee Preparation	Clearing & Grubbing		87	6,126	3,445
7	33	GROUP 3	Levees	Levees	Levee Preparation	Tree Removal		87	6,126	3,445
7	34	GROUP 3	Levees	Levees	Right Setback Levee					
7	35	GROUP 3	Levees	Levees	Right Setback Levee	Compacted Embankment		88	6,698	3,766
7	36	GROUP 3	Levees	Levees	Right Setback Levee	Slurry Wall (10 Percent Of Total Levee Length)		87	6,126	3,445
7	37	GROUP 3	Levees	Levees	Right Setback Levee	USACE Trench Foundation		88	6,698	3,766
7	38	GROUP 3	Levees	Levees	Right Setback Levee	Borrow Excavation (< 1 Mile)		88	6,698	3,766
7	39	GROUP 3	Levees	Levees	Left Setback Levee					
7	40	GROUP 3	Levees	Levees	Left Setback Levee	Compacted Embankment		88	6,698	3,766
7	41	GROUP 3	Levees	Levees	Left Setback Levee	Slurry Wall (10 Percent Of Total Levee Length)		87	6,126	3,445
7	42	GROUP 3	Levees	Levees	Left Setback Levee	USACE Trench Foundation		88	6,698	3,766
7	43	GROUP 3	Levees	Levees	Left Setback Levee	Borrow Excavation (< 1 Mile)		88	6,698	3,766
7	44	GROUP 3	Levees	Levees	General					
7	45	GROUP 3	Levees	Levees	General	Seeding (Levee Slopes)		88	6,698	3,766
7	46	GROUP 3	Levees	Levees	General	Ramps & Turnabouts		88	6,698	3,766
7	47	GROUP 3	Levees	Levees	General	Right Levee Aggregate Base Roadway		88	6,698	3,766
7	48	GROUP 3	Levees	Levees	General	Left Levee Aggregate Base Roadway		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	49	GROUP 3	Levees	Levees	General	Haul Excess Material By Truck < 20 Miles (Drainage Channel)		88	6,698	3,766
7	50	GROUP 3	Levees	Levees	General	Mobilization		80	2,963	1,666
7	287	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)						
7	288	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure					
7	289	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Excavation For Spillway		88	6,698	3,766
7	290	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Compacted Backfill		88	6,698	3,766
7	291	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Cutoff Walls (Steel Sheet Piling)		103	38,638	21,728
7	292	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Precast prestressed concrete pile (14"x14"x20')		103	38,638	21,728
7	293	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Concrete		83	4,029	2,266
7	294	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Steel Reinforcement		83	4,029	2,266
7	295	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Waterstop		78	2,118	1,191
7	296	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates					
7	297	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	6 Radial Gates (Each 20'x8')		83	4,029	2,266
7	298	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Hoist (Motor Operated W/Wire Ropes)		83	4,029	2,266
7	299	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Embedded Metal (Stainless Steel)		83	4,029	2,266
7	300	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Steel Stoplogs 6 EA 21'x12' Deep Inc Ribs Etc		83	4,029	2,266
7	301	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Railing On Top Deck		83	4,029	2,266
7	302	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Railing On Bridge Deck		83	4,029	2,266
7	303	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Riprap		83	4,029	2,266
7	304	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Water Velocity & Flow Measurement System		81	3,070	1,727
7	305	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Propane Tank & Enclosure (15'x20'x6' HCB)		80	2,963	1,666
7	306	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Emergency Generator		82	3,529	1,984
7	307	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction					

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	308	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Excavation For Dam		83	4,029	2,266
7	309	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Compacted Embankment - Impervious Fill		88	6,698	3,766
7	310	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Compacted Embankment - Semipervious Fill		88	6,698	3,766
7	311	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Compacted Embankment - Pervious Fill		88	6,698	3,766
7	312	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Geotextile Fabric		80	2,963	1,666
7	313	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	9" Bedding		84	4,337	2,439
7	314	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Stone Slope Protection, Type 1		83	4,029	2,266
7	315	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Access Road (4" AC/6" AB, 24' Wide)		88	6,698	3,766
7	316	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	7' Chain Link Fence Including Barbed Wire		80	2,963	1,666
7	317	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Pipe Handrail (On U/S & D/S Side Of Dam)		83	4,029	2,266
7	318	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Automatic Entrance Gate (16' Wide)		81	3,070	1,727
7	319	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Mobilization		80	2,963	1,666
7	335	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)						
7	336	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure					
7	337	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Coffer Dam (Steel Sheet Piling Inc Bracing)		103	38,638	21,728
7	338	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Coffer Dam (Filling With Dirt & Removal)		103	38,638	21,728
7	339	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Dewatering (8 Months)		83	4,029	2,266
7	340	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Excavation For Spillway		88	6,698	3,766
7	341	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Compacted Backfill		88	6,698	3,766
7	342	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Cutoff Walls (Steel Sheet Piling)		103	38,638	21,728
7	343	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Precast Prestressed Concrete Pile (14"x14"x20')		103	38,638	21,728
7	344	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Concrete		83	4,029	2,266
7	345	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Steel Reinforcement		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	346	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Waterstop		78	2,118	1,191
7	347	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs					
7	348	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	4 Radial Gates (Each 16'x18')		83	4,029	2,266
7	349	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Hoist (Motor Operated W/Wire Ropes)		83	4,029	2,266
7	350	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Embedded Metal (Stainless Steel)		83	4,029	2,266
7	351	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Stoplog (Steel, Each 12'x21') Inc Ribs		83	4,029	2,266
7	352	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Railing On Top Deck		83	4,029	2,266
7	353	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Riprap		83	4,029	2,266
7	354	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Water Velocity & Flow Measurement System		81	3,070	1,727
7	355	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Propane Tank & Enclosure (15'x20'x6' HCB)		80	2,963	1,666
7	356	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Emergency Generator		80	2,963	1,666
7	357	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction					
7	358	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Coffer Dam (Filling With Dirt & Removal)		103	38,638	21,728
7	359	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Dewatering (6 Months)		83	4,029	2,266
7	360	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Excavation For dam		88	6,698	3,766
7	361	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Compacted Embankment - Impervious Fill		88	6,698	3,766
7	362	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Compacted Embankment - Semipervious Fill		88	6,698	3,766
7	363	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Compacted Embankment - Pervious Fill		88	6,698	3,766
7	364	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Geotextile Fabric		80	2,963	1,666
7	365	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	9" Bedding		84	4,337	2,439
7	366	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Stone Slope Protection, Type 1		83	4,029	2,266
7	367	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Access Road (4" AC/6" AB, 24' Wide)		88	6,698	3,766
7	368	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	7' Chain Link Fence Including Barbed Wire		80	2,963	1,666

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	369	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Pipe Handrail (On U/S & D/S Side Of Dam)		83	4,029	2,266
7	370	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Automatic Entrance Gate (16' Wide)		81	3,070	1,727
7	371	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Mobilization		80	2,963	1,666
7	192	GROUP 6	Fish Screen							
7	193	GROUP 6	Fish Screen	Fish Screen Structure						
7	194	GROUP 6	Fish Screen	Fish Screen Structure	Cofferdam (Steel Sheet Piling Including Bracing)			103	38,638	21,728
7	195	GROUP 6	Fish Screen	Fish Screen Structure	Cofferdam (Filling With Dirt & Removal)			103	38,638	21,728
7	196	GROUP 6	Fish Screen	Fish Screen Structure	Dewatering (For 8 Months)			83	4,029	2,266
7	197	GROUP 6	Fish Screen	Fish Screen Structure	Mobilization			80	2,963	1,666
7	198	GROUP 6	Fish Screen	Fish Screen Structure	Excavation			88	6,698	3,766
7	199	GROUP 6	Fish Screen	Fish Screen Structure	Backfill & Compaction			88	6,698	3,766
7	200	GROUP 6	Fish Screen	Fish Screen Structure	Concrete			83	4,029	2,266
7	201	GROUP 6	Fish Screen	Fish Screen Structure	Steel Reinforcement			83	4,029	2,266
7	202	GROUP 6	Fish Screen	Screen Panels				83	4,029	2,266
7	203	GROUP 6	Fish Screen	Flow Control Baffles (Same Size As Screen Panels)				83	4,029	2,266
7	204	GROUP 6	Fish Screen	Blocker Panels				83	4,029	2,266
7	205	GROUP 6	Fish Screen	Structural Steel - Framework For Screens, Baffles, & Blocker				83	4,029	2,266
7	206	GROUP 6	Fish Screen	Fish Screen Automatic Cleaner (Atlas ST8100)				83	4,029	2,266
7	208	GROUP 6	Fish Screen	Fish Return Pipes						
7	209	GROUP 6	Fish Screen	Fish Return Pipes	Pipe Trench Excavation (2:1 Side Slopes)			83	4,029	2,266
7	210	GROUP 6	Fish Screen	Fish Return Pipes	Pipe Bedding (CLSM To Depth Of 0.7 D, Cement Sand Slurry)			81	3,070	1,727
7	211	GROUP 6	Fish Screen	Fish Return Pipes	Backfill & Compaction (5' Above Pipe)			86	5,320	2,992
7	212	GROUP 6	Fish Screen	Fish Return Pipes	Concrete			83	4,029	2,266
7	213	GROUP 6	Fish Screen	Fish Return Pipes	Steel Reinforcement			83	4,029	2,266
7	214	GROUP 6	Fish Screen	Fish Return Pipes	Pipes (8 @ 1900 FT Each) 30" HDPE, SDR 32.5 Pipes			83	4,029	2,266
7	215	GROUP 6	Fish Screen	Fish Return Pipes	Access Manholes			83	4,029	2,266
7	216	GROUP 6	Fish Screen	Outlet Structure For Fish Return Pipes (TBD)						

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	217	GROUP 6	Fish Screen	Pump Station						
7	218	GROUP 6	Fish Screen	Pump Station	Excavation			88	6,698	3,766
7	219	GROUP 6	Fish Screen	Pump Station	Backfill			88	6,698	3,766
7	220	GROUP 6	Fish Screen	Pump Station	Concrete			83	4,029	2,266
7	221	GROUP 6	Fish Screen	Pump Station	Steel Reinforcement			83	4,029	2,266
7	222	GROUP 6	Fish Screen	Pump Station	Wemco-Hydrostal 30" Pump (16,000 GPM)			83	4,029	2,266
7	223	GROUP 6	Fish Screen	Pump Station	Open Frame Pitch Valve 30"			83	4,029	2,266
7	224	GROUP 6	Fish Screen	Control Building				80	2,963	1,666
7	225	GROUP 6	Fish Screen	Trashrack				83	4,029	2,266
7	226	GROUP 6	Fish Screen	Trashrake - 150' Long Across Four Vee Opening				83	4,029	2,266
7	228	GROUP 6	Fish Screen	Miscellaneous Metalwork (Handrail, Guardrail, & Fittings)				83	4,029	2,266
7	229	GROUP 6	Fish Screen	Mobilization				80	2,963	1,666
7	128	GROUP 7	Reach 2B Levee Extension FP-1							
7	129	GROUP 7	Reach 2B Levee Extension FP-1	Levees						
7	130	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)					
7	131	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Levee Preparation				
7	132	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Levee Preparation	Clearing & Grubbing	87	6,126	3,445
7	133	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Levee Preparation	Tree Removal	87	6,126	3,445
7	134	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Right Setback Levee				
7	135	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Right Setback Levee	Compacted Embankment	88	6,698	3,766
7	136	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Right Setback Levee	Slurry Wall (Total Levee Length)	87	6,126	3,445
7	137	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Right Setback Levee	USACE Trench Foundation	88	6,698	3,766
7	138	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Right Setback Levee	Borrow Excavation (< 1 Mile)	88	6,698	3,766
7	139	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Left Setback Levee				
7	140	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Left Setback Levee	Compacted Embankment	88	6,698	3,766
7	141	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Left Setback Levee	Slurry Wall (Total Levee Length)	87	6,126	3,445
7	142	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Left Setback Levee	USACE Trench Foundation	88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	143	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	Left Setback Levee	Borrow Excavation (< 1 Mile)	88	6,698	3,766
7	144	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	General				
7	145	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	General	Seeding (Levee Slopes)	88	6,698	3,766
7	146	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	General	Ramp & Turnabouts	88	6,698	3,766
7	147	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	General	Right Levee Aggregate Base Roadway	88	6,698	3,766
7	148	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	General	Left Levee Aggregate Base Roadway	88	6,698	3,766
7	149	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	General	Haul Excess Material By Truck (< 20 Miles, Drainage Channel)	88	6,698	3,766
7	150	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Levee Construction (Extension)	General	Mobilization	80	2,963	1,666
7	151	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment					
7	152	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)				
7	153	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Mobilization & Demobilization (10%)	80	2,963	1,666
7	154	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Clearing & Grubbing	87	6,126	3,445
7	155	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Launch Rock	83	4,029	2,266
7	156	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Rock Slope Protection	83	4,029	2,266
7	157	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Clean Sand	83	4,029	2,266
7	158	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Landscaping (Ag Soil, Plants, Etc)	82	3,544	1,993
7	159	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Erosion Control	75	1,581	889
7	160	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Environmental Mitigation (20% Of Subtotal)	75	1,581	889
7	161	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Rock Slope - Labor	83	4,029	2,266
7	162	GROUP 7	Reach 2B Levee Extension FP-1	Levees	Revetment	Levee Revetment (6,800 Linear Feet)	Mobilization	80	2,963	1,666
7	163	GROUP 7	Reach 2B Levee Extension FP-1	Floodplain & Lands						
7	164	GROUP 7	Reach 2B Levee Extension FP-1	Floodplain & Lands	Levee Removal					

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	165	GROUP 7	Reach 2B Levee Extension FP-1	Floodplain & Lands	Levee Removal	Excavation Of Levee & Hauling Of Excess Material By Truck (< 20 Miles)		88	6,698	3,766
7	166	GROUP 7	Reach 2B Levee Extension FP-1	Floodplain & Lands	Levee Removal	Mobilization		80	2,963	1,666
7	372	GROUP 8	Reach 2B							
7	373	GROUP 8	Reach 2B	Compact Alignment Fish Barrier						
7	374	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Clearing & Grubbing			87	6,126	3,445
7	375	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Sheet Pile Coffer Dams			103	38,638	21,728
7	376	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Sheet Pile Removal			103	38,638	21,728
7	377	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Dewatering			83	4,029	2,266
7	378	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Rock Riprap Approaches - Labor			83	4,029	2,266
7	380	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Site Excavation (Excludes Bypass Channel)			88	6,698	3,766
7	381	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Engineered Fill			88	6,698	3,766
7	382	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Transition Road Construction (6" AB)			88	6,698	3,766
7	383	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Structural Concrete			84	4,462	2,509
7	384	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	18" Concrete Piles (30' Deep)			103	38,638	21,728
7	385	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Concrete Pile Cap			83	4,029	2,266
7	386	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Bridge Appurtenances			83	4,029	2,266
7	387	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Trash Rack & Bar Rack/Fish Barrier			83	4,029	2,266
7	388	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Steel Monorail Supports			83	4,029	2,266
7	389	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Traffic Guard Railing			83	4,029	2,266
7	390	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Generator & Transformer			83	4,029	2,266
7	391	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Bosker Trash Rake/Hoist			83	4,029	2,266
7	392	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Access Gates			81	3,070	1,727
7	393	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Dust Control			79	2,376	1,336
7	394	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	SWPPP			75	1,581	889

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	395	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Worker Protection			82	3,529	1,984
7	396	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Mobilization			80	2,963	1,666
7	414	GROUP 9	Fresno Slough Dam							
7	415	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined						
7	416	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General					
7	417	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Clearing & Grubbing		87	6,126	3,445
7	418	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Water For Dust Abatement		79	2,376	1,336
7	419	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	SWPPP		75	1,581	889
7	420	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Worker Protection		82	3,529	1,984
7	421	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Bridge (30'x165')		83	4,029	2,266
7	422	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Bridge Appurtenances		83	4,029	2,266
7	423	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation					
7	424	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation	Course Canal Excavation (Loader & Dozer)		88	6,698	3,766
7	425	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation	Haul Off Site (<20 Miles, Main Canal)		88	6,698	3,766
7	426	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation	Concrete Liner @ 6" Thick		84	4,462	2,509
7	427	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation	Riprap Approach (25' x bottom Canal Width)		83	4,029	2,266
7	428	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)					
7	429	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Compacted Embankment		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	430	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Inspection Trench (20% Of Levee Length)		88	6,698	3,766
7	431	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Seeding (Levee Slopes)		88	6,698	3,766
7	432	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Ramps & Turnabouts		88	6,698	3,766
7	433	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Levee Aggregate Base Roadway		88	6,698	3,766
7	434	GROUP 9	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Mobilization		80	2,963	1,666
7	51	GROUP 10	Relocations	Relocations						
7	52	GROUP 10	Relocations	Relocations	Utilities					
7	53	GROUP 10	Relocations	Relocations	Utilities	Overhead Electrical Distribution Removal & Replacement		83	4,029	2,266
7	54	GROUP 10	Relocations	Relocations	Utilities	Mobilization		80	2,963	1,666
7	55	GROUP 10	Relocations	Relocations	Canal					
7	56	GROUP 10	Relocations	Relocations	Canal	Canal Relocations		88	6,698	3,766
7	57	GROUP 10	Relocations	Relocations	Canal	Mobilization		80	2,963	1,666
7	58	GROUP 10	Relocations	Relocations	Pump Station					
7	59	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)				
7	60	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing	87	6,126	3,445
7	61	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Canal & Drain Relocation	88	6,698	3,766
7	62	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Concrete Lining (Intake & Outfall)	83	4,029	2,266
7	63	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Rock Riprap At Outfall	83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	64	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Pump & Sump Relocation	83	4,029	2,266
7	65	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel	81	3,070	1,727
7	66	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service	81	3,070	1,727
7	67	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	12" Steel Pipe	83	4,029	2,266
7	68	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Dust Control	79	2,376	1,336
7	69	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Worker Protection	82	3,529	1,984
7	70	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Mobilization	80	2,963	1,666
7	73	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Clearing & Grubbing	87	6,126	3,445
7	74	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Reinforced Concrete Pipe (72" RGRCP D-50 Pipe)	83	4,029	2,266
7	75	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Pipe Trench Excavation (2:1 Side Slopes)	83	4,029	2,266
7	76	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Pipe Bedding (CLSM To Depth Of 0.375D, Cement Sand Slurry)	81	3,070	1,727
7	77	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Pipe Backfill & Compaction (6' Above Pipe)	86	5,320	2,992

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	78	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Outlet Structure	84	4,226	2,376
7	79	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Pipe Appurtenances	83	4,029	2,266
7	80	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Dust Control	79	2,376	1,336
7	81	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	SWPPP	75	1,581	889
7	82	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Worker Protection	82	3,529	1,984
7	84	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Clearing & Grubbing	87	6,126	3,445
7	85	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Pumps & Structure	80	2,963	1,666
7	86	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Coffer Dam	103	38,638	21,728
7	87	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Dewatering Within Coffer Dam	83	4,029	2,266
7	88	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Removal Of Existing Pumps & Pipeline	83	4,029	2,266
7	89	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Dust Control	79	2,376	1,336
7	90	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	SWPPP	75	1,581	889
7	91	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Worker Protection	82	3,529	1,984
7	93	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)				
7	94	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Clearing & Grubbing	87	6,126	3,445
7	95	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Reinforced Concrete Pipe (30" RGRCP D-50 Pipe)	83	4,029	2,266
7	96	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Pipe Trench Excavation (2:1 Side Slopes)	83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	97	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Pipe Bedding (CLSM To Depth Of 0.375D, Cement Sand Slurry)	81	3,070	1,727
7	98	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Pipe Backfill & Compaction (6' Above Pipe)	86	5,320	2,992
7	99	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Pipe Appurtenances	83	4,029	2,266
7	100	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Dust Control	79	2,376	1,336
7	101	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	SWPPP	75	1,581	889
7	102	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Worker Protection	82	3,529	1,984
7	104	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)				
7	105	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Clearing & Grubbing	87	6,126	3,445
7	106	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Reinforced Concrete Pipe (24" RGRCP D-50 Pipe)	83	4,029	2,266
7	107	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Pipe Trench Excavation (2:1 Side Slopes)	83	4,029	2,266
7	108	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Pipe Bedding (CLSM To Depth Of 0.375D, Cement Sand Slurry)	81	3,070	1,727
7	109	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Pipe Backfill & Compaction (6' Above Pipe)	86	5,320	2,992
7	110	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Pipe Appurtenances	83	4,029	2,266
7	111	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Dust Control	79	2,376	1,336
7	112	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	SWPPP	75	1,581	889
7	113	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Worker Protection	82	3,529	1,984

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	114	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Mobilization	80	2,963	1,666
7	116	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)				
7	117	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing	87	6,126	3,445
7	118	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Earthwork (Loader & Truck)	88	6,698	3,766
7	119	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Revegetation	88	6,698	3,766
7	120	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Pull Pump & Column & Install After Modifications	83	4,029	2,266
7	121	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Column Extension	83	4,029	2,266
7	122	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Casing Extension	83	4,029	2,266
7	123	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Discharge Pipe Modifications	83	4,029	2,266
7	124	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel	81	3,070	1,727
7	125	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service	81	3,070	1,727
7	126	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Dust Control	79	2,376	1,336
7	127	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Mobilization	80	2,963	1,666
7	230	GROUP 11	Columbia Canal Company Relocation Facilities							
7	231	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS						
7	232	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Clearing & Grubbing			87	6,126	3,445

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	233	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Site Excavation			88	6,698	3,766
7	234	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Structure Backfill			88	6,698	3,766
7	235	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Structure Concrete			83	4,029	2,266
7	236	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pumps & Motors (50 HP)			83	4,029	2,266
7	237	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pump & Motor With VFD & Appurtenances (50 HP)			83	4,029	2,266
7	238	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pumps & Motors (75 HP)			83	4,029	2,266
7	239	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pump & Motor With VFD & Appurtenances (75 HP)			83	4,029	2,266
7	240	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pump Control Building (16'x8')			80	2,963	1,666
7	241	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	72" Steel Pipe			84	4,462	2,509
7	242	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	36" Pump Discharge Assemblies			80	2,963	1,666
7	243	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Trashrack			83	4,029	2,266
7	244	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Miscellaneous Metals			83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	245	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Excavate Ditch To Connect Pump Inlet To River Thalweg			88	6,698	3,766
7	246	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Flow Meter (Ultrasonic In Each Pipe Within Concrete Vault)			84	4,462	2,509
7	247	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Coffer Dam			103	38,638	21,728
7	248	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Dewatering Within Coffer Dam			83	4,029	2,266
7	249	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Dust Control			79	2,376	1,336
7	250	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	SWPPP			75	1,581	889
7	251	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Worker Protection			82	3,529	1,984
7	253	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Clearing & Grubbing			87	6,126	3,445
7	254	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Reinforced Concrete Pipe (RCP) - Two 72" D-50 Pipes			83	4,029	2,266
7	255	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Reinforced Concrete Pipe (RCP) - 72" Bends			83	4,029	2,266
7	256	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Pipe Trench Excavation (2:1 Side Slopes)			83	4,029	2,266
7	257	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Pipe Bedding (CLSM To Depth Of 0.5D, Cement Sand Slurry)			81	3,070	1,727

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	258	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Pipe Backfill & Compaction (15' Above Pipe)			86	5,320	2,992
7	259	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Dust Control			79	2,376	1,336
7	260	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	SWPPP			75	1,581	889
7	261	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Worker Protection			82	3,529	1,984
7	262	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures						
7	263	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Clearing & Grubbing			87	6,126	3,445
7	264	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Structure Backfill			88	6,698	3,766
7	265	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Structure Concrete (Check Structure & Headwalls)			83	4,029	2,266
7	266	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	72" Gate			83	4,029	2,266
7	267	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Riprap Facing Class Purchase, 100 LB/CF, 2' Deep			83	4,029	2,266
7	268	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Rock Riprap Approaches / Outfalls & Side Slope Protection, 2' Deep			83	4,029	2,266
7	269	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Dust Control			79	2,376	1,336

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	270	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	SWPPP			75	1,581	889
7	271	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Worker Protection			82	3,529	1,984
7	273	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Clearing & Grubbing			87	6,126	3,445
7	274	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Demolish Old Pump Structure, Flume, & Disposal			87	6,126	3,445
7	275	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Onsite Excavation			88	6,698	3,766
7	276	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Loader / Excavator & Truck For Material (Compacted Vol + 20%)			88	6,698	3,766
7	277	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Haul Truck (Less Than 20 Miles, Compacted Vol + 20%)			88	6,698	3,766
7	278	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Earthwork Fill & Compaction			88	6,698	3,766
7	279	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Canal Lining At 6" Thick			83	4,029	2,266
7	280	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Purchasing & Hauling Gravel For Roadway, 100 LB/CF			86	5,617	3,159
7	281	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Gravel Placement, New Road, 6" Thick, 4,000 LF On Both Banks			88	6,698	3,766
7	282	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Structure Concrete (Check Structure)			83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	283	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Dust Control			79	2,376	1,336
7	284	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	SWPPP			75	1,581	889
7	285	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Worker Protection			82	3,529	1,984
7	286	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Mobilization			80	2,963	1,666
7	435	GROUP 12	Relocations SJR Bypass Canal South Option							
7	436	GROUP 12	Relocations SJR Bypass Canal South Option	Canal						
7	437	GROUP 12	Relocations SJR Bypass Canal South Option	Canal	Canal Relocations			88	6,698	3,766
7	438	GROUP 12	Relocations SJR Bypass Canal South Option	Canal	Mobilization			80	2,963	1,666
7	439	GROUP 12	Relocations SJR Bypass Canal South Option	Utilities						
7	440	GROUP 12	Relocations SJR Bypass Canal South Option	Utilities	Overhead Electrical Distribution Removal & Replacement			83	4,029	2,266
7	441	GROUP 12	Relocations SJR Bypass Canal South Option	Utilities	Mobilization			80	2,963	1,666
7	442	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station						
7	443	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)					
7	444	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing		87	6,126	3,445

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	445	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Canal/Drain Relocation		88	6,698	3,766
7	446	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Concrete Lining (Intake & Outfall)		83	4,029	2,266
7	447	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Rock Riprap At Outfall		83	4,029	2,266
7	448	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Pump & Sump Relocation		83	4,029	2,266
7	449	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel		81	3,070	1,727
7	450	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service		81	3,070	1,727
7	451	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	12" Steel Pipe		83	4,029	2,266
7	452	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Dust Control		79	2,376	1,336
7	453	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Worker Protection		82	3,529	1,984
7	454	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Mobilization		80	2,963	1,666
7	455	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing						
7	456	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)					
7	457	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing		87	6,126	3,445

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	458	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Earthwork (Loader & Truck)		88	6,698	3,766
7	459	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Revegetation		88	6,698	3,766
7	460	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Pull Pump & Column and Reinstall After Modifications		83	4,029	2,266
7	461	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Column Extension		83	4,029	2,266
7	462	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Casing Extension		83	4,029	2,266
7	463	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Discharge Pipe Modifications		83	4,029	2,266
7	464	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel		81	3,070	1,727
7	465	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service		81	3,070	1,727
7	466	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Dust Control		79	2,376	1,336
7	467	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Mobilization		80	2,963	1,666
7	320	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure						
7	321	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Concrete			83	4,029	2,266
7	322	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Reinforcing Steel			83	4,029	2,266
7	323	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Grating			83	4,029	2,266
7	324	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Slide Compression Gate			83	4,029	2,266
7	325	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Adjustable Steel Slot Weir			83	4,029	2,266
7	326	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Slide Compression Gate for Pipe Diversion			83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	327	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Slide Compression Gate for Supplim. Flow Pipe			83	4,029	2,266
7	328	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Fish Screen			83	4,029	2,266
7	329	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Trash Rack			83	4,029	2,266
7	330	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Automated Trash Rack Screen Cleaner			83	4,029	2,266
7	331	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Slide Gate Operator Control			83	4,029	2,266
7	332	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	60" Diameter Steel Pipe			83	4,029	2,266
7	333	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	84" Diameter Steel Pipe			84	4,462	2,509
7	334	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Mobilization			80	2,963	1,666
7	468	GROUP 14	Fresno Slough Dam							
7	469	GROUP 14	Fresno Slough Dam	SJR Control Structure						
7	470	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment					
7	471	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Clearing & Grubbing		87	6,126	3,445
7	472	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Cofferdam		103	38,638	21,728
7	473	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Cofferdam Removal		103	38,638	21,728
7	474	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
7	475	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Dewatering		83	4,029	2,266
7	476	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Excavation To Stockpile		88	6,698	3,766
7	477	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Excavation To Disposal Off Site		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	478	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Gravel Base		88	6,698	3,766
7	479	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure					
7	480	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	12" Square Concrete Piles		103	38,638	21,728
7	481	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Concrete		83	4,029	2,266
7	482	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Reinforcing Steel		83	4,029	2,266
7	483	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Carbon/Galvanized Steel		83	4,029	2,266
7	484	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Stainless Steel		83	4,029	2,266
7	485	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Pipe Handrail		83	4,029	2,266
7	486	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Guardrail		83	4,029	2,266
7	487	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates					
7	488	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Tainter Gate Steel		83	4,029	2,266
7	489	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Motor Operated Hoist W/Wire Ropes		83	4,029	2,266
7	490	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trash Rack - Miscellaneous Steel		83	4,029	2,266
7	491	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trash Rack - Stainless Steel		83	4,029	2,266
7	492	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trash Rack - Nelson Studs		83	4,029	2,266
7	493	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trashrake Units		83	4,029	2,266
7	494	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trashrake - Structure Support Steel		83	4,029	2,266
7	495	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Rock Slope Protection		83	4,029	2,266
7	496	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment					
7	497	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Compacted Embankment - From Stockpile		88	6,698	3,766
7	498	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Compacted Embankment - Core Material		88	6,698	3,766
7	499	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Geotextile Fabric		80	2,963	1,666
7	500	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	9" Bedding		84	4,337	2,439

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	501	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Stone Slope Protection, Type 1		83	4,029	2,266
7	502	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
7	503	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Chain Link Fence W/Barbed Wire		80	2,963	1,666
7	504	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Automatic Entrance Gate		81	3,070	1,727
7	505	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment					
7	506	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Compacted Embankment From Stockpile		88	6,698	3,766
7	507	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Compacted Embankment - Core Material		88	6,698	3,766
7	508	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Geotextile Fabric		80	2,963	1,666
7	509	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	9" Bedding		84	4,337	2,439
7	510	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Stone Slope Protection, Type 1		83	4,029	2,266
7	511	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
7	512	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Chain Link Fence W/Barbed Wire		80	2,963	1,666
7	513	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Automatic Entrance Gate		81	3,070	1,727
7	514	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Mobilization		80	2,963	1,666
7	515	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation					
7	516	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Clearing & Grubbing		87	6,126	3,445
7	517	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Cofferdam		103	38,638	21,728
7	518	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Cofferdam Removal		103	38,638	21,728
7	519	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
7	520	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Dewatering		83	4,029	2,266
7	521	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Excavation To Stockpile		88	6,698	3,766
7	522	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Excavation To Disposal Off Site		88	6,698	3,766
7	523	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Gravel Base		88	6,698	3,766
7	524	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure					

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	525	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Concrete		83	4,029	2,266
7	526	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Reinforcing Steel		83	4,029	2,266
7	527	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Grating		83	4,029	2,266
7	528	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate		83	4,029	2,266
7	529	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Adjustable Steel Slot Weir		83	4,029	2,266
7	530	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate for Pipe Diversion		83	4,029	2,266
7	531	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate for Supplim. Flow Pipe		83	4,029	2,266
7	532	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Fish Screen		83	4,029	2,266
7	533	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Trash Rack		83	4,029	2,266
7	534	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Automated Trash Rack Screen Cleaner		83	4,029	2,266
7	535	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Gate Operator Control		81	3,070	1,727
7	536	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	60" Steel Pipe		83	4,029	2,266
7	537	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	84" Steel Pipe		83	4,029	2,266
7	538	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Mobilization		80	2,963	1,666
7	539	GROUP 15	Fresno Slough Dam							
7	540	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen						
7	541	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork					

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	542	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Clearing & Grubbing		87	6,126	3,445
7	543	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Cofferdam		103	38,638	21,728
7	544	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Cofferdam Removal		103	38,638	21,728
7	545	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
7	546	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Dewatering		83	4,029	2,266
7	547	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Excavation To Stockpile		88	6,698	3,766
7	548	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Excavation To Disposal Off Site		88	6,698	3,766
7	549	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Gravel Base		88	6,698	3,766
7	550	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure					
7	551	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Concrete		83	4,029	2,266
7	552	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Reinforcing Steel		83	4,029	2,266
7	553	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Miscellaneous Metals		83	4,029	2,266
7	554	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Steel Members		83	4,029	2,266
7	555	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Fish Screen		83	4,029	2,266
7	556	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Adjustable Baffles		83	4,029	2,266
7	557	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Automated Screen Brush Cleaners		83	4,029	2,266
7	558	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Scour Protection		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	559	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Electric Winches For Vertical Slide Gates		83	4,029	2,266
7	560	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen					
7	561	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Compacted Embankment - From Stockpile		88	6,698	3,766
7	562	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Compacted Embankment - Core Material		88	6,698	3,766
7	563	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Geotextile Fabric		80	2,963	1,666
7	564	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	9" Bedding		84	4,337	2,439
7	565	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Stone Slope Protection, Type 1		83	4,029	2,266
7	566	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
7	567	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Chain Link Fence W/Barbed Wire		80	2,963	1,666
7	568	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Automatic Entrance Gate		81	3,070	1,727
7	569	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure					
7	570	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	Concrete		83	4,029	2,266
7	571	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	Reinforcing Steel		83	4,029	2,266
7	572	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	48" Steel Pipe		83	4,029	2,266
7	573	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	Mobilization		80	2,963	1,666
7	574	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure					
7	575	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Clearing & Grubbing		87	6,126	3,445

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	576	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Excavation To Stockpile		88	6,698	3,766
7	577	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Excavation To Disposal Off Site		88	6,698	3,766
7	578	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
7	579	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure					
7	580	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	12" Square Concrete Piles		103	38,638	21,728
7	581	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Concrete		83	4,029	2,266
7	582	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Reinforcing Steel		83	4,029	2,266
7	583	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Carbon/Galvanized Steel		83	4,029	2,266
7	584	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Stainless Steel		83	4,029	2,266
7	585	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Pipe Handrail		83	4,029	2,266
7	586	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Guardrail		83	4,029	2,266
7	587	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates					
7	588	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Tainter Gate Steel		83	4,029	2,266
7	589	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Motor Operated Hoist W/Wire Ropes		83	4,029	2,266
7	590	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trash Rack - Miscellaneous Steel		83	4,029	2,266
7	591	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trash Rack - Stainless Steel		83	4,029	2,266
7	592	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trash Rack - Nelson Suds		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	593	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trashrake Units		83	4,029	2,266
7	594	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trashrake - Structural Support Steel		83	4,029	2,266
7	595	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Rock Slope Protection		83	4,029	2,266
7	596	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments					
7	597	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Compacted Embankment - From Stockpile		88	6,698	3,766
7	598	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Compacted Embankment - Core Material		88	6,698	3,766
7	599	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
7	600	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Chain Link Fence W/Barbed Wire		80	2,963	1,666
7	601	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Automated Entrance Gate		81	3,070	1,727
7	602	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Mobilization		80	2,963	1,666
7	167	GROUP 16	Vegetation & Irrigation							
7	168	GROUP 16	Vegetation & Irrigation	General Description						
7	169	GROUP 16	Vegetation & Irrigation	General Description	Plant Establishment (12 Months)			81	3,070	1,727
7	170	GROUP 16	Vegetation & Irrigation	General Description	Landscape Maintenance (12 Months Or As Needed)			81	3,070	1,727
7	171	GROUP 16	Vegetation & Irrigation	General Description	Agricultural Topsoil (6" Layer)			88	6,698	3,766
7	172	GROUP 16	Vegetation & Irrigation	General Description	Erosion Control Fabric			80	2,963	1,666
7	173	GROUP 16	Vegetation & Irrigation	General Description	Irrigation System			81	3,070	1,727
7	174	GROUP 16	Vegetation & Irrigation	General Description	Beaver Fence			80	2,963	1,666
7	175	GROUP 16	Vegetation & Irrigation	General Description	Seeding			88	6,698	3,766
7	176	GROUP 16	Vegetation & Irrigation	General Description	Pole Cuttings			80	2,963	1,666

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
7	177	GROUP 16	Vegetation & Irrigation	General Description	Fascine Bundle			80	2,963	1,666
7	178	GROUP 16	Vegetation & Irrigation	General Description	Instream Woody Material			80	2,963	1,666
7	182	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation T4 - Cbm			81	3,070	1,727
7	183	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation DP - Cmb			81	3,070	1,727
7	184	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation DP - Crg			81	3,070	1,727
7	185	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation DP - Rbh			81	3,070	1,727
7	186	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation DP - Sgf			81	3,070	1,727
7	189	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation D6 - Swt			81	3,070	1,727
7	190	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation D6 - Bwt			81	3,070	1,727
7	191	GROUP 16	Vegetation & Irrigation	General Description	Mobilization			80	2,963	1,666
8	1	GROUP 1	MPB Channel							
8	2	GROUP 1	MPB Channel	Bypass Channel						
8	3	GROUP 1	MPB Channel	Bypass Channel	General					
8	4	GROUP 1	MPB Channel	Bypass Channel	General	Clearing & Grubbing		87	6,126	3,445
8	5	GROUP 1	MPB Channel	Bypass Channel	General	Water For Dust Abatement		79	2,376	1,336
8	6	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation					
8	7	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Course Channel Excavation (Scraper) & Local Haul		88	6,698	3,766
8	8	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Course Channel Excavation (Loader & Dozer)		88	6,698	3,766
8	9	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Fine Channel Excavation & Shaping (Excavator)		84	4,462	2,509
8	10	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Haul Off Site (<20 Miles)		88	6,698	3,766
8	11	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Floodplain Excavation (Scraper) & Local Haul		88	6,698	3,766
8	12	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Floodplain Fill, Grading, & Compaction Between Levees		88	6,698	3,766
8	13	GROUP 1	MPB Channel	Bypass Channel	Channel and Floodplain Excavation	Revetment		87	6,126	3,445
8	14	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures					

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	15	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)				
8	16	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Clearing & Grubbing	87	6,126	3,445
8	17	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Onsite Earthwork For Anchor Systems (Remove & Recompact)	84	4,462	2,509
8	18	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Dewatering	83	4,029	2,266
8	20	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Deliver Materials (CMI Atlanta GA, 2 Trucks)	76	1,774	998
8	21	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Construct Driving Guide & Use As Wales	83	4,029	2,266
8	22	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Sheet Pile Installation (Single Sheet 20'x420')	103	38,638	21,728
8	23	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Caps For Tops (20' Lengths Material & Labor)	83	4,029	2,266
8	24	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Anchor Support System (Pilings, Cable, Wales, Etc)	83	4,029	2,266
8	25	GROUP 1	MPB Channel	Bypass Channel	Grade Control Structures	Single Wall, Anchored, Sheet Pipe Structures (9 Each Structures)	Dust Control	79	2,376	1,336
8	26	GROUP 1	MPB Channel	Bypass Channel	Other Costs					
8	27	GROUP 1	MPB Channel	Bypass Channel	Other Costs	SWPPP		75	1,581	889
8	28	GROUP 1	MPB Channel	Bypass Channel	Other Costs	Worker Protection		82	3,529	1,984
8	29	GROUP 1	MPB Channel	Bypass Channel	Other Costs	Mobilization		85	5,244	2,949
8	397	GROUP 2	Reach 3							
8	398	GROUP 2	Reach 3	Levee Removal						
8	399	GROUP 2	Reach 3	Levee Removal	Haul Excess material by truck < 20 miles			88	6,698	3,766
8	400	GROUP 2	Reach 3	Levee Preparation						
8	401	GROUP 2	Reach 3	Levee Preparation	Clearing & Grubbing			87	6,126	3,445
8	402	GROUP 2	Reach 3	Levee Preparation	Tree Removal			87	6,126	3,445
8	403	GROUP 2	Reach 3	New Levee						
8	404	GROUP 2	Reach 3	New Levee	Compacted Embankment			88	6,698	3,766
8	405	GROUP 2	Reach 3	New Levee	Slurry Wall (10 Percent Of Total Levee Length)			87	6,126	3,445

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	406	GROUP 2	Reach 3	New Levee	USACE Trench Foundation			88	6,698	3,766
8	407	GROUP 2	Reach 3	New Levee	Borrow Excavation and Haul			88	6,698	3,766
8	408	GROUP 2	Reach 3	General						
8	409	GROUP 2	Reach 3	General	Seeding (Levee Slopes)			88	6,698	3,766
8	410	GROUP 2	Reach 3	General	Ramps & Turnabouts			88	6,698	3,766
8	411	GROUP 2	Reach 3	General	Levee Aggregate Base Roadway			88	6,698	3,766
8	412	GROUP 2	Reach 3	General	Haul Excess Material By Truck < 20 Miles (Drainage Channel)			88	6,698	3,766
8	413	GROUP 2	Reach 3	Mobilization				80	2,963	1,666
8	30	GROUP 3	Levees	Levees						
8	31	GROUP 3	Levees	Levees	Levee Preparation					
8	32	GROUP 3	Levees	Levees	Levee Preparation	Clearing & Grubbing		87	6,126	3,445
8	33	GROUP 3	Levees	Levees	Levee Preparation	Tree Removal		87	6,126	3,445
8	34	GROUP 3	Levees	Levees	Right Setback Levee					
8	35	GROUP 3	Levees	Levees	Right Setback Levee	Compacted Embankment		88	6,698	3,766
8	36	GROUP 3	Levees	Levees	Right Setback Levee	Slurry Wall (10 Percent Of Total Levee Length)		87	6,126	3,445
8	37	GROUP 3	Levees	Levees	Right Setback Levee	USACE Trench Foundation		88	6,698	3,766
8	38	GROUP 3	Levees	Levees	Right Setback Levee	Borrow Excavation (< 1 Mile)		88	6,698	3,766
8	39	GROUP 3	Levees	Levees	Left Setback Levee					
8	40	GROUP 3	Levees	Levees	Left Setback Levee	Compacted Embankment		88	6,698	3,766
8	41	GROUP 3	Levees	Levees	Left Setback Levee	Slurry Wall (10 Percent Of Total Levee Length)		87	6,126	3,445
8	42	GROUP 3	Levees	Levees	Left Setback Levee	USACE Trench Foundation		88	6,698	3,766
8	43	GROUP 3	Levees	Levees	Left Setback Levee	Borrow Excavation (< 1 Mile)		88	6,698	3,766
8	44	GROUP 3	Levees	Levees	General					
8	45	GROUP 3	Levees	Levees	General	Seeding (Levee Slopes)		88	6,698	3,766
8	46	GROUP 3	Levees	Levees	General	Ramps & Turnabouts		88	6,698	3,766
8	47	GROUP 3	Levees	Levees	General	Right Levee Aggregate Base Roadway		88	6,698	3,766
8	48	GROUP 3	Levees	Levees	General	Left Levee Aggregate Base Roadway		88	6,698	3,766
8	49	GROUP 3	Levees	Levees	General	Haul Excess Material By Truck < 20 Miles (Drainage Channel)		85	5,113	2,875

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	50	GROUP 3	Levees	Levees	General	Mobilization		82	3,529	1,984
8	287	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)						
8	288	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure					
8	289	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Excavation For Spillway		88	6,698	3,766
8	290	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Compacted Backfill		88	6,698	3,766
8	291	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Cutoff Walls (Steel Sheet Piling)		103	38,638	21,728
8	292	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Precast prestressed concrete pile (14"x14"x20')		103	38,638	21,728
8	293	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Concrete		83	4,029	2,266
8	294	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Steel Reinforcement		83	4,029	2,266
8	295	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Spillway Structure	Waterstop		78	2,118	1,191
8	296	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates					
8	297	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	6 Radial Gates (Each 20'x8')		83	4,029	2,266
8	298	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Hoist (Motor Operated W/Wire Ropes)		83	4,029	2,266
8	299	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Embedded Metal (Stainless Steel)		83	4,029	2,266
8	300	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Steel Stoplogs 6 EA 21'x12' Deep Inc Ribs Etc		83	4,029	2,266
8	301	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Railing On Top Deck		83	4,029	2,266
8	302	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Railing On Bridge Deck		83	4,029	2,266
8	303	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Riprap		83	4,029	2,266
8	304	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Water Velocity & Flow Measurement System		81	3,070	1,727
8	305	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Propane Tank & Enclosure (15'x20'x6' HCB)		80	2,963	1,666
8	306	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Radial Gates	Emergency Generator		82	3,529	1,984
8	307	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction					
8	308	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Excavation For Dam		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	309	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Compacted Embankment - Impervious Fill		88	6,698	3,766
8	310	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Compacted Embankment - Semipervious Fill		88	6,698	3,766
8	311	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Compacted Embankment - Pervious Fill		88	6,698	3,766
8	312	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Geotextile Fabric		80	2,963	1,666
8	313	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	9" Bedding		84	4,337	2,439
8	314	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Stone Slope Protection, Type 1		83	4,029	2,266
8	315	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Access Road (4" AC/6" AB, 24' Wide)		88	6,698	3,766
8	316	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	7' Chain Link Fence Including Barbed Wire		80	2,963	1,666
8	317	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Pipe Handrail (On U/S & D/S Side Of Dam)		83	4,029	2,266
8	318	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Automatic Entrance Gate (16' Wide)		81	3,070	1,727
8	319	GROUP 4	Diversion Structure (Bypass Channel)	Diversion Structure (Bypass Channel)	Dam Construction	Mobilization		80	2,963	1,666
8	335	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)						
8	336	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure					
8	337	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Coffer Dam (Steel Sheet Piling Inc Bracing)		103	38,638	21,728
8	338	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Coffer Dam (Filling With Dirt & Removal)		103	38,638	21,728
8	339	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Dewatering (8 Months)		83	4,029	2,266
8	340	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Excavation For Spillway		88	6,698	3,766
8	341	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Compacted Backfill		88	6,698	3,766
8	342	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Cutoff Walls (Steel Sheet Piling)		103	38,638	21,728
8	343	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Precast Prestressed Concrete Pile (14"x14"x20')		103	38,638	21,728
8	344	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Concrete		83	4,029	2,266
8	345	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Steel Reinforcement		83	4,029	2,266
8	346	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Spillway Structure	Waterstop		78	2,118	1,191

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	347	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs					
8	348	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	4 Radial Gates (Each 16'x18')		83	4,029	2,266
8	349	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Hoist (Motor Operated W/Wire Ropes)		83	4,029	2,266
8	350	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Embedded Metal (Stainless Steel)		83	4,029	2,266
8	351	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Stoplog (Steel, Each 12'x21') Inc Ribs		83	4,029	2,266
8	352	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Railing On Top Deck		83	4,029	2,266
8	353	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Riprap		83	4,029	2,266
8	354	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Water Velocity & Flow Measurement System		81	3,070	1,727
8	355	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Propane Tank & Enclosure (15'x20'x6' HCB)		80	2,963	1,666
8	356	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Radial Gates & Stoplogs	Emergency Generator		80	2,963	1,666
8	357	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction					
8	358	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Coffer Dam (Filling With Dirt & Removal)		103	38,638	21,728
8	359	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Dewatering (6 Months)		83	4,029	2,266
8	360	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Excavation For dam		88	6,698	3,766
8	361	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Compacted Embankment - Impervious Fill		88	6,698	3,766
8	362	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Compacted Embankment - Semipervious Fill		88	6,698	3,766
8	363	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Compacted Embankment - Pervious Fill		88	6,698	3,766
8	364	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Geotextile Fabric		80	2,963	1,666
8	365	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	9" Bedding		84	4,337	2,439
8	366	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Stone Slope Protection, Type 1		83	4,029	2,266
8	367	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Access Road (4" AC/6" AB, 24' Wide)		88	6,698	3,766
8	368	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	7' Chain Link Fence Including Barbed Wire		80	2,963	1,666
8	369	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Pipe Handrail (On U/S & D/S Side Of Dam)		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	370	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Automatic Entrance Gate (16' Wide)		81	3,070	1,727
8	371	GROUP 5	Diversion Structure (SJR)	Diversion Structure (SJR)	Dam Construction	Mobilization		80	2,963	1,666
8	192	GROUP 6	Fish Screen							
8	193	GROUP 6	Fish Screen	Fish Screen Structure						
8	194	GROUP 6	Fish Screen	Fish Screen Structure	Cofferdam (Steel Sheet Piling Including Bracing)			103	38,638	21,728
8	195	GROUP 6	Fish Screen	Fish Screen Structure	Cofferdam (Filling With Dirt & Removal)			103	38,638	21,728
8	196	GROUP 6	Fish Screen	Fish Screen Structure	Dewatering (For 8 Months)			83	4,029	2,266
8	197	GROUP 6	Fish Screen	Fish Screen Structure	Mobilization			80	2,963	1,666
8	198	GROUP 6	Fish Screen	Fish Screen Structure	Excavation			88	6,698	3,766
8	199	GROUP 6	Fish Screen	Fish Screen Structure	Backfill & Compaction			88	6,698	3,766
8	200	GROUP 6	Fish Screen	Fish Screen Structure	Concrete			83	4,029	2,266
8	201	GROUP 6	Fish Screen	Fish Screen Structure	Steel Reinforcement			83	4,029	2,266
8	202	GROUP 6	Fish Screen	Screen Panels				83	4,029	2,266
8	203	GROUP 6	Fish Screen	Flow Control Baffles (Same Size As Screen Panels)				83	4,029	2,266
8	204	GROUP 6	Fish Screen	Blocker Panels				83	4,029	2,266
8	205	GROUP 6	Fish Screen	Structural Steel - Framework For Screens, Baffles, & Blocker				83	4,029	2,266
8	206	GROUP 6	Fish Screen	Fish Screen Automatic Cleaner (Atlas ST8100)				83	4,029	2,266
8	208	GROUP 6	Fish Screen	Fish Return Pipes						
8	209	GROUP 6	Fish Screen	Fish Return Pipes	Pipe Trench Excavation (2:1 Side Slopes)			83	4,029	2,266
8	210	GROUP 6	Fish Screen	Fish Return Pipes	Pipe Bedding (CLSM To Depth Of 0.7 D, Cement Sand Slurry)			81	3,070	1,727
8	211	GROUP 6	Fish Screen	Fish Return Pipes	Backfill & Compaction (5' Above Pipe)			86	5,320	2,992
8	212	GROUP 6	Fish Screen	Fish Return Pipes	Concrete			83	4,029	2,266
8	213	GROUP 6	Fish Screen	Fish Return Pipes	Steel Reinforcement			83	4,029	2,266
8	214	GROUP 6	Fish Screen	Fish Return Pipes	Pipes (8 @ 1900 FT Each) 30" HDPE, SDR 32.5 Pipes			83	4,029	2,266
8	215	GROUP 6	Fish Screen	Fish Return Pipes	Access Manholes			83	4,029	2,266
8	217	GROUP 6	Fish Screen	Pump Station						
8	218	GROUP 6	Fish Screen	Pump Station	Excavation			88	6,698	3,766
8	219	GROUP 6	Fish Screen	Pump Station	Backfill			88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	220	GROUP 6	Fish Screen	Pump Station	Concrete			83	4,029	2,266
8	221	GROUP 6	Fish Screen	Pump Station	Steel Reinforcement			83	4,029	2,266
8	222	GROUP 6	Fish Screen	Pump Station	Wemco-Hydrostal 30" Pump (16,000 GPM)			83	4,029	2,266
8	223	GROUP 6	Fish Screen	Pump Station	Open Frame Pitch Valve 30"			83	4,029	2,266
8	224	GROUP 6	Fish Screen	Control Building				80	2,963	1,666
8	225	GROUP 6	Fish Screen	Trashrack				83	4,029	2,266
8	226	GROUP 6	Fish Screen	Trashrake - 150' Long Across Four Vee Opening				83	4,029	2,266
8	228	GROUP 6	Fish Screen	Miscellaneous Metalwork (Handrail, Guardrail, & Fittings)				83	4,029	2,266
8	229	GROUP 6	Fish Screen	Mobilization				80	2,963	1,666
8	128	GROUP 7	Reach 2B Levee Extension FP-5							
8	129	GROUP 7	Reach 2B Levee Extension FP-5	Levees						
8	130	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)					
8	131	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Levee Preparation				
8	132	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Levee Preparation	Clearing & Grubbing	87	6,126	3,445
8	133	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Levee Preparation	Tree Removal	87	6,126	3,445
8	134	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Right Setback Levee				
8	135	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Right Setback Levee	Compacted Embankment	88	6,698	3,766
8	136	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Right Setback Levee	Slurry Wall (Total Levee Length)	87	6,126	3,445
8	137	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Right Setback Levee	USACE Trench Foundation	88	6,698	3,766
8	138	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Right Setback Levee	Borrow Excavation (< 1 Mile)	88	6,698	3,766
8	139	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Left Setback Levee				
8	140	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Left Setback Levee	Compacted Embankment	88	6,698	3,766
8	141	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Left Setback Levee	Slurry Wall (Total Levee Length)	87	6,126	3,445
8	142	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Left Setback Levee	USACE Trench Foundation	88	6,698	3,766
8	143	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	Left Setback Levee	Borrow Excavation (< 1 Mile)	88	6,698	3,766
8	144	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	General				

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	145	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	General	Seeding (Levee Slopes)	88	6,698	3,766
8	146	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	General	Ramp & Turnabouts	88	6,698	3,766
8	147	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	General	Right Levee Aggregate Base Roadway	88	6,698	3,766
8	148	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	General	Left Levee Aggregate Base Roadway	88	6,698	3,766
8	149	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	General	Haul Excess Material By Truck (< 20 Miles, Drainage Channel)	88	6,698	3,766
8	150	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Levee Construction (Extension)	General	Mobilization	80	2,963	1,666
8	151	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment					
8	152	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)				
8	153	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Mobilization & Demobilization (10%)	80	2,963	1,666
8	154	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Clearing & Grubbing	87	6,126	3,445
8	155	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Launch Rock	83	4,029	2,266
8	156	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Rock Slope Protection	83	4,029	2,266
8	157	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Clean Sand	83	4,029	2,266
8	158	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Landscaping (Ag Soil, Plants, Etc)	82	3,544	1,993
8	159	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Erosion Control	75	1,581	889
8	160	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Environmental Mitigation (20% Of Subtotal)	75	1,581	889
8	161	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Rock Slope - Labor	83	4,029	2,266
8	162	GROUP 7	Reach 2B Levee Extension FP-5	Levees	Revetment	Levee Revetment (4,600 Linear Feet)	Mobilization	80	2,963	1,666
8	163	GROUP 7	Reach 2B Levee Extension FP-5	Floodplain & Lands						
8	164	GROUP 7	Reach 2B Levee Extension FP-5	Floodplain & Lands	Levee Removal					
8	165	GROUP 7	Reach 2B Levee Extension FP-5	Floodplain & Lands	Levee Removal	Excavation Of Levee & Hauling Of Excess Material By Truck (< 20 Miles)		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	166	GROUP 7	Reach 2B Levee Extension FP-5	Floodplain & Lands	Levee Removal	Mobilization		80	2,963	1,666
8	372	GROUP 8	Reach 2B							
8	373	GROUP 8	Reach 2B	Compact Alignment Fish Barrier						
8	374	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Clearing & Grubbing			87	6,126	3,445
8	375	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Sheet Pile Coffer Dams			103	38,638	21,728
8	376	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Sheet Pile Removal			103	38,638	21,728
8	377	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Dewatering			83	4,029	2,266
8	378	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Rock Riprap Approaches - Labor			83	4,029	2,266
8	380	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Site Excavation (Excludes Bypass Channel)			88	6,698	3,766
8	381	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Engineered Fill			88	6,698	3,766
8	382	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Transition Road Construction (6" AB)			88	6,698	3,766
8	383	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Structural Concrete			84	4,462	2,509
8	384	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	18" Concrete Piles (30' Deep)			103	38,638	21,728
8	385	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Concrete Pile Cap			83	4,029	2,266
8	386	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Bridge Appurtenances			83	4,029	2,266
8	387	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Trash Rack & Bar Rack/Fish Barrier			83	4,029	2,266
8	388	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Steel Monorail Supports			83	4,029	2,266
8	389	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Traffic Guard Railing			83	4,029	2,266
8	390	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Generator & Transformer			83	4,029	2,266
8	391	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Bosker Trash Rake/Hoist			83	4,029	2,266
8	392	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Access Gates			81	3,070	1,727
8	393	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Dust Control			79	2,376	1,336
8	394	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	SWPPP			75	1,581	889
8	395	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Worker Protection			82	3,529	1,984
8	396	GROUP 8	Reach 2B	Compact Alignment Fish Barrier	Mobilization			80	2,963	1,666

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	51	GROUP 10	Relocations	Relocations						
8	52	GROUP 10	Relocations	Relocations	Utilities					
8	53	GROUP 10	Relocations	Relocations	Utilities	Overhead Electrical Distribution Removal & Replacement		82	3,544	1,993
8	54	GROUP 10	Relocations	Relocations	Utilities	Mobilization		85	5,244	2,949
8	55	GROUP 10	Relocations	Relocations	Canal					
8	56	GROUP 10	Relocations	Relocations	Canal	Canal Relocations		85	5,113	2,875
8	57	GROUP 10	Relocations	Relocations	Canal	Mobilization		85	5,244	2,949
8	58	GROUP 10	Relocations	Relocations	Pump Station					
8	59	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)				
8	60	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing	87	6,126	3,445
8	61	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Canal & Drain Relocation	86	5,460	3,070
8	62	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Concrete Lining (Intake & Outfall)	83	4,029	2,266
8	63	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Rock Riprap At Outfall	83	4,029	2,266
8	64	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Pump & Sump Relocation	82	3,544	1,993
8	65	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel	81	3,070	1,727
8	66	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service	82	3,619	2,035
8	67	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	12" Steel Pipe	81	3,070	1,727

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	68	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Dust Control	82	3,529	1,984
8	69	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Worker Protection	80	2,963	1,666
8	70	GROUP 10	Relocations	Relocations	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Mobilization	85	5,244	2,949
8	72	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)				
8	73	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Clearing & Grubbing	85	4,742	2,666
8	74	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Reinforced Concrete Pipe (72" RGRCP D-50 Pipe)	83	4,029	2,266
8	75	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Pipe Trench Excavation (2:1 Side Slopes)	82	3,544	1,993
8	76	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Pipe Bedding (CLSM To Depth Of 0.375D, Cement Sand Slurry)	84	4,350	2,446
8	77	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Pipe Backfill & Compaction (6' Above Pipe)	85	4,742	2,666
8	78	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Outlet Structure	84	4,226	2,376
8	79	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Pipe Appurtenances	81	3,070	1,727
8	80	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Dust Control	78	2,236	1,257

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	81	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	SWPPP	81	3,155	1,774
8	82	GROUP 10	Relocations	Relocations	Pump Station	(38 CFS 72" Pipeline From Isolation Structure To Approx. City Of Mendota Well 7)	Worker Protection	78	2,118	1,191
8	83	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure				
8	84	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Clearing & Grubbing	87	6,126	3,445
8	85	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Pumps & Structure	80	2,963	1,666
8	86	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Coffer Dam	103	38,638	21,728
8	87	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Dewatering Within Coffer Dam	83	4,029	2,266
8	88	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Removal Of Existing Pumps & Pipeline	83	4,029	2,266
8	89	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Dust Control	79	2,376	1,336
8	90	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	SWPPP	75	1,581	889
8	91	GROUP 10	Relocations	Relocations	Pump Station	Lift Station - 38 CFS Near Isolation Structure	Worker Protection	82	3,529	1,984
8	93	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)				
8	94	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Clearing & Grubbing	86	5,912	3,325
8	95	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Reinforced Concrete Pipe (30" RGRCP D-50 Pipe)	83	4,029	2,266
8	96	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Pipe Trench Excavation (2:1 Side Slopes)	82	3,544	1,993
8	97	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Pipe Bedding (CLSM To Depth Of 0.375D, Cement Sand Slurry)	84	4,350	2,446
8	98	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Pipe Backfill & Compaction (6' Above Pipe)	85	4,742	2,666
8	99	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Pipe Appurtenances	81	3,070	1,727
8	100	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Dust Control	78	2,236	1,257

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	101	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	SWPPP	81	3,155	1,774
8	102	GROUP 10	Relocations	Relocations	Pump Station	(22 CFS 30" Pipeline At Well 7 To Existing Mowry Ranch Pipeline)	Worker Protection	85	5,244	2,949
8	104	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)				
8	105	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Clearing & Grubbing	84	4,462	2,509
8	106	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Reinforced Concrete Pipe (24" RGRCP D-50 Pipe)	83	4,029	2,266
8	107	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Pipe Trench Excavation (2:1 Side Slopes)	82	3,544	1,993
8	108	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Pipe Bedding (CLSM To Depth Of 0.375D, Cement Sand Slurry)	84	4,350	2,446
8	109	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Pipe Backfill & Compaction (6' Above Pipe)	85	4,742	2,666
8	110	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Pipe Appurtenances	81	3,070	1,727
8	111	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Dust Control	78	2,236	1,257
8	112	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	SWPPP	81	3,155	1,774
8	113	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Worker Protection	80	2,963	1,666
8	114	GROUP 10	Relocations	Relocations	Pump Station	(16 CFS 24" Pipeline From Well 7 To Approx. Well 9)	Mobilization	78	2,118	1,191
8	116	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)				
8	117	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing	87	6,126	3,445
8	118	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Earthwork (Loader & Truck)	88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	119	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Revegetation	88	6,698	3,766
8	120	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Pull Pump & Column & Install After Modifications	83	4,029	2,266
8	121	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Column Extension	83	4,029	2,266
8	122	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Casing Extension	83	4,029	2,266
8	123	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Discharge Pipe Modifications	83	4,029	2,266
8	124	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel	81	3,070	1,727
8	125	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service	81	3,070	1,727
8	126	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Dust Control	79	2,376	1,336
8	127	GROUP 10	Relocations	Relocations	Pump Station	Site Preparation & Construction (2 Each Locations)	Mobilization	80	2,963	1,666
8	230	GROUP 11	Columbia Canal Company Relocation Facilities							
8	231	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS						
8	232	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Clearing & Grubbing			87	6,126	3,445
8	233	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Site Excavation			88	6,698	3,766
8	234	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Structure Backfill			88	6,698	3,766
8	235	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Structure Concrete			83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	236	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pumps & Motors (50 HP)			83	4,029	2,266
8	237	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pump & Motor With VFD & Appurtenances (50 HP)			83	4,029	2,266
8	238	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pumps & Motors (75 HP)			83	4,029	2,266
8	239	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pump & Motor With VFD & Appurtenances (75 HP)			83	4,029	2,266
8	240	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Pump Control Building (16'x8')			80	2,963	1,666
8	241	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	72" Steel Pipe			84	4,462	2,509
8	242	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	36" Pump Discharge Assemblies			80	2,963	1,666
8	243	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Trashrack			83	4,029	2,266
8	244	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Miscellaneous Metals			83	4,029	2,266
8	245	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Excavate Ditch To Connect Pump Inlet To River Thalweg			88	6,698	3,766
8	246	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Flow Meter (Ultrasonic In Each Pipe Within Concrete Vault)			84	4,462	2,509
8	247	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Coffer Dam			103	38,638	21,728

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	248	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Dewatering Within Coffer Dam			83	4,029	2,266
8	249	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Dust Control			79	2,376	1,336
8	250	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	SWPPP			75	1,581	889
8	251	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant - 250 CFS	Worker Protection			82	3,529	1,984
8	252	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)						
8	253	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Clearing & Grubbing			87	6,126	3,445
8	254	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Reinforced Concrete Pipe (RCP) - Two 72" D-50 Pipes			83	4,029	2,266
8	255	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Reinforced Concrete Pipe (RCP) - 72" Bends			83	4,029	2,266
8	256	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Pipe Trench Excavation (2:1 Side Slopes)			83	4,029	2,266
8	257	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Pipe Bedding (CLSM To Depth Of 0.5D, Cement Sand Slurry)			81	3,070	1,727
8	258	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Pipe Backfill & Compaction (15' Above Pipe)			86	5,320	2,992
8	259	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Dust Control			79	2,376	1,336

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	260	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	SWPPP			75	1,581	889
8	261	GROUP 11	Columbia Canal Company Relocation Facilities	Siphon Under Compact Alignment (From Flow Meter To Outlet)	Worker Protection			82	3,529	1,984
8	262	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures						
8	263	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Clearing & Grubbing			87	6,126	3,445
8	264	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Structure Backfill			88	6,698	3,766
8	265	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Structure Concrete (Check Structure & Headwalls)			83	4,029	2,266
8	266	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	72" Gate			83	4,029	2,266
8	267	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Riprap Facing Class Purchase, 100 LB/CF, 2' Deep			83	4,029	2,266
8	268	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Rock Riprap Approaches / Outfalls & Side Slope Protection, 2' Deep			83	4,029	2,266
8	269	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Dust Control			79	2,376	1,336
8	270	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	SWPPP			75	1,581	889
8	271	GROUP 11	Columbia Canal Company Relocation Facilities	USBR Main Columbia Pumping Plant Outlet Structures	Worker Protection			82	3,529	1,984

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	272	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks						
8	273	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Clearing & Grubbing			87	6,126	3,445
8	274	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Demolish Old Pump Structure, Flume, & Disposal			87	6,126	3,445
8	275	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Onsite Excavation			88	6,698	3,766
8	276	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Loader / Excavator & Truck For Material (Compacted Vol + 20%)			88	6,698	3,766
8	277	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Haul Truck (Less Than 20 Miles, Compacted Vol + 20%)			88	6,698	3,766
8	278	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Earthwork Fill & Compaction			88	6,698	3,766
8	279	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Canal Lining At 6" Thick			83	4,029	2,266
8	280	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Purchasing & Hauling Gravel For Roadway, 100 LB/CF			86	5,617	3,159
8	281	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Gravel Placement For New Road At 6" Thick, 4,000 LF On Both Banks			88	6,698	3,766
8	282	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Structure Concrete (Check Structure)			83	4,029	2,266
8	283	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Dust Control			79	2,376	1,336

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	284	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	SWPPP			75	1,581	889
8	285	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Worker Protection			82	3,529	1,984
8	286	GROUP 11	Columbia Canal Company Relocation Facilities	Raising Columbia Canal 5' From Proposed Headworks Back To Old Headworks	Mobilization			80	2,963	1,666
8	435	GROUP 12	Relocations SJR Bypass Canal South Option							
8	436	GROUP 12	Relocations SJR Bypass Canal South Option	Canal						
8	437	GROUP 12	Relocations SJR Bypass Canal South Option	Canal	Canal Relocations			88	6,698	3,766
8	438	GROUP 12	Relocations SJR Bypass Canal South Option	Canal	Mobilization			80	2,963	1,666
8	439	GROUP 12	Relocations SJR Bypass Canal South Option	Utilities						
8	440	GROUP 12	Relocations SJR Bypass Canal South Option	Utilities	Overhead Electrical Distribution Removal & Replacement			83	4,029	2,266
8	441	GROUP 12	Relocations SJR Bypass Canal South Option	Utilities	Mobilization			80	2,963	1,666
8	442	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station						
8	443	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)					
8	444	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing		87	6,126	3,445
8	445	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Canal/Drain Relocation		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	446	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Concrete Lining (Intake & Outfall)		83	4,029	2,266
8	447	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Rock Riprap At Outfall		83	4,029	2,266
8	448	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Pump & Sump Relocation		83	4,029	2,266
8	449	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel		81	3,070	1,727
8	450	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service		81	3,070	1,727
8	451	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	12" Steel Pipe		83	4,029	2,266
8	452	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Dust Control		79	2,376	1,336
8	453	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Worker Protection		82	3,529	1,984
8	454	GROUP 12	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Mobilization		80	2,963	1,666
8	455	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing						
8	456	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)					
8	457	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing		87	6,126	3,445
8	458	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Earthwork (Loader & Truck)		88	6,698	3,766
8	459	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Revegetation		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	460	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Pull Pump & Column and Reinstall After Modifications		83	4,029	2,266
8	461	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Column Extension		83	4,029	2,266
8	462	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Casing Extension		83	4,029	2,266
8	463	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Discharge Pipe Modifications		83	4,029	2,266
8	464	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel		81	3,070	1,727
8	465	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service		81	3,070	1,727
8	466	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Dust Control		79	2,376	1,336
8	467	GROUP 12	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Mobilization		80	2,963	1,666
8	320	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure						
8	321	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Concrete			83	4,029	2,266
8	322	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Reinforcing Steel			83	4,029	2,266
8	323	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Grating			83	4,029	2,266
8	324	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Slide Compression Gate			83	4,029	2,266
8	325	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Adjustable Steel Slot Weir			83	4,029	2,266
8	326	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Slide Compression Gate for Pipe Diversion			83	4,029	2,266
8	327	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Slide Compression Gate for Supplim. Flow Pipe			83	4,029	2,266
8	328	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Fish Screen			83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	329	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Trash Rack			83	4,029	2,266
8	330	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Automated Trash Rack Screen Cleaner			83	4,029	2,266
8	331	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Steel Slide Gate Operator Control			83	4,029	2,266
8	332	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	60" Diameter Steel Pipe			83	4,029	2,266
8	333	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	84" Diameter Steel Pipe			84	4,462	2,509
8	334	GROUP 13	Fish Ladder and Supplemental Intake Structure	Fish Ladder and Supplemental Intake Structure	Mobilization			80	2,963	1,666
8	468	GROUP 14	Fresno Slough Dam							
8	469	GROUP 14	Fresno Slough Dam	SJR Control Structure						
8	470	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment					
8	471	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Clearing & Grubbing		87	6,126	3,445
8	472	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Cofferdam		103	38,638	21,728
8	473	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Cofferdam Removal		103	38,638	21,728
8	474	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
8	475	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Dewatering		83	4,029	2,266
8	476	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Excavation To Stockpile		88	6,698	3,766
8	477	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Excavation To Disposal Off Site		88	6,698	3,766
8	478	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Gravel Base		88	6,698	3,766
8	479	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure					

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	480	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	12" Square Concrete Piles		103	38,638	21,728
8	481	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Concrete		83	4,029	2,266
8	482	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Reinforcing Steel		83	4,029	2,266
8	483	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Carbon/Galvanized Steel		83	4,029	2,266
8	484	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Stainless Steel		83	4,029	2,266
8	485	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Pipe Handrail		83	4,029	2,266
8	486	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Guardrail		83	4,029	2,266
8	487	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates					
8	488	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Tainter Gate Steel		83	4,029	2,266
8	489	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Motor Operated Hoist W/Wire Ropes		83	4,029	2,266
8	490	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trash Rack - Miscellaneous Steel		83	4,029	2,266
8	491	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trash Rack - Stainless Steel		83	4,029	2,266
8	492	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trash Rack - Nelson Studs		83	4,029	2,266
8	493	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trashrake Units		83	4,029	2,266
8	494	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trashrake - Structure Support Steel		83	4,029	2,266
8	495	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Rock Slope Protection		83	4,029	2,266
8	496	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment					
8	497	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Compacted Embankment - From Stockpile		88	6,698	3,766
8	498	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Compacted Embankment - Core Material		88	6,698	3,766
8	499	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Geotextile Fabric		80	2,963	1,666
8	500	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	9" Bedding		84	4,337	2,439
8	501	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Stone Slope Protection, Type 1		83	4,029	2,266
8	502	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
					Embankment					
8	503	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Chain Link Fence W/Barbed Wire		80	2,963	1,666
8	504	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Automatic Entrance Gate		81	3,070	1,727
8	505	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment					
8	506	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Compacted Embankment From Stockpile		88	6,698	3,766
8	507	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Compacted Embankment - Core Material		88	6,698	3,766
8	508	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Geotextile Fabric		80	2,963	1,666
8	509	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	9" Bedding		84	4,337	2,439
8	510	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Stone Slope Protection, Type 1		83	4,029	2,266
8	511	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
8	512	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Chain Link Fence W/Barbed Wire		80	2,963	1,666
8	513	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Automatic Entrance Gate		81	3,070	1,727
8	514	GROUP 14	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Mobilization		80	2,963	1,666
8	515	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation					
8	516	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Clearing & Grubbing		87	6,126	3,445
8	517	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Cofferdam		103	38,638	21,728
8	518	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Cofferdam Removal		103	38,638	21,728
8	519	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
8	520	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Dewatering		83	4,029	2,266
8	521	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Excavation To Stockpile		88	6,698	3,766
8	522	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Excavation To Disposal Off Site		88	6,698	3,766
8	523	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Gravel Base		88	6,698	3,766
8	524	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure					
8	525	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Concrete		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	526	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Reinforcing Steel		83	4,029	2,266
8	527	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Grating		83	4,029	2,266
8	528	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate		83	4,029	2,266
8	529	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Adjustable Steel Slot Weir		83	4,029	2,266
8	530	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate for Pipe Diversion		83	4,029	2,266
8	531	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate for Supplim. Flow Pipe		83	4,029	2,266
8	532	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Fish Screen		83	4,029	2,266
8	533	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Trash Rack		83	4,029	2,266
8	534	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Automated Trash Rack Screen Cleaner		83	4,029	2,266
8	535	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Gate Operator Control		81	3,070	1,727
8	536	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	60" Steel Pipe		83	4,029	2,266
8	537	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	84" Steel Pipe		83	4,029	2,266
8	538	GROUP 14	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Mobilization		80	2,963	1,666
8	539	GROUP 15	Fresno Slough Dam							
8	540	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen						
8	541	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork					
8	542	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Clearing & Grubbing		87	6,126	3,445

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	543	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Cofferdam		103	38,638	21,728
8	544	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Cofferdam Removal		103	38,638	21,728
8	545	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
8	546	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Dewatering		83	4,029	2,266
8	547	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Excavation To Stockpile		88	6,698	3,766
8	548	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Excavation To Disposal Off Site		88	6,698	3,766
8	549	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Gravel Base		88	6,698	3,766
8	550	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure					
8	551	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Concrete		83	4,029	2,266
8	552	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Reinforcing Steel		83	4,029	2,266
8	553	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Miscellaneous Metals		83	4,029	2,266
8	554	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Steel Members		83	4,029	2,266
8	555	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Fish Screen		83	4,029	2,266
8	556	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Adjustable Baffles		83	4,029	2,266
8	557	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Automated Screen Brush Cleaners		83	4,029	2,266
8	558	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Scour Protection		83	4,029	2,266
8	559	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Electric Winches For Vertical Slide Gates		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	560	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen					
8	561	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Compacted Embankment - From Stockpile		88	6,698	3,766
8	562	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Compacted Embankment - Core Material		88	6,698	3,766
8	563	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Geotextile Fabric		80	2,963	1,666
8	564	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	9" Bedding		84	4,337	2,439
8	565	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Stone Slope Protection, Type 1		83	4,029	2,266
8	566	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
8	567	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Chain Link Fence W/Barbed Wire		80	2,963	1,666
8	568	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Automatic Entrance Gate		81	3,070	1,727
8	569	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure					
8	570	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	Concrete		83	4,029	2,266
8	571	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	Reinforcing Steel		83	4,029	2,266
8	572	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	48" Steel Pipe		83	4,029	2,266
8	573	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	Mobilization		80	2,963	1,666
8	574	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure					
8	575	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Clearing & Grubbing		87	6,126	3,445
8	576	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Excavation To Stockpile		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	577	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Excavation To Disposal Off Site		88	6,698	3,766
8	578	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
8	579	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure					
8	580	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	12" Square Concrete Piles		103	38,638	21,728
8	581	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Concrete		83	4,029	2,266
8	582	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Reinforcing Steel		83	4,029	2,266
8	583	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Carbon/Galvanized Steel		83	4,029	2,266
8	584	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Stainless Steel		83	4,029	2,266
8	585	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Pipe Handrail		83	4,029	2,266
8	586	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Guardrail		83	4,029	2,266
8	587	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates					
8	588	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Tainter Gate Steel		83	4,029	2,266
8	589	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Motor Operated Hoist W/Wire Ropes		83	4,029	2,266
8	590	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trash Rack - Miscellaneous Steel		83	4,029	2,266
8	591	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trash Rack - Stainless Steel		83	4,029	2,266
8	592	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trash Rack - Nelson Suds		83	4,029	2,266
8	593	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trashrake Units		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	594	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trashrake - Structural Support Steel		83	4,029	2,266
8	595	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Rock Slope Protection		83	4,029	2,266
8	596	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments					
8	597	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Compacted Embankment - From Stockpile		88	6,698	3,766
8	598	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Compacted Embankment - Core Material		88	6,698	3,766
8	599	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
8	600	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Chain Link Fence W/Barbed Wire		80	2,963	1,666
8	601	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Automated Entrance Gate		81	3,070	1,727
8	602	GROUP 15	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Mobilization		80	2,963	1,666
8	167	GROUP 16	Vegetation & Irrigation							
8	168	GROUP 16	Vegetation & Irrigation	General Description						
8	169	GROUP 16	Vegetation & Irrigation	General Description	Plant Establishment (12 Months)			81	3,070	1,727
8	170	GROUP 16	Vegetation & Irrigation	General Description	Landscape Maintenance (12 Months Or As Needed)			81	3,070	1,727
8	171	GROUP 16	Vegetation & Irrigation	General Description	Agricultural Topsoil (6" Layer)			88	6,698	3,766
8	172	GROUP 16	Vegetation & Irrigation	General Description	Erosion Control Fabric			80	2,963	1,666
8	173	GROUP 16	Vegetation & Irrigation	General Description	Irrigation System			81	3,070	1,727
8	174	GROUP 16	Vegetation & Irrigation	General Description	Beaver Fence			80	2,963	1,666
8	175	GROUP 16	Vegetation & Irrigation	General Description	Seeding			88	6,698	3,766
8	176	GROUP 16	Vegetation & Irrigation	General Description	Pole Cuttings			80	2,963	1,666
8	177	GROUP 16	Vegetation & Irrigation	General Description	Fascine Bundle			80	2,963	1,666

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
8	178	GROUP 16	Vegetation & Irrigation	General Description	Instream Woody Material			80	2,963	1,666
8	182	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation T4 - Cbm			81	3,070	1,727
8	183	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation DP - Cmb			81	3,070	1,727
8	184	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation DP - Crg			81	3,070	1,727
8	185	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation DP - Rbh			81	3,070	1,727
8	186	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation DP - Sgf			81	3,070	1,727
8	189	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation D6 - Swt			81	3,070	1,727
8	190	GROUP 16	Vegetation & Irrigation	General Description	Treepot Installation D6 - Bwt			81	3,070	1,727
8	191	GROUP 16	Vegetation & Irrigation	General Description	Mobilization			80	2,963	1,666
9	1	GROUP 1	Levee Construction							
9	2	GROUP 1	Levee Construction	Levee Preparation						
9	3	GROUP 1	Levee Construction	Levee Preparation	Clearing & Grubbing			87	6,126	3,445
9	4	GROUP 1	Levee Construction	Levee Preparation	Tree Removal			87	6,126	3,445
9	5	GROUP 1	Levee Construction	Right Setback Levee						
9	6	GROUP 1	Levee Construction	Right Setback Levee	Compacted Embankment			88	6,698	3,766
9	7	GROUP 1	Levee Construction	Right Setback Levee	Slurry Wall (100 Percent Of Total Levee Length)			87	6,126	3,445
9	8	GROUP 1	Levee Construction	Right Setback Levee	USACE Trench Foundation			88	6,698	3,766
9	9	GROUP 1	Levee Construction	Right Setback Levee	Borrow Excavation (< 1 Mile)			88	6,698	3,766
9	10	GROUP 1	Levee Construction	Left Setback Levee						
9	11	GROUP 1	Levee Construction	Left Setback Levee	Compacted Embankment			88	6,698	3,766
9	12	GROUP 1	Levee Construction	Left Setback Levee	Slurry Wall (100 Percent Of Total Levee Length)			87	6,126	3,445
9	13	GROUP 1	Levee Construction	Left Setback Levee	USACE Trench Foundation			88	6,698	3,766
9	14	GROUP 1	Levee Construction	Left Setback Levee	Borrow Excavation (< 1 Mile)			88	6,698	3,766
9	15	GROUP 1	Levee Construction	General						
9	16	GROUP 1	Levee Construction	General	Seeding (Levee Slopes)			88	6,698	3,766
9	17	GROUP 1	Levee Construction	General	Ramps & Turnabouts			88	6,698	3,766
9	18	GROUP 1	Levee Construction	General	Right Levee Aggregate Base Roadway			88	6,698	3,766
9	19	GROUP 1	Levee Construction	General	Left Levee Aggregate Base Roadway			88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	20	GROUP 1	Levee Construction	General	Haul Excess Material By Truck <20 Miles (Drainage Channel)			88	6,698	3,766
9	21	GROUP 1	Levee Construction	General	Mobilization			80	2,963	1,666
9	35	GROUP 2	Levee Removal							
9	36	GROUP 2	Levee Removal	Excavation of Levee and Haul Excess Material By Truck <20 Miles				88	6,698	3,766
9	37	GROUP 2	Levee Removal	Mobilization				80	2,963	1,666
9	33	GROUP 3	Levee Revetment	Revetment Per Linear Foot	Rock Slope - Labor	Revetment Subtotal Per Linear Foot (Subtotal 24 To 33)		87	6,126	3,445
9	34	GROUP 3	Levee Revetment	Revetment Per Linear Foot	Mobilization			80	2,963	1,666
9	84	GROUP 4	Fresno Slough Dam							
9	85	GROUP 4	Fresno Slough Dam	Initial Stage						
9	86	GROUP 4	Fresno Slough Dam	Initial Stage	Clearing & Grubbing			87	6,126	3,445
9	87	GROUP 4	Fresno Slough Dam	Initial Stage	Soil Remediation			88	6,698	3,766
9	88	GROUP 4	Fresno Slough Dam	Initial Stage	Cut-Off Wall (Secant Piles)			84	4,462	2,509
9	89	GROUP 4	Fresno Slough Dam	Initial Stage	Upstream Right Bank Excavation			88	6,698	3,766
9	90	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure						
9	91	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Cofferdam			103	38,638	21,728
9	92	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Cofferdam Removal			103	38,638	21,728
9	93	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Dewatering			83	4,029	2,266
9	94	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Excavation To Stockpile			88	6,698	3,766
9	95	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Excavation To Disposal Off Site			88	6,698	3,766
9	96	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Tremie Concrete			83	4,029	2,266
9	97	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Gravel			88	6,698	3,766
9	98	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Concrete			83	4,029	2,266
9	99	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Reinforcing Steel			83	4,029	2,266
9	100	GROUP 4	Fresno Slough Dam	Stage 1 - Dam Spillway Structure	Guardrail			83	4,029	2,266
9	101	GROUP 4	Fresno Slough Dam	Radial Gates (Spillway Structure)						
9	102	GROUP 4	Fresno Slough Dam	Radial Gates (Spillway Structure)	Radial Gates			83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	103	GROUP 4	Fresno Slough Dam	Radial Gates (Spillway Structure)	Motor Operated Hoist W/Wire Ropes			83	4,029	2,266
9	104	GROUP 4	Fresno Slough Dam	Radial Gates (Spillway Structure)	Embedded Metal (Stainless Steel)			83	4,029	2,266
9	105	GROUP 4	Fresno Slough Dam	Radial Gates (Spillway Structure)	Railing			83	4,029	2,266
9	106	GROUP 4	Fresno Slough Dam	Radial Gates (Spillway Structure)	Riprap			83	4,029	2,266
9	107	GROUP 4	Fresno Slough Dam	Radial Gates (Spillway Structure)	Stoplog			83	4,029	2,266
9	108	GROUP 4	Fresno Slough Dam	Radial Gates (Spillway Structure)	Water Velocity & Flow Measuring System			81	3,070	1,727
9	109	GROUP 4	Fresno Slough Dam	Radial Gates (Spillway Structure)	Propane Tank & Enclosure			80	2,963	1,666
9	110	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left						
9	111	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Cofferdam			103	38,638	21,728
9	112	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Cofferdam Removal			103	38,638	21,728
9	113	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Dewatering			83	4,029	2,266
9	114	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Excavation To Stockpile			88	6,698	3,766
9	115	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Excavation To Disposal Off Site			88	6,698	3,766
9	116	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Tremie Concrete			83	4,029	2,266
9	117	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Gravel			88	6,698	3,766
9	118	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Compacted Embankment - From Stockpile			88	6,698	3,766
9	119	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Compacted Embankment - Core Material			88	6,698	3,766
9	120	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Geotextile Fabric			80	2,963	1,666
9	121	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	9" Bedding			84	4,337	2,439
9	122	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Stone Slope Protection, Type 1			83	4,029	2,266
9	123	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Access Road (4" AC / 6" AB, 24' Wide)			88	6,698	3,766
9	124	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Chain Link Fence W/Barbed Wire			80	2,963	1,666
9	125	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Pipe Handrail			83	4,029	2,266
9	126	GROUP 4	Fresno Slough Dam	Stage 2 - Earthen Embankment Left	Automatic Entrance Gate			81	3,070	1,727

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	127	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right						
9	128	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Cofferdam			103	38,638	21,728
9	129	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Cofferdam Removal			103	38,638	21,728
9	130	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Dewatering			83	4,029	2,266
9	131	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Excavation To Stockpile			88	6,698	3,766
9	132	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Excavation To Disposal Off Site			88	6,698	3,766
9	133	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Tremie Concrete			83	4,029	2,266
9	134	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Gravel			88	6,698	3,766
9	135	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Compacted Embankment - From Stockpile			88	6,698	3,766
9	136	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Compacted Embankment - Imported			88	6,698	3,766
9	137	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Compacted Embankment - Core Material			88	6,698	3,766
9	138	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Geotextile Fabric			80	2,963	1,666
9	139	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	9" Bedding			84	4,337	2,439
9	140	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Stone Slope Protection, Type 1			83	4,029	2,266
9	141	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Access Road (4" AC / 6" AB, 24' Wide)			88	6,698	3,766
9	142	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Chain Link Fence W/Barbed Wire			80	2,963	1,666
9	143	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Pipe Handrail			83	4,029	2,266
9	144	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Automatic Entrance Gate			81	3,070	1,727
9	145	GROUP 4	Fresno Slough Dam	Stage 3 - Earthen Embankment Right	Mobilization			80	2,963	1,666
9	172	GROUP 5	Fresno Slough Dam							
9	173	GROUP 5	Fresno Slough Dam	SJR Control Structure						
9	174	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment					
9	175	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Clearing & Grubbing		87	6,126	3,445

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	176	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Cofferdam		103	38,638	21,728
9	177	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Cofferdam Removal		103	38,638	21,728
9	178	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
9	179	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Dewatering		83	4,029	2,266
9	180	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Excavation To Stockpile		88	6,698	3,766
9	181	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Excavation To Disposal Off Site		88	6,698	3,766
9	182	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control & 1/2 Connection Embankment	Gravel Base		88	6,698	3,766
9	183	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure					
9	184	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	12" Square Concrete Piles		103	38,638	21,728
9	185	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Concrete		83	4,029	2,266
9	186	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Reinforcing Steel		83	4,029	2,266
9	187	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Carbon/Galvanized Steel		83	4,029	2,266
9	188	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Stainless Steel		83	4,029	2,266
9	189	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Pipe Handrail		83	4,029	2,266
9	190	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Structure	Guardrail		83	4,029	2,266
9	191	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates					
9	192	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Tainter Gate Steel		83	4,029	2,266
9	193	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Motor Operated Hoist W/Wire Ropes		83	4,029	2,266
9	194	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trash Rack - Miscellaneous Steel		83	4,029	2,266
9	195	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trash Rack - Stainless Steel		83	4,029	2,266
9	196	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trash Rack - Nelson Studs		83	4,029	2,266
9	197	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trashrake Units		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	198	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Trashrake - Structure Support Steel		83	4,029	2,266
9	199	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - SJR Control Radial Gates	Rock Slope Protection		83	4,029	2,266
9	200	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment					
9	201	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Compacted Embankment - From Stockpile		88	6,698	3,766
9	202	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Compacted Embankment - Core Material		88	6,698	3,766
9	203	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Geotextile Fabric		80	2,963	1,666
9	204	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	9" Bedding		84	4,337	2,439
9	205	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Stone Slope Protection, Type 1		83	4,029	2,266
9	206	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
9	207	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Chain Link Fence W/Barbed Wire		80	2,963	1,666
9	208	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 1 - 1/2 Connection Embankment	Automatic Entrance Gate		81	3,070	1,727
9	209	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment					
9	210	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Compacted Embankment From Stockpile		88	6,698	3,766
9	211	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Compacted Embankment - Core Material		88	6,698	3,766
9	212	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Geotextile Fabric		80	2,963	1,666
9	213	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	9" Bedding		84	4,337	2,439
9	214	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Stone Slope Protection, Type 1		83	4,029	2,266
9	215	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
9	216	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Chain Link Fence W/Barbed Wire		80	2,963	1,666
9	217	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Automatic Entrance Gate		81	3,070	1,727
9	218	GROUP 5	Fresno Slough Dam	SJR Control Structure	Stage 2 - Wing Embankment	Mobilization		80	2,963	1,666

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	219	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation					
9	220	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Clearing & Grubbing		87	6,126	3,445
9	221	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Cofferdam		103	38,638	21,728
9	222	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Cofferdam Removal		103	38,638	21,728
9	223	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
9	224	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Dewatering		83	4,029	2,266
9	225	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Excavation To Stockpile		88	6,698	3,766
9	226	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Excavation To Disposal Off Site		88	6,698	3,766
9	227	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder Preparation	Gravel Base		88	6,698	3,766
9	229	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Concrete		83	4,029	2,266
9	230	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Reinforcing Steel		83	4,029	2,266
9	231	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Grating		83	4,029	2,266
9	232	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate		83	4,029	2,266
9	233	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Adjustable Steel Slot Weir		83	4,029	2,266
9	234	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate for Pipe Diversion		83	4,029	2,266
9	235	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Compression Gate for Supplim. Flow Pipe		83	4,029	2,266
9	236	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Fish Screen		83	4,029	2,266
9	237	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Trash Rack		83	4,029	2,266
9	238	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Automated Trash Rack Screen Cleaner		83	4,029	2,266
9	239	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Steel Slide Gate Operator Control		81	3,070	1,727
9	240	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	60" Steel Pipe		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	241	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	84" Steel Pipe		83	4,029	2,266
9	242	GROUP 5	Fresno Slough Dam	SJR Control Structure	Fish Ladder & Supplemental Intake Structure	Mobilization		80	2,963	1,666
9	243	GROUP 6	Fresno Slough Dam							
9	244	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen						
9	245	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork					
9	246	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Clearing & Grubbing		87	6,126	3,445
9	247	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Cofferdam		103	38,638	21,728
9	248	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Cofferdam Removal		103	38,638	21,728
9	249	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
9	250	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Dewatering		83	4,029	2,266
9	251	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Excavation To Stockpile		88	6,698	3,766
9	252	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Excavation To Disposal Off Site		88	6,698	3,766
9	253	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Earthwork	Gravel Base		88	6,698	3,766
9	254	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure					
9	255	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Concrete		83	4,029	2,266
9	256	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Reinforcing Steel		83	4,029	2,266
9	257	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Miscellaneous Metals		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	258	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Steel Members		83	4,029	2,266
9	259	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Fish Screen		83	4,029	2,266
9	260	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Adjustable Baffles		83	4,029	2,266
9	261	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Automated Screen Brush Cleaners		83	4,029	2,266
9	262	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Scour Protection		83	4,029	2,266
9	263	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Structure	Electric Winches For Vertical Slide Gates		83	4,029	2,266
9	264	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen					
9	265	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Compacted Embankment - From Stockpile		88	6,698	3,766
9	266	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Compacted Embankment - Core Material		88	6,698	3,766
9	267	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Geotextile Fabric		80	2,963	1,666
9	268	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	9" Bedding		84	4,337	2,439
9	269	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Stone Slope Protection, Type 1		83	4,029	2,266
9	270	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
9	271	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Chain Link Fence W/Barbed Wire		80	2,963	1,666
9	272	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Connection Embankments For Fish Screen	Automatic Entrance Gate		81	3,070	1,727
9	273	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure					
9	274	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	Concrete		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	275	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	Reinforcing Steel		83	4,029	2,266
9	276	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	48" Steel Pipe		83	4,029	2,266
9	277	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Fish Screen Outlet Structure	Mobilization		80	2,963	1,666
9	278	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure					
9	279	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Clearing & Grubbing		87	6,126	3,445
9	280	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Excavation To Stockpile		88	6,698	3,766
9	281	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Excavation To Disposal Off Site		88	6,698	3,766
9	282	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Cut-Off Wall (Sheet Piles)		103	38,638	21,728
9	283	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure					
9	284	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	12" Square Concrete Piles		103	38,638	21,728
9	285	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Concrete		83	4,029	2,266
9	286	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Reinforcing Steel		83	4,029	2,266
9	287	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Carbon/Galvanized Steel		83	4,029	2,266
9	288	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Stainless Steel		83	4,029	2,266
9	289	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Pipe Handrail		83	4,029	2,266
9	290	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Channel Control Structure	Guardrail		83	4,029	2,266
9	291	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates					

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	292	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Tainter Gate Steel		83	4,029	2,266
9	293	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Motor Operated Hoist W/Wire Ropes		83	4,029	2,266
9	294	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trash Rack - Miscellaneous Steel		83	4,029	2,266
9	295	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trash Rack - Stainless Steel		83	4,029	2,266
9	296	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trash Rack - Nelson Suds		83	4,029	2,266
9	297	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trashrake Units		83	4,029	2,266
9	298	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Trashrake - Structural Support Steel		83	4,029	2,266
9	299	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Radial Gates	Rock Slope Protection		83	4,029	2,266
9	300	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments					
9	301	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Compacted Embankment - From Stockpile		88	6,698	3,766
9	302	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Compacted Embankment - Core Material		88	6,698	3,766
9	303	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Access Road (4" AC / 6" AB, 24' Wide)		88	6,698	3,766
9	304	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Chain Link Fence W/Barbed Wire		80	2,963	1,666
9	305	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Automated Entrance Gate		81	3,070	1,727
9	306	GROUP 6	Fresno Slough Dam	Bypass Canal - North & South Options Fish Screen	Bypass Control Embankments	Mobilization		80	2,963	1,666
9	146	GROUP 7	Fresno Slough Dam							
9	147	GROUP 7	Fresno Slough Dam	Channel Excavation						
9	148	GROUP 7	Fresno Slough Dam	Channel Excavation	Excavation (Bulldozer)			88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	149	GROUP 7	Fresno Slough Dam	Channel Excavation	Excavation & Haul Material By Truck (<20 Miles)			88	6,698	3,766
9	150	GROUP 7	Fresno Slough Dam	Channel Excavation	Mobilization			80	2,963	1,666
9	151	GROUP 8	Fresno Slough Dam							
9	152	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined						
9	153	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General					
9	154	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Clearing & Grubbing		87	6,126	3,445
9	155	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Water For Dust Abatement		79	2,376	1,336
9	156	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	SWPPP		75	1,581	889
9	157	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Worker Protection		82	3,529	1,984
9	158	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Bridge (30'x165')		83	4,029	2,266
9	159	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	General	Bridge Appurtenances		83	4,029	2,266
9	160	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation					
9	161	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation	Course Canal Excavation (Loader & Dozer)		88	6,698	3,766
9	162	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation	Haul Off Site (<20 Miles, Main Canal)		88	6,698	3,766
9	163	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation	Concrete Liner @ 6" Thick		84	4,462	2,509
9	164	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Canal Excavation	Riprap Approach (25' x bottom Canal Width)		83	4,029	2,266
9	165	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)					
9	166	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Compacted Embankment		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	167	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Inspection Trench (20% Of Levee Length)		88	6,698	3,766
9	168	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Seeding (Levee Slopes)		88	6,698	3,766
9	169	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Ramps & Turnabouts		88	6,698	3,766
9	170	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Levee Aggregate Base Roadway		88	6,698	3,766
9	171	GROUP 8	Fresno Slough Dam	San Joaquin River Bypass Canal South Option Lined	Levee Construction (Left & Right)	Mobilization		80	2,963	1,666
9	471	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits							
9	472	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)						
9	473	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)	Grade Control Structure Cost (Single Structure)					
9	474	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)	Grade Control Structure Cost (Single Structure)	Clearing & Grubbing		87	6,126	3,445
9	475	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)	Grade Control Structure Cost (Single Structure)	Onsite Earthwork For Anchor Systems (Remove & Recompact)		84	4,462	2,509
9	477	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)	Grade Control Structure Cost (Single Structure)	Deliver Materials (CMI Atlanta GA, 1 Truck)		76	1,774	998
9	478	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)	Grade Control Structure Cost (Single Structure)	Construct Driving Guide & Use As Wales		83	4,029	2,266
9	479	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)	Grade Control Structure Cost (Single Structure)	Sheet Pile Installation (Single Sheet 20'x420')		103	38,638	21,728
9	480	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)	Grade Control Structure Cost (Single Structure)	Caps For Tops (20' Lengths Material & Labor)		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	481	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)	Grade Control Structure Cost (Single Structure)	Anchor Support System (Pilings, Cable, Wales, Etc)		83	4,029	2,266
9	482	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 1)	Grade Control Structure Cost (Single Structure)	Dust Control		79	2,376	1,336
9	483	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)						
9	484	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)	Grade Control Structure Cost (Single Structure)					
9	485	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)	Grade Control Structure Cost (Single Structure)	Clearing & Grubbing		87	6,126	3,445
9	486	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)	Grade Control Structure Cost (Single Structure)	Onsite Earthwork For Anchor Systems (Remove & Recompact)		84	4,462	2,509
9	488	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)	Grade Control Structure Cost (Single Structure)	Deliver Materials (CMI Atlanta GA, 2 Trucks)		76	1,774	998
9	489	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)	Grade Control Structure Cost (Single Structure)	Construct Driving Guide & Use As Wales		83	4,029	2,266
9	490	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)	Grade Control Structure Cost (Single Structure)	Sheet Pile Installation (Single Sheet 20'x420')		103	38,638	21,728
9	491	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)	Grade Control Structure Cost (Single Structure)	Caps For Tops (20' Lengths Material & Labor)		83	4,029	2,266
9	492	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)	Grade Control Structure Cost (Single Structure)	Anchor Support System (Pilings, Cable, Wales, Etc)		83	4,029	2,266
9	493	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Drop Structure (Weir 2)	Grade Control Structure Cost (Single Structure)	Dust Control		79	2,376	1,336

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	494	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Bank Revetment						
9	495	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Bank Revetment	Riprap - Labor			83	4,029	2,266
9	497	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Temporary Bypass Channel						
9	498	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Temporary Bypass Channel	Coffer Dam			103	38,638	21,728
9	499	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Temporary Bypass Channel	Dewatering (Upstream & Downstream)			83	4,029	2,266
9	500	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Temporary Bypass Channel	Channel Excavation (Bypass)			88	6,698	3,766
9	501	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Other Costs						
9	502	GROUP 9	MPBC Initial Alternative 3 FSD Mendota Dam Retrofits	Other Costs	Mobilization			80	2,963	1,666
9	63	GROUP 10	Relocation/Modifications							
9	64	GROUP 10	Relocation/Modifications	Canal						
9	65	GROUP 10	Relocation/Modifications	Canal	Canal Relocations			88	6,698	3,766
9	66	GROUP 10	Relocation/Modifications	Canal	Mobilization			80	2,963	1,666
9	67	GROUP 10	Relocation/Modifications	Utilities						
9	68	GROUP 10	Relocation/Modifications	Utilities	Overhead Electrical Distribution Removal & Replacement			83	4,029	2,266
9	69	GROUP 10	Relocation/Modifications	Utilities	Mobilization			80	2,963	1,666
9	70	GROUP 10	Relocation/Modifications	Utilities						

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	71	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)						
9	72	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction					
9	73	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Clearing & Grubbing		87	6,126	3,445
9	74	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Earthwork (Using Loader & Truck)		88	6,698	3,766
9	75	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Revegetation		88	6,698	3,766
9	76	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Pull Pump & Column & Reinstall After Modifications		83	4,029	2,266
9	77	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Column Extension		83	4,029	2,266
9	78	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Casing Extension		83	4,029	2,266
9	79	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Discharge Piping Modifications		83	4,029	2,266
9	80	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Replace Electrical Panel		81	3,070	1,727
9	81	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	PG&E Electrical Service		81	3,070	1,727
9	82	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Dust Control		79	2,376	1,336

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	83	GROUP 10	Relocation/Modifications	Groundwater Well Floodproofing (Quantities Reflect 2 Each Locations)	Site Preparation & Construction	Mobilization		80	2,963	1,666
9	307	GROUP 11	Fresno Slough Dam							
9	308	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1						
9	309	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station					
9	310	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Clearing & Grubbing		87	6,126	3,445
9	311	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Site Excavation		88	6,698	3,766
9	312	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Excavate Ditch To Connect Pump Inlet To River Thalweg		88	6,698	3,766
9	313	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Structure Backfill		88	6,698	3,766
9	314	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Structure Concrete		83	4,029	2,266
9	315	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Pumps & Motors (50HP)		83	4,029	2,266
9	316	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	36" Pump Discharge Assemblies		80	2,963	1,666
9	317	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Trashracks		83	4,029	2,266
9	318	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Miscellaneous Metals		83	4,029	2,266
9	319	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Flow Meter In Each Discharge Pipe		81	3,070	1,727
9	320	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Coffer Dam		103	38,638	21,728
9	321	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Dewatering Within Coffer Dam		83	4,029	2,266
9	322	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Dust Control		79	2,376	1,336
9	323	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	SWPPP		75	1,581	889
9	324	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Mendota Pool Pump Station	Worker Protection		82	3,529	1,984
9	325	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)					
9	326	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Clearing & Grubbing		87	6,126	3,445
9	327	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Site Excavation		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	328	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Loader/Excavator & Truck For Material (Compact Volume +20%)		88	6,698	3,766
9	329	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Haul Truck (<20 Miles Transport (Compacted Volume +20%)		88	6,698	3,766
9	330	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Earthwork Fill (Compacted)		88	6,698	3,766
9	331	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Structure Concrete (Headwall)		83	4,029	2,266
9	332	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Transition Structure Concrete		83	4,029	2,266
9	333	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Purchasing & Hauling Gravel For Roadway, 100 LB/CF		86	5,617	3,159
9	334	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Gravel Placement For Road At 6" Thick		88	6,698	3,766
9	335	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Dust Control		79	2,376	1,336
9	336	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	SWPPP		75	1,581	889
9	337	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Earthen Canal (Columbia Canal Feeder)	Worker Protection		82	3,529	1,984
9	338	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon					
9	339	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Clearing & Grubbing		87	6,126	3,445
9	340	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Excavate & Fill Bore Pit (30' x 30' x 22' Deep)		83	4,029	2,266
9	341	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Bore & Jack 114" Steel Carrier Pipe		86	5,460	3,070
9	342	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Reinforced Concrete Pipe (RCP, Pipe, 84", D-25)		83	4,029	2,266
9	343	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Reinforced Concrete Pipe (RCP, Bends, 84", D-25)		83	4,029	2,266
9	344	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Pressure Grout Annular Space		82	3,619	2,035
9	345	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Excavate & Fill Receiving Pit (30' x 30' x 22' Deep)		83	4,029	2,266
9	346	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Structure Excavation (Inlet Structure)		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	347	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Structure Backfill		88	6,698	3,766
9	348	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Structure Concrete (Inlet Structure)		83	4,029	2,266
9	349	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Dust Control		79	2,376	1,336
9	350	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	SWPPP		75	1,581	889
9	351	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Siphon	Worker Protection		82	3,529	1,984
9	352	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station					
9	353	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Clearing & Grubbing		87	6,126	3,445
9	354	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Structure Excavation		88	6,698	3,766
9	355	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Structure Backfill		88	6,698	3,766
9	356	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Structure Concrete		83	4,029	2,266
9	357	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Pumps & Motors (75HP)		83	4,029	2,266
9	358	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	54" Pump Discharge Assemblies		80	2,963	1,666
9	359	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	72" Steel Pipe		84	4,462	2,509
9	360	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Trashrack		83	4,029	2,266
9	361	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Miscellaneous Metals		83	4,029	2,266
9	362	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Coffer Dam		103	38,638	21,728
9	363	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Dewatering Within Coffer Dam		83	4,029	2,266
9	364	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Dust Control		79	2,376	1,336
9	365	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	SWPPP		75	1,581	889
9	366	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Columbia Canal Pump Station	Worker Protection		82	3,529	1,984
9	367	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal					
9	368	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Clearing & Grubbing		87	6,126	3,445
9	369	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Structure Concrete (West Check Structure & Headwall)		83	4,029	2,266
9	370	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Riprap, Facing Class Purchase, 100 LB/CF, 2' Deep		83	4,029	2,266

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	371	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Remove Old Pump Structure & Flume		83	4,029	2,266
9	372	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Onsite Excavation		88	6,698	3,766
9	373	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Loader/Excavator & Truck For Material (Compact Volume +20%)		88	6,698	3,766
9	374	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Haul Truck (<20 Miles Transport (Compacted Volume +20%)		88	6,698	3,766
9	375	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Raising Canal 5' - 2,700', 1.5 Side Slopes, 4' Bottom, 12' Roadways		88	6,698	3,766
9	376	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Canal Lining At 6" Thick		83	4,029	2,266
9	377	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Purchasing & Hauling Gravel For Roadway, 100 LB/CF		86	5,617	3,159
9	378	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Gravel Placement For Road At 6" Thick, 2,700' On Both Banks		88	6,698	3,766
9	379	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Structure Concrete (East Check Structure)		83	4,029	2,266
9	380	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Dust Control		79	2,376	1,336
9	381	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	SWPPP		75	1,581	889
9	382	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Worker Protection		82	3,529	1,984
9	383	GROUP 11	Fresno Slough Dam	Columbia Canal Siphon FP-1	Raising Columbia Canal	Mobilization		80	2,963	1,666
9	384	GROUP 12	Fresno Slough Dam							
9	385	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations						
9	386	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment					
9	387	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Clearing & Grubbing		87	6,126	3,445
9	388	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Demolish Existing Headworks		87	6,126	3,445
9	389	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Onsite Excavation		88	6,698	3,766
9	390	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Earthwork Fill (Compacted)		88	6,698	3,766
9	391	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Concrete Canal Lining (6" Thickness)		83	4,029	2,266
9	392	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Buy & Haul Gravel For Roadway, 100 LB/CF		88	6,698	3,766

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	393	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Gravel Placement For Road At 6" Thick		88	6,698	3,766
9	394	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Riprap, Facing Class Purchase, 100 LB/CF, 2' Deep		83	4,029	2,266
9	395	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Place Riprap		83	4,029	2,266
9	396	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Dust Control		79	2,376	1,336
9	397	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	SWPPP		75	1,581	889
9	398	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Main Canal Realignment	Worker Protection		82	3,529	1,984
9	399	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment					
9	400	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Clearing & Grubbing		87	6,126	3,445
9	401	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Demolish Existing Headworks		87	6,126	3,445
9	402	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Onsite Excavation		88	6,698	3,766
9	403	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Loader/Excavator & Truck For Material (Compacted Vol + 20%)		88	6,698	3,766
9	404	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Haul Truck (<20 Miles Transport, Compacted Vol + 20%)		88	6,698	3,766
9	405	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Earthwork Fill (Compacted)		88	6,698	3,766
9	406	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Concrete Canal Lining (6" Thickness)		83	4,029	2,266
9	407	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Buy & Haul Gravel For Roadway, 100 LB/CF		88	6,698	3,766
9	408	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Gravel Placement For Road At 6" Thick		88	6,698	3,766
9	409	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Riprap, Facing Class Purchase, 100 LB/CF, 2' Deep		83	4,029	2,266
9	410	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Place Riprap		83	4,029	2,266
9	411	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Dust Control		79	2,376	1,336
9	412	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	SWPPP		75	1,581	889
9	413	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Helm's Ditch Realignment	Worker Protection		82	3,529	1,984
9	414	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure					
9	415	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Drive & Remove 1 Row Temp Sheet Piling To Isolate Inlet		103	38,638	21,728

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	416	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Dewater Behind Sheet Piling		83	4,029	2,266
9	417	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Furnish & Install 1 Row Permanent Sheet Piling For Cut-Off Wall		103	38,638	21,728
9	418	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Structure Concrete		83	4,029	2,266
9	419	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Furnish & Install 15' Wide x 15' Tall Radial Gates		83	4,029	2,266
9	420	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Furnish & Install 3 Wire Rope Hoists For Radial Gates		83	4,029	2,266
9	421	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	48" Concrete Pipeline		83	4,029	2,266
9	422	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Concrete Junction Box With Slide Gate		80	2,963	1,666
9	423	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Excavation For North Headworks Structure		88	6,698	3,766
9	424	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Backfill Around North Headworks Structure		88	6,698	3,766
9	425	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Onsite Electrical/Telemetry		81	3,070	1,727
9	426	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Miscellaneous Metals		83	4,029	2,266
9	427	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Dust Control		79	2,376	1,336
9	428	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	SWPPP		75	1,581	889
9	429	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Control Structure	Worker Protection		82	3,529	1,984
9	430	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Bridge Over Realigned Main Canal					
9	431	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Bridge Over Realigned Main Canal	120' x 30' Bridge Structure (Pilings, Abutments, Excavation, Backfill, Stem,		83	4,029	2,266
9	433	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Bridge Over Realigned Main Canal	Modify Mendota Potable Water Pipeline To Cross Bridge		83	4,029	2,266
9	434	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Bridge Over Realigned Main Canal	Dust Control		79	2,376	1,336
9	435	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Bridge Over Realigned Main Canal	SWPPP		75	1,581	889
9	436	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Bridge Over Realigned Main Canal	Worker Protection		82	3,529	1,984
9	437	GROUP 12	Fresno Slough Dam	Main Canal & Helm Ditch Relocations	Bridge Over Realigned Main Canal	Mobilization		80	2,963	1,666
9	438	GROUP 13	Relocations SJR Bypass Canal South Option							

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	439	GROUP 13	Relocations SJR Bypass Canal South Option	Canal						
9	440	GROUP 13	Relocations SJR Bypass Canal South Option	Canal	Canal Relocations			88	6,698	3,766
9	441	GROUP 13	Relocations SJR Bypass Canal South Option	Canal	Mobilization			80	2,963	1,666
9	442	GROUP 13	Relocations SJR Bypass Canal South Option	Utilities						
9	443	GROUP 13	Relocations SJR Bypass Canal South Option	Utilities	Overhead Electrical Distribution Removal & Replacement			83	4,029	2,266
9	444	GROUP 13	Relocations SJR Bypass Canal South Option	Utilities	Mobilization			80	2,963	1,666
9	445	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station						
9	446	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)					
9	447	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing		87	6,126	3,445
9	448	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Canal/Drain Relocation		88	6,698	3,766
9	449	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Concrete Lining (Intake & Outfall)		83	4,029	2,266
9	450	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Rock Riprap At Outfall		83	4,029	2,266
9	451	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Pump & Sump Relocation		83	4,029	2,266
9	452	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel		81	3,070	1,727

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	453	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service		81	3,070	1,727
9	454	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	12" Steel Pipe		83	4,029	2,266
9	455	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Dust Control		79	2,376	1,336
9	456	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Worker Protection		82	3,529	1,984
9	457	GROUP 13	Relocations SJR Bypass Canal South Option	Pump Station	General Pump Station Site Preparation & Construction (2 Each Locations)	Mobilization		80	2,963	1,666
9	458	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing						
9	459	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)					
9	460	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Clearing & Grubbing		87	6,126	3,445
9	461	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Earthwork (Loader & Truck)		88	6,698	3,766
9	462	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Revegetation		88	6,698	3,766
9	463	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Pull Pump & Column and Reinstall After Modifications		83	4,029	2,266
9	464	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Column Extension		83	4,029	2,266
9	465	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Casing Extension		83	4,029	2,266
9	466	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Discharge Pipe Modifications		83	4,029	2,266
9	467	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Replace Electrical Panel		81	3,070	1,727

Schedule Name	Item	Group	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Total Adjusted SPL (dBA) @ 50 feet	Distance to 45 dBA SPL Contour (feet)	Distance to 50 dBA SPL Contour (feet)
9	468	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	PG&E Electrical Service		81	3,070	1,727
9	469	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Dust Control		79	2,376	1,336
9	470	GROUP 13	Relocations SJR Bypass Canal South Option	Deep Well Floodproofing	Site Preparation & Construction (2 Each Locations)	Mobilization		80	2,963	1,666
9	38	GROUP 14	Vegetation & Irrigation							
9	39	GROUP 14	Vegetation & Irrigation	General Description						
9	40	GROUP 14	Vegetation & Irrigation	General Description	Plant Establishment (12 Months)			81	3,070	1,727
9	41	GROUP 14	Vegetation & Irrigation	General Description	Landscape Maintenance (12 Months Or As Needed)			81	3,070	1,727
9	42	GROUP 14	Vegetation & Irrigation	General Description	Agricultural Topsoil (6" Layer)			88	6,698	3,766
9	43	GROUP 14	Vegetation & Irrigation	General Description	Erosion Control Fabric			80	2,963	1,666
9	44	GROUP 14	Vegetation & Irrigation	General Description	Irrigation System			81	3,070	1,727
9	45	GROUP 14	Vegetation & Irrigation	General Description	Beaver Fence			80	2,963	1,666
9	46	GROUP 14	Vegetation & Irrigation	General Description	Seeding			88	6,698	3,766
9	47	GROUP 14	Vegetation & Irrigation	General Description	Pole Cuttings			80	2,963	1,666
9	48	GROUP 14	Vegetation & Irrigation	General Description	Fascine Bundle			80	2,963	1,666
9	49	GROUP 14	Vegetation & Irrigation	General Description	Instream Woody Material			80	2,963	1,666
9	54	GROUP 14	Vegetation & Irrigation	General Description	Treepot Installation DP - Cmb			81	3,070	1,727
9	55	GROUP 14	Vegetation & Irrigation	General Description	Treepot Installation DP - Crg			81	3,070	1,727
9	56	GROUP 14	Vegetation & Irrigation	General Description	Treepot Installation DP - Rbh			81	3,070	1,727
9	57	GROUP 14	Vegetation & Irrigation	General Description	Treepot Installation DP - Sgf			81	3,070	1,727
9	60	GROUP 14	Vegetation & Irrigation	General Description	Treepot Installation D6 - Swt			81	3,070	1,727
9	61	GROUP 14	Vegetation & Irrigation	General Description	Treepot Installation D6 - Bwt			81	3,070	1,727
9	62	GROUP 14	Vegetation & Irrigation	General Description	Mobilization			80	2,963	1,666