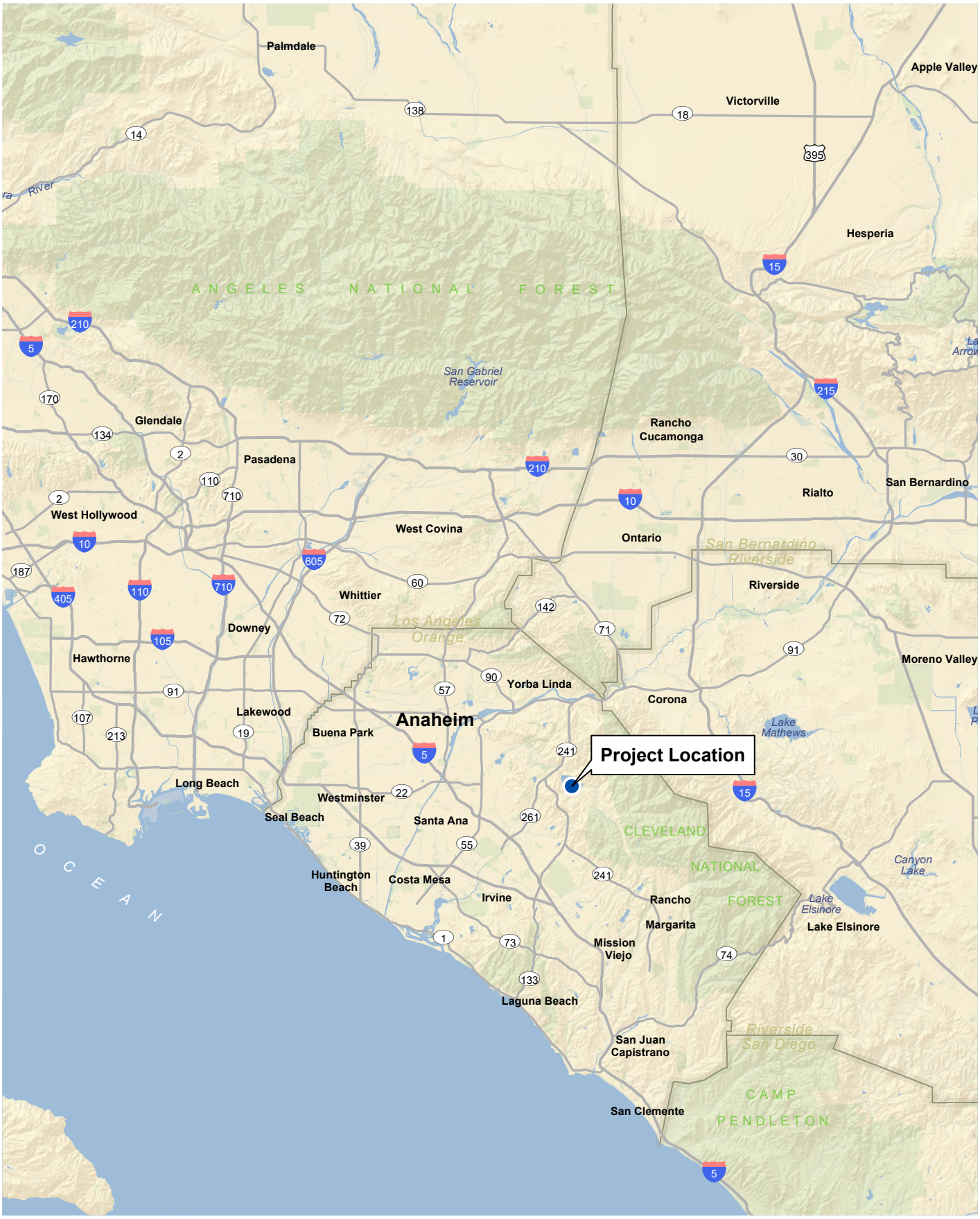


Regional Location

Exhibit 1-1

Santiago Creek Dam Improvements Project

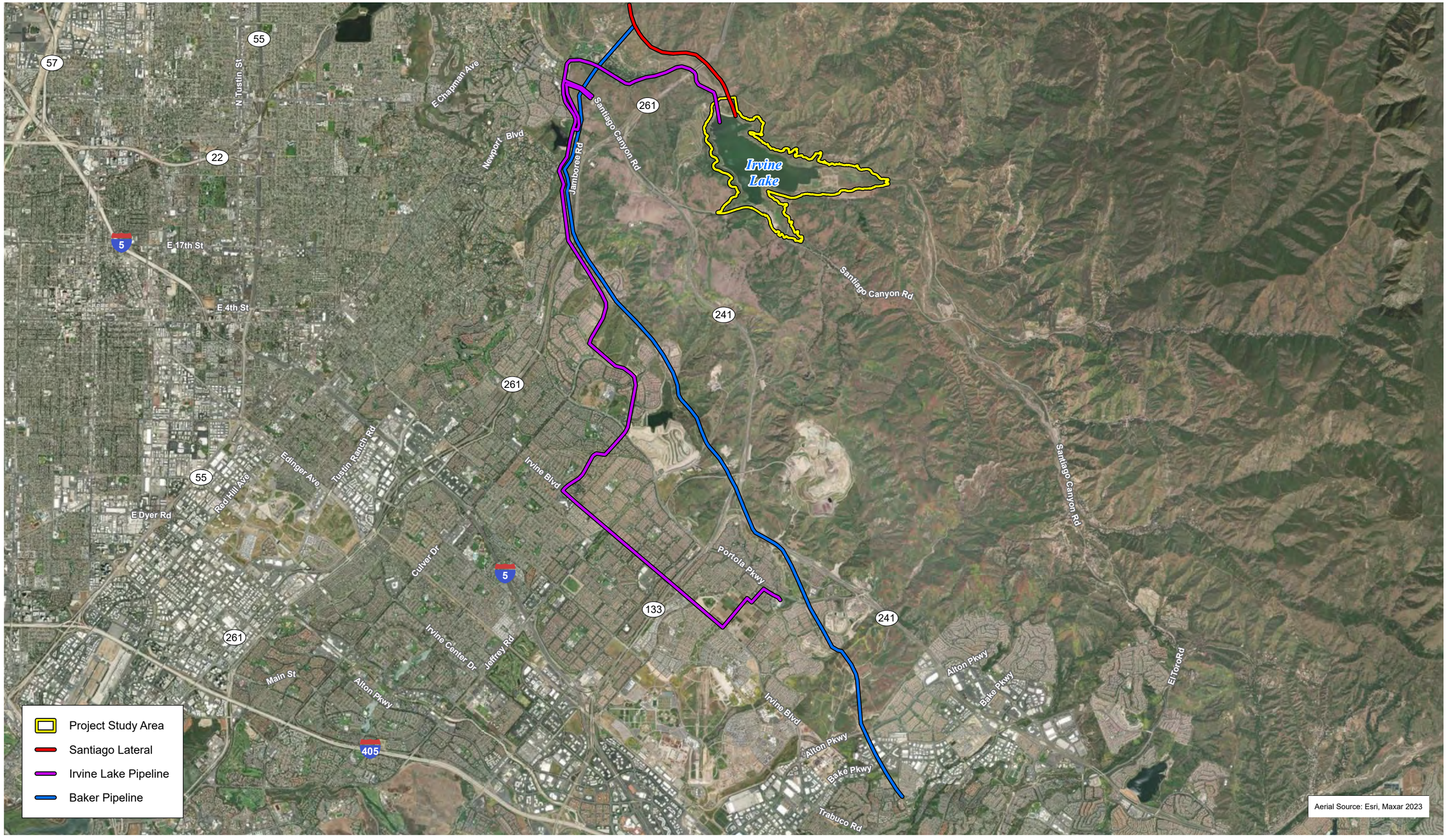
N W E S

0 5 10 Miles

PSOMAS

(Rev: 11-14-2024 JVR) R:\Projects\IRW_IRWD\3IRW001101\Graphics\EIR\ex_RL.pdf

D:\Projects\3IRW\SantiagoCreek\PRO\SCD\SCD_Project.aprx\ex_RL



Aerial Photograph

Exhibit 1-2

Santiago Creek Dam Improvements Project

N W E S

0 0.6 1.2 Miles

PSOMAS

(Rev: 11/27/2024 JVR) R:\Projects\IRW_IRWD\3IRW001101\Graphics\EIR\ex_Aerial.pdf

D:\Projects\3IRW\SantiagoCreek\PROJSCD\SCD_Project.aprx\ex_Aerial_11x17L

ATTACHMENT B

NOISE CALCULATIONS

						Receptor 1 - Irvine Regional Park					Receptor 2 - Residences Along Jamboree Road			Receptor 3 - Oak Canyon Park			Receptor 4 - Lakeview Park Camping Area			Receptor 5 - Sensitive Bird Species South of Dam			Receptor 6 - Sensitive Bird Species North of the Dam			Receptor 7 - Sensitive Bird Species Near Primary Staging Area		
Phase Name	Number per Day	Equipment Type	Typical Noise Level 50 ft from Source, dBA	Noise Level 50 ft Multiple Equipment, dBA	Construction Phase Noise Level, dBA	Hard/Soft	Distance	Utilization	Noise Level with Utilization	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level
Part 1 Site Demolition (Excludes Spillway)	1	Excavators	85	85	82	0.00	5070.00	0.40	81	42	0.00	9785.00	36	0.00	9035.00	42	0.00	7640.00	39	0.00	640.00	60	0.00	320.00	66	0.00	8300.00	38
Part 1 Site Demolition (Excludes Spillway)	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Part 2 Site Demolition (Excludes Spillway)	1	Excavators	85	85	82	0.00	5070.00	0.40	81	42	0.00	9785.00	36	0.00	9035.00	42	0.00	7640.00	39	0.00	360.00	65	0.00	590.00	61	0.00	8300.00	38
Part 2 Site Demolition (Excludes Spillway)	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Spillway Demolition: Existing Spillway Demo	3	Air Compressors	80	85	95	0.00	5070.00	0.40	81	55	0.00	9785.00	49	0.00	9035.00	50	0.00	7640.00	51	0.00	200.00	83	0.00	710.00	72	0.00	8300.00	50
Spillway Demolition: Existing Spillway Demo	4	Concrete/Industrial Saws	90	96				0.20	89																			
Spillway Demolition: Existing Spillway Demo	1	Cranes	88	88				0.16	80																			
Spillway Demolition: Existing Spillway Demo	2	Crushing/Proc. Equipment	89	92				1.00	92																			
Spillway Demolition: Existing Spillway Demo	2	Excavators	85	88				0.40	84																			
Spillway Demolition: Existing Spillway Demo	1	Off-Highway Trucks	84	84				0.40	80																			
Spillway Demolition: Existing Spillway Demo	1	Welders	73	73				0.40	69																			
Spillway Demolition: Crush Concrete Demo	1	Crushing/Proc. Equipment	89	89	91	0.00	5070.00	1.00	89	51	0.00	9785.00	45	0.00	9035.00	46	0.00	7640.00	47	0.00	770.00	67	0.00	240.00	77	0.00	8300.00	46
Spillway Demolition: Crush Concrete Demo	1	Excavators	85	85				0.40	81																			
Spillway Demolition: Crush Concrete Demo	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Spillway Demolition: Crush Concrete Demo	2	Off-Highway Trucks	84	87				0.40	83																			
Spillway Demolition: Bridge Pier and Facing Demo	3	Air Compressors	80	85	95	0.00	5070.00	0.40	81	55	0.00	9785.00	49	0.00	9035.00	50	0.00	7640.00	51	0.00	1100.00	68	0.00	290.00	79	0.00	8300.00	50
Spillway Demolition: Bridge Pier and Facing Demo	4	Concrete/Industrial Saws	90	96				0.20	89																			
Spillway Demolition: Bridge Pier and Facing Demo	1	Cranes	88	88				0.16	80																			
Spillway Demolition: Bridge Pier and Facing Demo	2	Crushing/Proc. Equipment	89	92				1.00	92																			
Spillway Demolition: Bridge Pier and Facing Demo	2	Excavators	85	88				0.40	84																			
Spillway Demolition: Bridge Pier and Facing Demo	1	Off-Highway Trucks	84	84				0.40	80																			
Spillway Demolition: Bridge Pier and Facing Demo	1	Welders	73	73				0.40	69																			
Temporary Flood Control Berm	1	Excavators	85	85	88	0.00	5070.00	0.40	81	48	0.00	9785.00	42	0.00	9035.00	43	0.00	7640.00	44	0.00	390.00	70	0.00	1220.00	60	0.00	8300.00	44
Temporary Flood Control Berm	4	Off-Highway Trucks	84	90				0.40	86																			
Temporary Flood Control Berm	1	Rubber Tired Dozers	85	85				0.20	78																			
Temporary Flood Control Berm	1	Rollers	85	85				0.20	78																			
Mobilization	1	Forklifts	85	85	89	0.00	5070.00	0.20	78	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	660.00	66	0.00	240.00	75	0.00	8300.00	44
Mobilization	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Mobilization	2	Off-Highway Trucks	84	87				0.40	83																			
Mobilization	1	Graders	85	85				0.40	81																			
Mobilization	1	Excavators	85	85				0.40	81																			
Mobilization	2	Skid Steer Loaders	80	83				0.40	79																			
Mobilization	1	Cranes	88	88				0.16	80																			
Demobilization	1	Forklifts	85	85	89	0.00	5070.00	0.20	78	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	660.00	66	0.00	240.00	75	0.00	8300.00	44
Demobilization	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Demobilization	2	Off-Highway Trucks	84	87				0.40	83																			
Demobilization	1	Graders	85	85				0.40	81																			
Demobilization	1	Excavators	85	85				0.40	81																			
Demobilization	2	Skid Steer Loaders	80	83				0.40	79																			
Demobilization	1	Cranes	88	88				0.16	80																			
Cleanup	2	Scrapers	85	88	88	0.00	5070.00	0.40	84	48	0.00	9785.00	42	0.00	9035.00	43	0.00	7640.00	44	0.00	660.00	65	0.00	240.00	74	0.00	8300.00	43
Cleanup	3	Rubber Tired Dozers	85	90				0.20	83																			
Cleanup	1	Graders	85	85				0.40	81																			
Cleanup	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Allowance for Piping Install	1	Excavators	85	85	83	0.00	5070.00	0.40	81	43	0.00	9785.00	37	0.00	9035.00	38	0.00	7640.00	39	0.00	265.00	69	0.00	310.00	67	0.00	8300.00	39
Allowance for Piping Install	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Allowance for Piping Install	1	Skid Steer Loaders	80	80				0.40	76																			
Bypass Pumping Diversion Berm	1	Generator Sets	82	82	79	0.00	5070.00	0.50	79	39	0.00	9785.00	33	0.00	9035.00	34	0.00	7640.00	35	0.00	225.00	66	0.00	1370.00	50	0.00	8300.00	35
Inclined Inlet Structure: Steel Pipe and Appurtenances	1	Rollers	85	85	87	0.00	5070.00	0.20	78	47	0.00	9785.00	41	0.00	9035.00	42	0.00	7640.00	43	0.00	140.00	78	0.00	1210.00	59	0.00	8300.00	42
Inclined Inlet Structure: Steel Pipe and Appurtenances	2	Excavators	85	88				0.40	84																			
Inclined Inlet Structure: Steel Pipe and Appurtenances	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Inclined Inlet Structure: Steel Pipe and Appurtenances	1	Welders	73	73				0.40	69																			
Inclined Inlet Structure: Steel Pipe and Appurtenances	1	Cranes	88	88				0.16	80																			
Inclined Inlet Structure: Reinforced Concrete	2	Surfacing Equipment	76	79	90	0.00	5070.00	0.40	75	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	46	0.00	140.00	81	0.00	1210.00	62	0.00	8300.00	45
Inclined Inlet Structure: Reinforced Concrete	1	Pumps	77	77				0.50	74																			
Inclined Inlet Structure: Reinforced Concrete	2	Cranes	88	91				0.16	83																			
Inclined Inlet Structure: Reinforced Concrete	2	Rough Terrain Forklifts	85	88				0.20	81																			
Inclined Inlet Structure: Reinforced Concrete	2	Generator Sets	82	85				0.50	82																			
Inclined Inlet Structure: Reinforced Concrete	3	Cement and Mortar Mixers	85	90				0.40	86																			
Inclined Inlet Structure: Drilled Foundation Anchors	2	Bore/Drill Rigs	84	87	83	0.00	5070.00	0.20	80	43	0.00	9785.00	37	0.00	9035.00	38	0.00	7640.00	39	0.00	140.00	74	0.00	1210.00	55	0.00	8300.00	39
Inclined Inlet Structure: Drilled Foundation Anchors	1	Skid Steer Loaders	80	80				0.40	76																			
Inclined Inlet Structure: Drilled Foundation Anchors	1	Forklifts	85	85				0.20	78																			
Inclined Inlet Structure: Excavation	1	Excavators	85	85	85	0.00	5070.00	0.40	81	45	0.00	9785.00	39	0.00	9035.00	40	0.00	7640.00	41	0.00	140.00	76	0.00	1210.00	57	0.00	8300.00	41
Inclined Inlet Structure: Excavation	2	Off-Highway Trucks	84	87				0.40	83																			
Inclined Inlet Structure: Stainless Steel Platform	1	Skid Steer Loaders	80	80	83	0.00	5070.00	0.40	76	43	0.00	9785.00	37	0.00	9035.00	38	0.00	7640.00	39	0.00	140.00	74	0.00	1210.00	55	0.00	8300.00	39
Inclined Inlet Structure: Stainless Steel Platform	1	Forklifts	85	85				0.20	78																			
Inclined Inlet Structure: Stainless Steel Platform	1	Cranes	88	88				0.16	80																			
Inclined Inlet Structure: Pneumatic Actuation Control System	1	Skid Steer Loaders	80	80	83	0.00	5070.00	0.40	76	43	0.00	9785.00	37	0.00	9035.00	38	0.00	7640.00	39	0.00	140.00	74	0.00	1210.00	55	0.00	8300.00	39
Inclined Inlet Structure: Pneumatic Actuation Control System	1	Forklifts	85	85				0.20	78																			
Inclined Inlet Structure: Pneumatic Actuation Control System	1	Cranes	88	88				0.16	80																			
Cofferdam Installation and Removal: Install Cofferdam H/King Piles	2	Cranes	88	91	86	0.00	5070.00	0.16	83	46	0.00	9785.00	40	0.00	9035.00	41	0.00	7640.00	42	0.00	470.00	66	0.00	1190.00	58	0.00	8300.00	42
Cofferdam Installation and Removal: Install Cofferdam H/King Piles	1	Rough Terrain Forklifts	85	85				0.20	78																			
Cofferdam Installation and Removal: Install Cofferdam H/King Piles	2	Aerial Lifts	85	88				0.20	81																			
Cofferdam Installation and Removal: Dewatering	2	Generator Sets	82	85	82	0.00	5070.00	0.50	82	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	38	0.00	470.00	63	0.00	1190.00	54	0.00	8300.00	38
Cofferdam Installation and Removal: Remove Cofferdam H/King Piles	2	Cranes	88	91	86	0.00	5070.00	0.16	83	46		9785.00	40	0.00	9035.00	41	0.00	7640.00	42	0.00	470.00	66	0.00	1190.00	58	0.00	8300.00	42
Cofferdam Installation and Removal: Remove Cofferdam H/King Piles	1	Rough Terrain Forklifts	85	85				0.20	78																			
Cofferdam Installation and Removal: Remove Cofferdam H/King Piles	2	Aerial Lifts	85	88				0.20	81																			
Access Road, Crest Ramp, and Existing Crest Widening: Roadway Excavation	1	Graders	85	85	88	0.00	5070.00	0.40	81	48	0.00	9785.00	42	0.00	9035.00	43	0.00	7640.00	44	0.00	250.00	74	0.00	855.00	63	0.00	8300.00	44
Access Road, Crest Ramp, and Existing Crest Widening: Roadway Excavation	3	Scrapers	85	90				0.40	86																			
Access Road, Crest Ramp, and Existing Crest Widening: Roadway Excavation	1	Rubber Tired Dozers	85	85				0.40	81																			
Access Road, Crest Ramp, and Existing Crest Widening: Imported Fill & CMB Surface Course	1	Off-Highway Trucks	84	84	85	0.00	5070.00	0.40	80	45	0.00	9785.00	39	0.00	9035.00	39	0.00	7640.00	41	0.00	250.00	71	0.00	855.00	60	0.00	8300.00	40
Access Road, Crest Ramp, and Existing Crest Widening: Imported Fill & CMB Surface Course	1	Rubber Tired Dozers	85	85				0.40	81																			
Access Road, Crest Ramp, and Existing Crest Widening: Imported Fill & CMB Surface Course	1	Rollers	85	85				0.20	78																			
Access Road, Crest Ramp, and Existing Crest Widening: CMB Surface Course	1	Graders	85	85	84	0.00	5070.00	0.40	81	43	0.00	9785.00	38	0.00	9035.00	38	0.00	7640.00	40	0.00	250.00	70	0.00	855.00	59	0.00	8300.00	39
Access Road, Crest Ramp, and Existing Crest Widening: CMB Surface Course	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Access Road, Crest Ramp, and Existing Crest Widening: CMB Surface Course	1	Rollers	85	85				0.20	78																			
Access Road, Crest Ramp, and Existing Crest Widening: MSE Retaining Wall	1	Excavators	85	85	88	0.00	5070.00	0.40	81	48	0.00	9785.00	42	0.00	9035.00	43	0.00	7640.00	44	0.00	250.00	74	0.00	855.00	63	0.00	8300.00	43
Access Road, Crest Ramp, and Existing Crest Widening: MSE Retaining Wall	2	Off-Highway Trucks	84	87				0.40	83																			
Access Road, Crest Ramp, and Existing Crest Widening: MSE Retaining Wall	1	Rubber Tired Dozers	85	85				0.40	81																			
Access Road, Crest Ramp, and Existing Crest Widening: MSE Retaining Wall	1	Forklifts	85	85				0.20	78																			
Access Road, Crest Ramp, and Existing Crest Widening: MSE Retaining Wall	1	Plate Compactors	82	82				0.20	75																			
Access Road, Crest Ramp, and Existing Crest Widening: MSE Retaining Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Access Road, Crest Ramp, and Existing Crest Widening: Metal Beam Guard Rail	1	Skid Steer Loaders	80	80	80	0.00	5070.00	0.40	76	40	0.00	9785.00	34	0.00	9035.00	35	0.00	7640.00	36	0.00	250.00	66	0.00	855.00	55	0.00	8300.00	36
Access Road, Crest Ramp, and Existing Crest Widening: Metal Beam Guard Rail	1	Forklifts	85	85				0.20	78																			
Access Road, Crest Ramp, and Existing Crest Widening: 1.5' Conc Parapet Wall	1	Forklifts	85	85	87	0.00	5070.00	0.20	78	47	0.00	9785.00	41	0.00	9035.00	42	0.00	7640.00	43	0.00	250.00	73	0.00	855.00	62	0.00	8300.00	42
Access Road, Crest Ramp, and Existing Crest Widening: 1.5' Conc Parapet Wall	1	Generator Sets	82	82				0.50	79																			
Access Road, Crest Ramp, and Existing Crest Widening: 1.5' Conc Parapet Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Access Road, Crest Ramp, and Existing Crest Widening: 1.5' Conc Parapet Wall	1	Pumps	77	77				0.50	74																			
Access Road, Crest Ramp, and Existing Crest Widening: 1.5' Conc Parapet Wall	1	Bore/Drill Rigs	84	84				0.20	77																			
Access Road, Crest Ramp, and Existing Crest Widening: 1.5' Conc Parapet Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Access Road, Crest Ramp, and Existing Crest Widening: 1.5' Conc Parapet Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Access Road, Crest Ramp, and Existing Crest Widening: 1.5' Conc Parapet Wall	1	Cement and Mortar Mixers	85	85				0.40	81																			
Dam Control Building: Pt 1 CMU Control Building	1	Forklifts	85	85	84	0.00	5070.00	0.20	78	43	0.00	9785.00	38	0.00	9035.00	38	0.00	7640.00	40	0.00	620.00	62	0.00	720.00	60	0.00	8300.00	39
Dam Control Building: Pt 1 CMU Control Building	1	Skid Steer Loaders	80	80				0.40	76																			
Dam Control Building: Pt 1 CMU Control Building	1	Excavators	85	85				0.40	81																			
Dam Control Building: Pt 2 CMU Control Building	1	Forklifts	85	85	84	0.00	5070.00	0.20	78	43	0.00	9785.00	38	0.00	9035.00	38	0.00	7640.00	40	0.00	620.00	62	0.00	720.00	60	0.00	8300.00	39
Dam Control Building: Pt 2 CMU Control Building	1	Skid Steer Loaders	80	80				0.40	76																			
Dam Control Building: Pt 2 CMU Control Building	1	Excavators	85	85				0.40	81																			
Dam Control Building: Reinforced Concrete Foundation	1	Forklifts	85	85	87	0.00	5070.00	0.20	78	47	0.00	9785.00	41	0.00	9035.00	42	0.00	7640.00	43	0.00	620.00	65	0.00	720.00	64	0.00	8300.00	42
Dam Control Building: Reinforced Concrete Foundation	1	Generator Sets	82	82				0.50	79																			
Dam Control Building: Reinforced Concrete Foundation	1	Skid Steer Loaders	80	80				0.40	76																			
Dam Control Building: Reinforced Concrete Foundation	1	Pumps	77	77				0.50	74																			
Dam Control Building: Reinforced Concrete Foundation	1	Bore/Drill Rigs	84	84				0.20	77																			
Dam Control Building: Reinforced Concrete Foundation	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Dam Control Building: Reinforced Concrete Foundation	1	Skid Steer Loaders	80	80				0.40	76																			
Dam Control Building: Reinforced Concrete Foundation	1	Cement and Mortar Mixers	85	85				0.40	81																			
Dam Control Building: Metal Frame Roofing	1	Forklifts	85	85	82	0.00	5070.00	0.20	78	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	38	0.00	620.00	60	0.00	720.00	59	0.00	8300.00	38
Dam Control Building: Metal Frame Roofing	1	Cranes	88	88				0.16	80																			
Dam Control Building: Ancillary Features	1	Forklifts	85	85	82	0.00	5070.00	0.20	78	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	38	0.00	620.00	60	0.00	720.00	59	0.00	8300.00	38

						Receptor 1 - Irvine Regional Park					Receptor 2 - Residences Along Jamboree Road			Receptor 3 - Oak Canyon Park			Receptor 4 - Lakeview Park Camping Area			Receptor 5 - Sensitive Bird Species South of Dam			Receptor 6 - Sensitive Bird Species North of the Dam			Receptor 7 - Sensitive Bird Species Near Primary Staging Area		
Phase Name	Number per Day	Equipment Type	Typical Noise Level 50 ft from Source, dBA	Noise Level 50 ft Multiple Equipment, dBA	Construction Phase Noise Level, dBA	Hard/Soft	Distance	Utilization	Noise Level with Utilization	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level
Dam Control Building: Ancillary Features	1	Cranes	88	88				0.16	80																			
Downstream Outlet Works Piping and Vault: Structure Excavation Shoring & Excavation	1	Excavators	85	85	87	0.00	5070.00	0.40	81	46	0.00	9785.00	41	0.00	9035.00	41	0.00	7640.00	43	0.00	185.00	75	0.00	1220.00	59	0.00	8300.00	42
Downstream Outlet Works Piping and Vault: Structure Excavation Shoring & Excavation	2	Off-Highway Trucks	84	87				0.40	83																			
Downstream Outlet Works Piping and Vault: Structure Excavation Shoring & Excavation	1	Rubber Tired Dozers	85	85				0.40	81																			
Downstream Outlet Works Piping and Vault: Structure Bkfl	1	Excavators	85	85	86	0.00	5070.00	0.40	81	46	0.00	9785.00	40	0.00	9035.00	41	0.00	7640.00	42	0.00	185.00	75	0.00	1220.00	58	0.00	8300.00	42
Downstream Outlet Works Piping and Vault: Structure Bkfl	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Downstream Outlet Works Piping and Vault: Structure Bkfl	1	Plate Compactors	82	82				0.20	75																			
Downstream Outlet Works Piping and Vault: Structure Bkfl	2	Off-Highway Trucks	84	87				0.40	83																			
Downstream Outlet Works Piping and Vault: Reinforced Conc Structures	1	Cranes	88	88	89	0.00	5070.00	0.16	80	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	185.00	78	0.00	1220.00	61	0.00	8300.00	45
Downstream Outlet Works Piping and Vault: Reinforced Conc Structures	1	Forklifts	85	85				0.20	78																			
Downstream Outlet Works Piping and Vault: Reinforced Conc Structures	1	Generator Sets	82	82				0.50	79																			
Downstream Outlet Works Piping and Vault: Reinforced Conc Structures	1	Skid Steer Loaders	80	80				0.40	76																			
Downstream Outlet Works Piping and Vault: Reinforced Conc Structures	1	Pumps	77	77				0.50	74																			
Downstream Outlet Works Piping and Vault: Reinforced Conc Structures	1	Bore/Drill Rigs	84	84				0.20	77																			
Downstream Outlet Works Piping and Vault: Reinforced Conc Structures	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Downstream Outlet Works Piping and Vault: Reinforced Conc Structures	1	Skid Steer Loaders	80	80				0.40	76																			
Downstream Outlet Works Piping and Vault: Reinforced Conc Structures	3	Cement and Mortar Mixers	85	90				0.40	86																			
Downstream Outlet Works Piping and Vault: Piping and Valves	1	Rollers	85	85	87	0.00	5070.00	0.20	78	47	0.00	9785.00	41	0.00	9035.00	42	0.00	7640.00	43	0.00	185.00	76	0.00	1220.00	59	0.00	8300.00	43
Downstream Outlet Works Piping and Vault: Piping and Valves	3	Excavators	85	90				0.40	86																			
Downstream Outlet Works Piping and Vault: Piping and Valves	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Downstream Outlet Works Piping and Vault: Piping and Valves	1	Welders	73	73				0.40	69																			
Downstream Outlet Works Piping and Vault: Steel Casing	1	Rollers	85	85	87	0.00	5070.00	0.20	78	47	0.00	9785.00	41	0.00	9035.00	42	0.00	7640.00	43	0.00	185.00	76	0.00	1220.00	59	0.00	8300.00	43
Downstream Outlet Works Piping and Vault: Steel Casing	3	Excavators	85	90				0.40	86																			
Downstream Outlet Works Piping and Vault: Steel Casing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Downstream Outlet Works Piping and Vault: Steel Casing	1	Welders	73	73				0.40	69																			
Downstream Outlet Works Piping and Vault: Ladders and Platforms	1	Forklifts	85	85	82	0.00	5070.00	0.20	78	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	38	0.00	185.00	71	0.00	1220.00	54	0.00	8300.00	38
Downstream Outlet Works Piping and Vault: Ladders and Platforms	1	Cranes	88	88				0.16	80																			
Downstream Outlet Works Piping and Vault: Dam keeper Residence Water Supply System and Piping	1	Excavators	85	85	83	0.00	5070.00	0.40	81	43	0.00	9785.00	37	0.00	9035.00	38	0.00	7640.00	39	0.00	185.00	72	0.00	1220.00	55	0.00	8300.00	39
Downstream Outlet Works Piping and Vault: Dam keeper Residence Water Supply System and Piping	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Downstream Outlet Works Piping and Vault: Dam keeper Residence Water Supply System and Piping	1	Plate Compactors	82	82				0.20	75																			
Downstream Outlet Works Piping and Vault: Dewatering	1	Generator Sets	82	82	79	0.00	5070.00	0.50	79	39	0.00	9785.00	33	0.00	9035.00	34	0.00	7640.00	35	0.00	185.00	68	0.00	1220.00	51	0.00	8300.00	35
Downstream Outlet Works Piping and Vault: ARVs and Valves	1	Excavators	85	85	83	0.00	5070.00	0.40	81	43	0.00	9785.00	37	0.00	9035.00	38	0.00	7640.00	39	0.00	185.00	72	0.00	1220.00	55	0.00	8300.00	39
Downstream Outlet Works Piping and Vault: ARVs and Valves	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Downstream Outlet Works Piping and Vault: ARVs and Valves	1	Plate Compactors	82	82				0.20	75																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Structure Excavation	1	Excavators	85	85	85	0.00	5070.00	0.40	81	45	0.00	9785.00	39	0.00	9035.00	40	0.00	7640.00	41	0.00	490.00	65	0.00	855.00	60	0.00	8300.00	41
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Structure Excavation	2	Off-Highway Trucks	84	87				0.40	83																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Concrete Walkway	1	Cranes	88	88	88	0.00	5070.00	0.16	80	47	0.00	9785.00	42	0.00	9035.00	42	0.00	7640.00	44	0.00	490.00	68	0.00	855.00	63	0.00	8300.00	43
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Concrete Walkway	1	Forklifts	85	85				0.20	78																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Concrete Walkway	1	Generator Sets	82	82				0.50	79																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Concrete Walkway	1	Skid Steer Loaders	80	80				0.40	76																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Concrete Walkway	1	Pumps	77	77				0.50	74																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Concrete Walkway	1	Bore/Drill Rigs	84	84				0.20	77																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Concrete Walkway	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Concrete Walkway	1	Skid Steer Loaders	80	80				0.40	76																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Concrete Walkway	1	Cement and Mortar Mixers	85	85				0.40	81																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Bridge	2	Cranes	88	91	87	0.00	5070.00	0.16	83	47	0.00	9785.00	41	0.00	9035.00	42	0.00	7640.00	43	0.00	490.00	67	0.00	855.00	62	0.00	8300.00	43
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Bridge	1	Forklifts	85	85				0.20	78																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Bridge	1	Generator Sets	82	82				0.50	79																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Bridge	1	Forklifts	85	85				0.20	78																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Bridge	1	Cranes	88	88				0.16	80																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Roadway Excavation	1	Graders	85	85	88	0.00	5070.00	0.40	81	48	0.00	9785.00	42	0.00	9035.00	43	0.00	7640.00	44	0.00	490.00	68	0.00	855.00	63	0.00	8300.00	44
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Roadway Excavation	3	Scrapers	85	90				0.40	86																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Roadway Excavation	1	Rubber Tired Dozers	85	85				0.40	81																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Slope Anchors	2	Bore/Drill Rigs	84	87		0.00	5070.00	0.20	80	50	0.00	9785.00	44	0.00	9035.00	44	0.00	7640.00	46	0.00	490.00	70	0.00	855.00	65	0.00	8300.00	45
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Slope Anchors	1	Skid Steer Loaders	80	80				0.40	76																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Slope Anchors	1	Forklifts	85	85				0.20	78																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Tie Back Wall	2	Bore/Drill Rigs	84	87	89	0.00	5070.00	0.20	80	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	490.00	69	0.00	855.00	64	0.00	8300.00	44
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Tie Back Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Tie Back Wall	1	Forklifts	85	85				0.20	78																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Tie Back Wall	1	Excavators	85	85				0.40	81																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Tie Back Wall	1	Pumps	77	77				0.50	74																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Tie Back Wall	1	Air Compressors	80	80				0.40	76																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Tie Back Wall	1	Bore/Drill Rigs	84	84				0.20	77																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Tie Back Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Pedestrian Access Walkway, Stairs, Catwalk, Vehicle Ramp: Tie Back Wall	2	Cement and Mortar Mixers	85	88				0.40	84																			
Spillway Site Excavations	1	Excavators	85	85	89	0.00	5070.00	0.40	81	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	800.00	65	0.00	600.00	67	0.00	8300.00	45
Spillway Site Excavations	1	Excavators	85	85				0.40	81																			
Spillway Site Excavations	4	Off-Highway Trucks	84	90				0.40	86																			
Spillway Site Excavations	1	Rubber Tired Dozers	85	85				0.40	81																			
Rock Slope Stabilization	2	Bore/Drill Rigs	84	87	89	0.00	5070.00	0.20	80	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	800.00	65	0.00	600.00	67	0.00	8300.00	44
Rock Slope Stabilization	1	Skid Steer Loaders	80	80				0.40	76																			
Rock Slope Stabilization	1	Forklifts	85	85				0.20	78																			
Rock Slope Stabilization	1	Excavators	85	85				0.40	81																			
Rock Slope Stabilization	1	Pumps	77	77				0.50	74																			
Rock Slope Stabilization	1	Air Compressors	80	80				0.40	76																			
Rock Slope Stabilization	1	Bore/Drill Rigs	84	84				0.20	77																			
Rock Slope Stabilization	2	Cement and Mortar Mixers	85	88				0.40	84																			
Rock Slope Stabilization	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
RCC Weir Support Block	1	Bore/Drill Rigs	84	84	93	0.00	5070.00	0.20	77	53	0.00	9785.00	47	0.00	9035.00	48	0.00	7640.00	49	0.00	800.00	69	0.00	600.00	71	0.00	8300.00	48
RCC Weir Support Block	3	Pumps	77	82				0.50	79																			
RCC Weir Support Block	1	Plate Compactors	82	82				0.20	75																			
RCC Weir Support Block	1	Cranes	88	88				0.16	80																			
RCC Weir Support Block	4	Generator Sets	82	88				0.50	85																			
RCC Weir Support Block	3	Tractors/Loaders/Backhoes	80	85				0.40	81																			
RCC Weir Support Block	3	Pumps	77	82				0.50	79																			
RCC Weir Support Block	3	Rollers	85	90				0.20	83																			
RCC Weir Support Block	3	Rubber Tired Dozers	85	90				0.40	86																			
RCC Weir Support Block	5	Off-Highway Trucks	84	91				0.40	87																			
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	1	Bore/Drill Rigs	84	84	93	0.00	5070.00	0.20	77	53	0.00	9785.00	47	0.00	9035.00	48	0.00	7640.00	49	0.00	340.00	76	0.00	1000.00	67	0.00	8300.00	48
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	3	Pumps	77	82				0.50	79																			
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	1	Plate Compactors	82	82				0.20	75																			
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	4	Generator Sets	82	88				0.50	85																			
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	3	Tractors/Loaders/Backhoes	80	85				0.40	81																			
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	3	Pumps	77	82				0.50	79																			
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	3	Rollers	85	90				0.20	83																			
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	3	Rubber Tired Dozers	85	90				0.40	86																			
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	1	Cranes	88	88				0.16	80																			
Side Channel Control Structure (Zone A): Ogee Weir RCC 7 days per week	5	Off-Highway Trucks	84	91				0.40	87																			
Side Channel Control Structure (Zone A): Ogee Weir concrete Overlay - CVC	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	44	0.00	9035.00	44	0.00	7640.00	46	0.00	340.00	73	0.00	1000.00	63	0.00	8300.00	45
Side Channel Control Structure (Zone A): Ogee Weir concrete Overlay - CVC	1	Pumps	77	77				0.50	74																			
Side Channel Control Structure (Zone A): Ogee Weir concrete Overlay - CVC	2	Cranes	88	91				0.16	83																			
Side Channel Control Structure (Zone A): Ogee Weir concrete Overlay - CVC	2	Rough Terrain Forklifts	85	88				0.20	81																			
Side Channel Control Structure (Zone A): Ogee Weir concrete Overlay - CVC	2	Generator Sets	82	85				0.50	82																			
Side Channel Control Structure (Zone A): Ogee Weir concrete Overlay - CVC	1	Bore/Drill Rigs	84	84				0.20	77																			
Side Channel Control Structure (Zone A): Ogee Weir concrete Overlay - CVC	2	Cement and Mortar Mixers	85	88				0.40	84																			
Side Channel Control Structure (Zone A): Ogee Weir concrete Overlay - CVC	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Side Channel Control Structure (Zone A): Side Channel Reinforced Concrete	2	Surfacing Equipment	76	79	88	0.00	5070.00	0.40	75	48	0.00	9785.00	43	0.00	9035.00	43	0.00	7640.00	45	0.00	340.00	72	0.00	1000.00	62	0.00	8300.00	44
Side Channel Control Structure (Zone A): Side Channel Reinforced Concrete	1	Pumps	77	77				0.50	74																			
Side Channel Control Structure (Zone A): Side Channel Reinforced Concrete	2	Cranes	88	91				0.16	83																			
Side Channel Control Structure (Zone A): Side Channel Reinforced Concrete	2	Rough Terrain Forklifts	85	88				0.20	81																			
Side Channel Control Structure (Zone A): Side Channel Reinforced Concrete	2	Generator Sets	82	85				0.50	82																			
Side Channel Control Structure (Zone A): Side Channel Reinforced Concrete	2	Bore/Drill Rigs	84	87				0.20	80																			
Side Channel Control Structure (Zone A): Side Channel Reinforced Concrete	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): CLSM Backfill	1	Skid Steer Loaders	80	80	86	0.00	5070.00	0.40	76	46	0.00	9785.00	40	0.00	9035.00	41	0.00	7640.00	42	0.00	340.00	69	0.00	930.00	61	0.00	8300.00	42
Wall Type 1 Tieback Wall Left (0+27 to 2+17): CLSM Backfill	1	Pumps	77	77				0.50	74																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): CLSM Backfill	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): CLSM Backfill	2	Cement and Mortar Mixers	85	88				0.40	84																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): CLSM Backfill	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17)\: Work Platform Construction	2	Excavators	85	88	89	0.00	5070.00	0.40	84	48	0.00	9785.00	43	0.00	9035.00	43	0.00	7640.00	45	0.00	340.00	72	0.00	930.00	63	0.00	8300.00	44

						Receptor 1 - Irvine Regional Park					Receptor 2 - Residences Along Jamboree Road			Receptor 3 - Oak Canyon Park			Receptor 4 - Lakeview Park Camping Area			Receptor 5 - Sensitive Bird Species South of Dam			Receptor 6 - Sensitive Bird Species North of the Dam			Receptor 7 - Sensitive Bird Species Near Primary Staging Area		
Phase Name	Number per Day	Equipment Type	Typical Noise Level 50 ft from Source, dBA	Noise Level 50 ft Multiple Equipment, dBA	Construction Phase Noise Level, dBA	Hard/Soft	Distance	Utilization	Noise Level with Utilization	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level
Wall Type 1 Tieback Wall Left (0+27 to 2+17)\: Work Platform Construction	3	Off-Highway Trucks	84	89				0.40	85																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17)\: Work Platform Construction	1	Rubber Tired Dozers	85	85				0.40	81																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17)\: Work Platform Construction	1	Plate Compactors	82	82				0.20	75																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Temp Shotcrete Facing	1	Pumps	77	77	86	0.00	5070.00	0.50	74	45	0.00	9785.00	40	0.00	9035.00	40	0.00	7640.00	42	0.00	340.00	69	0.00	930.00	60	0.00	8300.00	41
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Temp Shotcrete Facing	1	Air Compressors	80	80				0.40	76																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Temp Shotcrete Facing	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Temp Shotcrete Facing	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Temp Shotcrete Facing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Temp Shotcrete Facing	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Temp Shotcrete Facing	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Permanent Reinforced Concrete Facing	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	340.00	72	0.00	930.00	64	0.00	8300.00	45
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Pumps	77	77				0.50	74																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Permanent Reinforced Concrete Facing	2	Cranes	88	91				0.16	83																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Permanent Reinforced Concrete Facing	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Permanent Reinforced Concrete Facing	2	Generator Sets	82	85				0.50	82																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Post Tensioned Rock Anchors	2	Bore/Drill Rigs	84	87	85	0.00	5070.00	0.20	80	45	0.00	9785.00	39	0.00	9035.00	40	0.00	7640.00	42	0.00	340.00	69	0.00	930.00	60	0.00	8300.00	41
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Post Tensioned Rock Anchors	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Post Tensioned Rock Anchors	1	Forklifts	85	85				0.20	78																			
Wall Type 1 Tieback Wall Left (0+27 to 2+17): Post Tensioned Rock Anchors	1	Excavators	85	85				0.40	81																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): CLSM Backfill	1	Skid Steer Loaders	80	80	88	0.00	5070.00	0.40	76	48	0.00	9785.00	43	0.00	9035.00	43	0.00	7640.00	45	0.00	340.00	72	0.00	930.00	63	0.00	8300.00	44
Wall Type 1 Tieback Wall Right (0+27 to 2+17): CLSM Backfill	1	Pumps	77	77				0.50	74																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): CLSM Backfill	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): CLSM Backfill	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): CLSM Backfill	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): CLSM Backfill	4	Cement and Mortar Mixers	85	91				0.40	87																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17) Work Platform Construction	2	Excavators	85	88	89	0.00	5070.00	0.40	84	48	0.00	9785.00	43	0.00	9035.00	43	0.00	7640.00	45	0.00	340.00	72	0.00	930.00	63	0.00	8300.00	44
Wall Type 1 Tieback Wall Right (0+27 to 2+17) Work Platform Construction	3	Off-Highway Trucks	84	89				0.40	85																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17) Work Platform Construction	1	Rubber Tired Dozers	85	85				0.40	81																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17) Work Platform Construction	1	Plate Compactors	82	82				0.20	75																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Temp Shotcrete Facing	1	Pumps	77	77	86	0.00	5070.00	0.50	74	45	0.00	9785.00	40	0.00	9035.00	40	0.00	7640.00	42	0.00	340.00	69	0.00	930.00	60	0.00	8300.00	41
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Temp Shotcrete Facing	1	Air Compressors	80	80				0.40	76																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Temp Shotcrete Facing	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Temp Shotcrete Facing	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Temp Shotcrete Facing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Temp Shotcrete Facing	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Temp Shotcrete Facing	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Permanent Reinforced Concrete Facing	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	340.00	72	0.00	930.00	64	0.00	8300.00	45
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Pumps	77	77				0.50	74																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Permanent Reinforced Concrete Facing	2	Cranes	88	91				0.16	83																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Permanent Reinforced Concrete Facing	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Permanent Reinforced Concrete Facing	2	Generator Sets	82	85				0.50	82																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Permanent Reinforced Concrete Facing	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Post Tensioned Rock Anchors	2	Bore/Drill Rigs	84	87	85	0.00	5070.00	0.20	80	45	0.00	9785.00	39	0.00	9035.00	40	0.00	7640.00	42	0.00	340.00	69	0.00	930.00	60	0.00	8300.00	41
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Post Tensioned Rock Anchors	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Post Tensioned Rock Anchors	1	Forklifts	85	85				0.20	78																			
Wall Type 1 Tieback Wall Right (0+27 to 2+17): Post Tensioned Rock Anchors	1	Excavators	85	85				0.40	81																			
Wall Transitions: Left Secant Pile Walls	1	Excavators	85	85	89	0.00	5070.00	0.40	81	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	46	0.00	600.00	68	0.00	760.00	66	0.00	8300.00	45
Wall Transitions: Left Secant Pile Walls	1	Cranes	88	88				0.16	80																			
Wall Transitions: Left Secant Pile Walls	1	Excavators	85	85				0.40	81																			
Wall Transitions: Left Secant Pile Walls	1	Forklifts	85	85				0.20	78																			
Wall Transitions: Left Secant Pile Walls	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Transitions: Left Secant Pile Walls	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Transitions: Left Secant Pile Walls	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Transitions: Left Secant Pile Walls	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Transitions: Left Secant Pile Walls	2	Cement and Mortar Mixers	85	88				0.40	84																			
Wall Transitions: Right Secant Pile Wall	2	Excavators	85	88	89	0.00	5070.00	0.40	84	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	46	0.00	600.00	68	0.00	760.00	66	0.00	8300.00	45
Wall Transitions: Right Secant Pile Wall	1	Cranes	88	88				0.16	80																			
Wall Transitions: Right Secant Pile Wall	1	Forklifts	85	85				0.20	78																			
Wall Transitions: Right Secant Pile Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Transitions: Right Secant Pile Wall	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Transitions: Right Secant Pile Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Transitions: Right Secant Pile Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Transitions: Right Secant Pile Wall	2	Cement and Mortar Mixers	85	88				0.40	84																			
Right Closure Wall: Work Platform Construction	1	Excavators	85	85	87	0.00	5070.00	0.40	81	47	0.00	9785.00	41	0.00	9035.00	42	0.00	7640.00	43	0.00	600.00	65	0.00	760.00	63	0.00	8300.00	42
Right Closure Wall: Work Platform Construction	2	Off-Highway Trucks	84	87				0.40	83																			
Right Closure Wall: Work Platform Construction	1	Rubber Tired Dozers	85	85				0.40	81																			
Right Closure Wall: Work Platform Construction	1	Plate Compactors	82	82				0.20	75																			
Right Closure Wall: Secant Pile Wall	1	Excavators	85	85	89	0.00	5070.00	0.40	81	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	46	0.00	600.00	68	0.00	760.00	66	0.00	8300.00	45
Right Closure Wall: Secant Pile Wall	1	Cranes	88	88				0.16	80																			
Right Closure Wall: Secant Pile Wall	1	Excavators	85	85				0.40	81																			
Right Closure Wall: Secant Pile Wall	1	Forklifts	85	85				0.20	78																			
Right Closure Wall: Secant Pile Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Right Closure Wall: Secant Pile Wall	1	Bore/Drill Rigs	84	84				0.20	77																			
Right Closure Wall: Secant Pile Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Right Closure Wall: Secant Pile Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Right Closure Wall: Secant Pile Wall	2	Cement and Mortar Mixers	85	88				0.40	84																			
Right Closure Wall: Backfill Concrete	1	Skid Steer Loaders	80	80	88	0.00	5070.00	0.40	76	47	0.00	9785.00	42	0.00	9035.00	42	0.00	7640.00	44	0.00	600.00	66	0.00	760.00	64	0.00	8300.00	43
Right Closure Wall: Backfill Concrete	1	Pumps	77	77				0.50	74																			
Right Closure Wall: Backfill Concrete	1	Bore/Drill Rigs	84	84				0.20	77																			
Right Closure Wall: Backfill Concrete	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Right Closure Wall: Backfill Concrete	1	Skid Steer Loaders	80	80				0.40	76																			
Right Closure Wall: Backfill Concrete	3	Cement and Mortar Mixers	85	90				0.40	86																			
Wall Type 2 - Left: Leveling Concrete	1	Skid Steer Loaders	80	80	86	0.00	5070.00	0.40	76	46	0.00	9785.00	40	0.00	9035.00	41	0.00	7640.00	42	0.00	600.00	65	0.00	765.00	62	0.00	8300.00	42
Wall Type 2 - Left: Leveling Concrete	1	Pumps	77	77				0.50	74																			
Wall Type 2 - Left: Leveling Concrete	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 2 - Left: Leveling Concrete	2	Cement and Mortar Mixers	85	88				0.40	84																			
Wall Type 2 - Left: Leveling Concrete	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 2 - Left: 1 Inch Concrete Wall	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	600.00	67	0.00	765.00	65	0.00	8300.00	45
Wall Type 2 - Left: 1 Inch Concrete Wall	1	Pumps	77	77				0.50	74																			
Wall Type 2 - Left: 1 Inch Concrete Wall	2	Cranes	88	91				0.16	83																			
Wall Type 2 - Left: 1 Inch Concrete Wall	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 2 - Left: 1 Inch Concrete Wall	2	Generator Sets	82	85				0.50	82																			
Wall Type 2 - Left: 1 Inch Concrete Wall	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 2 - Left: 1 Inch Concrete Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 2 - Left: 1 Inch Concrete Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 2 - Left: 1 Inch Concrete Wall	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 2 - Left: 2.5 Inch Concrete Wall	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	48	0.00	9785.00	43	0.00	9035.00	43	0.00	7640.00	45	0.00	600.00	67	0.00	765.00	65	0.00	8300.00	44
Wall Type 2 - Left: 2.5 Inch Concrete Wall	1	Pumps	77	77				0.50	74																			
Wall Type 2 - Left: 2.5 Inch Concrete Wall	2	Cranes	88	91				0.16	83																			
Wall Type 2 - Left: 2.5 Inch Concrete Wall	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 2 - Left: 2.5 Inch Concrete Wall	1	Generator Sets	82	82				0.50	79																			
Wall Type 2 - Left: 2.5 Inch Concrete Wall	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 2 - Left: 2.5 Inch Concrete Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 2 - Left: 2.5 Inch Concrete Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 2 - Left: 2.5 Inch Concrete Wall	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 2 - Left: Concrete Footing	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	600.00	67	0.00	765.00	65	0.00	8300.00	45
Wall Type 2 - Left: Concrete Footing	1	Pumps	77	77				0.50	74																			
Wall Type 2 - Left: Concrete Footing	2	Cranes	88	91				0.16	83																			
Wall Type 2 - Left: Concrete Footing	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 2 - Left: Concrete Footing	2	Generator Sets	82	85				0.50	82																			
Wall Type 2 - Left: Concrete Footing	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 2 - Left: Concrete Footing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			

						Receptor 1 - Irvine Regional Park					Receptor 2 - Residences Along Jamboree Road			Receptor 3 - Oak Canyon Park			Receptor 4 - Lakeview Park Camping Area			Receptor 5 - Sensitive Bird Species South of Dam			Receptor 6 - Sensitive Bird Species North of the Dam			Receptor 7 - Sensitive Bird Species Near Primary Staging Area		
Phase Name	Number per Day	Equipment Type	Typical Noise Level 50 ft from Source, dBA	Noise Level 50 ft Multiple Equipment, dBA	Construction Phase Noise Level, dBA	Hard/Soft	Distance	Utilization	Noise Level with Utilization	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level
Wall Type 2 - Left: Concrete Footing	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 2 - Left: Concrete Footing	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 2 - Left: Backfill	1	Graders	85	85	90	0.00	5070.00	0.40	81	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	46	0.00	600.00	68	0.00	765.00	66	0.00	8300.00	46
Wall Type 2 - Left: Backfill	1	Excavators	85	85				0.40	81																			
Wall Type 2 - Left: Backfill	2	Rollers	85	88				0.20	81																			
Wall Type 2 - Left: Backfill	5	Off-Highway Trucks	84	91				0.40	87																			
Wall Type 2 - Left: Backfill	1	Off-Highway Trucks	84	84				0.40	80																			
Wall Type 2 - Left: Reinforced Concrete Wall	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	600.00	67	0.00	765.00	65	0.00	8300.00	45
Wall Type 2 - Left: Reinforced Concrete Wall	1	Pumps	77	77				0.50	74																			
Wall Type 2 - Left: Reinforced Concrete Wall	2	Cranes	88	91				0.16	83																			
Wall Type 2 - Left: Reinforced Concrete Wall	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 2 - Left: Reinforced Concrete Wall	2	Generator Sets	82	85				0.50	82																			
Wall Type 2 - Left: Reinforced Concrete Wall	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 2 - Left: Reinforced Concrete Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 2 - Left: Reinforced Concrete Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 2 - Left: Reinforced Concrete Wall	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 2 - Left: Footing Rock Anchors and Backfill	2	Bore/Drill Rigs	84	87	91	0.00	5070.00	0.20	80	51	0.00	9785.00	45	0.00	9035.00	46	0.00	7640.00	47	0.00	600.00	69	0.00	765.00	67	0.00	8300.00	46
Wall Type 2 - Left: Footing Rock Anchors and Backfill	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 2 - Left: Footing Rock Anchors and Backfill	1	Forklifts	85	85				0.20	78																			
Wall Type 2 - Left: Footing Rock Anchors and Backfill	1	Graders	85	85				0.40	81																			
Wall Type 2 - Left: Footing Rock Anchors and Backfill	1	Excavators	85	85				0.40	81																			
Wall Type 2 - Left: Footing Rock Anchors and Backfill	2	Rollers	85	88				0.20	81																			
Wall Type 2 - Left: Footing Rock Anchors and Backfill	6	Off-Highway Trucks	84	92				0.40	88																			
Wall Type 2 - Wall Right: Leveling Concrete	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	600.00	67	0.00	765.00	65	0.00	8300.00	45
Wall Type 2 - Wall Right: Leveling Concrete	1	Pumps	77	77				0.50	74																			
Wall Type 2 - Wall Right: Leveling Concrete	2	Cranes	88	91				0.16	83																			
Wall Type 2 - Wall Right: Leveling Concrete	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 2 - Wall Right: Leveling Concrete	2	Generator Sets	82	85				0.50	82																			
Wall Type 2 - Wall Right: Leveling Concrete	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 2 - Wall Right: Leveling Concrete	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 2 - Wall Right: Leveling Concrete	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 2 - Wall Right: Leveling Concrete	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 2 - Wall Right: 1 Inch Wall	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	600.00	67	0.00	765.00	65	0.00	8300.00	45
Wall Type 2 - Wall Right: 1 Inch Wall	1	Pumps	77	77				0.50	74																			
Wall Type 2 - Wall Right: 1 Inch Wall	2	Cranes	88	91				0.16	83																			
Wall Type 2 - Wall Right: 1 Inch Wall	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 2 - Wall Right: 1 Inch Wall	2	Generator Sets	82	85				0.50	82																			
Wall Type 2 - Wall Right: 1 Inch Wall	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 2 - Wall Right: 1 Inch Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 2 - Wall Right: 1 Inch Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 2 - Wall Right: 1 Inch Wall	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 2 - Wall Right: 2.5 Inch Wall	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	600.00	67	0.00	765.00	65	0.00	8300.00	45
Wall Type 2 - Wall Right: 2.5 Inch Wall	1	Pumps	77	77				0.50	74																			
Wall Type 2 - Wall Right: 2.5 Inch Wall	2	Cranes	88	91				0.16	83																			
Wall Type 2 - Wall Right: 2.5 Inch Wall	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 2 - Wall Right: 2.5 Inch Wall	2	Generator Sets	82	85				0.50	82																			
Wall Type 2 - Wall Right: 2.5 Inch Wall	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 2 - Wall Right: 2.5 Inch Wall	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 2 - Wall Right: 2.5 Inch Wall	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 2 - Wall Right: 2.5 Inch Wall	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 2 - Wall Right: Concrete Footing	2	Surfacing Equipment	76	79	89	0.00	5070.00	0.40	75	49	0.00	9785.00	43	0.00	9035.00	44	0.00	7640.00	45	0.00	600.00	67	0.00	765.00	65	0.00	8300.00	45
Wall Type 2 - Wall Right: Concrete Footing	1	Pumps	77	77				0.50	74																			
Wall Type 2 - Wall Right: Concrete Footing	2	Cranes	88	91				0.16	83																			
Wall Type 2 - Wall Right: Concrete Footing	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 2 - Wall Right: Concrete Footing	2	Generator Sets	82	85				0.50	82																			
Wall Type 2 - Wall Right: Concrete Footing	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 2 - Wall Right: Concrete Footing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 2 - Wall Right: Concrete Footing	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 2 - Wall Right: Concrete Footing	1	Cement and Mortar Mixers	85	85				0.40	81																			
Wall Type 2 - Wall Right: Backfill	1	Graders	85	85	90	0.00	5070.00	0.40	81	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	46	0.00	600.00	68	0.00	765.00	66	0.00	8300.00	46
Wall Type 2 - Wall Right: Backfill	1	Excavators	85	85				0.40	81																			
Wall Type 2 - Wall Right: Backfill	2	Rollers	85	88				0.20	81																			
Wall Type 2 - Wall Right: Backfill	6	Off-Highway Trucks	84	92				0.40	88																			
Wall Type 3 - Left: Roller Compacted Concrete	1	Bore/Drill Rigs	84	84	93	0.00	5070.00	0.20	77	53	0.00	9785.00	47	0.00	9035.00	48	0.00	7640.00	49	0.00	970.00	67	0.00	400.00	75	0.00	8300.00	48
Wall Type 3 - Left: Roller Compacted Concrete	3	Pumps	77	82				0.50	79																			
Wall Type 3 - Left: Roller Compacted Concrete	1	Plate Compactors	82	82				0.20	75																			
Wall Type 3 - Left: Roller Compacted Concrete	1	Cranes	88	88				0.16	80																			
Wall Type 3 - Left: Roller Compacted Concrete	4	Generator Sets	82	88				0.50	85																			
Wall Type 3 - Left: Roller Compacted Concrete	3	Tractors/Loaders/Backhoes	80	85				0.40	81																			
Wall Type 3 - Left: Roller Compacted Concrete	3	Pumps	77	82				0.50	79																			
Wall Type 3 - Left: Roller Compacted Concrete	3	Rollers	85	90				0.20	83																			
Wall Type 3 - Left: Roller Compacted Concrete	3	Rubber Tired Dozers	85	90				0.40	86																			
Wall Type 3 - Left: Roller Compacted Concrete	5	Off-Highway Trucks	84	91				0.40	87																			
Wall Type 3 - Left: CVC Facing	2	Surfacing Equipment	76	79	90	0.00	5070.00	0.40	75	50	0.00	9785.00	45	0.00	9035.00	45	0.00	7640.00	47	0.00	970.00	65	0.00	400.00	72	0.00	8300.00	46
Wall Type 3 - Left: CVC Facing	1	Pumps	77	77				0.50	74																			
Wall Type 3 - Left: CVC Facing	2	Cranes	88	91				0.16	83																			
Wall Type 3 - Left: CVC Facing	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 3 - Left: CVC Facing	2	Generator Sets	82	85				0.50	82																			
Wall Type 3 - Left: CVC Facing	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 3 - Left: CVC Facing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 3 - Left: CVC Facing	5	Skid Steer Loaders	80	87				0.40	83																			
Wall Type 3 - Left: CVC Facing	2	Cement and Mortar Mixers	85	88				0.40	84																			
Wall Type 3 - Right: Roller Compacted Concrete	1	Bore/Drill Rigs	84	84	93	0.00	5070.00	0.20	77	53	0.00	9785.00	47	0.00	9035.00	48	0.00	7640.00	49	0.00	970.00	67	0.00	400.00	75	0.00	8300.00	48
Wall Type 3 - Right: Roller Compacted Concrete	3	Pumps	77	82				0.50	79																			
Wall Type 3 - Right: Roller Compacted Concrete	1	Plate Compactors	82	82				0.20	75																			
Wall Type 3 - Right: Roller Compacted Concrete	1	Cranes	88	88				0.16	80																			
Wall Type 3 - Right: Roller Compacted Concrete	4	Generator Sets	82	88				0.50	85																			
Wall Type 3 - Right: Roller Compacted Concrete	3	Tractors/Loaders/Backhoes	80	85				0.40	81																			
Wall Type 3 - Right: Roller Compacted Concrete	3	Pumps	77	82				0.50	79																			
Wall Type 3 - Right: Roller Compacted Concrete	3	Rollers	85	90				0.20	83																			
Wall Type 3 - Right: Roller Compacted Concrete	3	Rubber Tired Dozers	85	90				0.40	86																			
Wall Type 3 - Right: Roller Compacted Concrete	5	Off-Highway Trucks	84	91				0.40	87																			
Wall Type 3 - Right: CVC Facing	2	Surfacing Equipment	76	79	90	0.00	5070.00	0.40	75	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	46	0.00	970.00	64	0.00	400.00	72	0.00	8300.00	45
Wall Type 3 - Right: CVC Facing	1	Pumps	77	77				0.50	74																			
Wall Type 3 - Right: CVC Facing	2	Cranes	88	91				0.16	83																			
Wall Type 3 - Right: CVC Facing	2	Rough Terrain Forklifts	85	88				0.20	81																			
Wall Type 3 - Right: CVC Facing	2	Generator Sets	82	85				0.50	82																			
Wall Type 3 - Right: CVC Facing	1	Bore/Drill Rigs	84	84				0.20	77																			
Wall Type 3 - Right: CVC Facing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Wall Type 3 - Right: CVC Facing	1	Skid Steer Loaders	80	80				0.40	76																			
Wall Type 3 - Right: CVC Facing	2	Cement and Mortar Mixers	85	88				0.40	84																			
Wall Type 3 - Right: Backfill	1	Graders	85	85	90	0.00	5070.00	0.40	81	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	46	0.00	970.00	64	0.00	400.00	72	0.00	8300.00	46
Wall Type 3 - Right: Backfill	1	Excavators	85	85				0.40	81																			
Wall Type 3 - Right: Backfill	2	Rollers	85	88				0.20	81																			
Wall Type 3 - Right: Backfill	6	Off-Highway Trucks	84	92				0.40	88																			
Stilling Basin: RCC	1	Bore/Drill Rigs	84	84	93	0.00	5070.00	0.20	77	53	0.00	9785.00	47	0.00	9035.00	48	0.00	7640.00	49	0.00	970.00	67	0.00	400.00	75	0.00	8300.00	48
Stilling Basin: RCC	3	Pumps	77	82				0.50	79																			
Stilling Basin: RCC	1	Plate Compactors	82	82				0.20	75																			
Stilling Basin: RCC	1	Cranes	88	88				0.16	80																			
Stilling Basin: RCC	4	Generator Sets	82	88				0.50	85																			
Stilling Basin: RCC	3	Tractors/Loaders/Backhoes	80	85				0.40	81																			
Stilling Basin: RCC	3	Pumps	77	82				0.50	79																			
Stilling Basin: RCC	3	Rollers	85	90				0.20	83																			
Stilling Basin: RCC	3	Rubber Tired Dozers	85	90				0.40	86																			
Stilling Basin: RCC	5	Off-Highway Trucks	84	91				0.40	87																			
Stilling Basin: Upstream/Downstream CVC Facing	2	Surfacing Equipment	76	79	90	0.00	5070.00	0.40	75	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	46	0.00	970.00	64	0.00	400.00	72	0.00	8300.00	45
Stilling Basin: Upstream/Downstream CVC Facing	1	Pumps	77	77				0.50	74																			
Stilling Basin: Upstream/Downstream CVC Facing	2	Cranes	88	91				0.16	83																			
Stilling Basin: Upstream/Downstream CVC Facing	2	Rough Terrain Forklifts	85	88				0.20	81																			

						Receptor 1 - Irvine Regional Park					Receptor 2 - Residences Along Jamboree Road			Receptor 3 - Oak Canyon Park			Receptor 4 - Lakeview Park Camping Area			Receptor 5 - Sensitive Bird Species South of Dam			Receptor 6 - Sensitive Bird Species North of the Dam			Receptor 7 - Sensitive Bird Species Near Primary Staging Area		
Phase Name	Number per Day	Equipment Type	Typical Noise Level 50 ft from Source, dBA	Noise Level 50 ft Multiple Equipment, dBA	Construction Phase Noise Level, dBA	Hard/Soft	Distance	Utilization	Noise Level with Utilization	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level
Stilling Basin: Upstream/Downstream CVC Facing	2	Generator Sets	82	85				0.50	82																			
Stilling Basin: Upstream/Downstream CVC Facing	1	Bore/Drill Rigs	84	84				0.20	77																			
Stilling Basin: Upstream/Downstream CVC Facing	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Stilling Basin: Upstream/Downstream CVC Facing	1	Skid Steer Loaders	80	80				0.40	76																			
Stilling Basin: Upstream/Downstream CVC Facing	2	Cement and Mortar Mixers	85	88				0.40	84																			
Stilling Basin: Basin Steps	2	Surfacing Equipment	76	79	90	0.00	5070.00	0.40	75	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	46	0.00	970.00	64	0.00	400.00	72	0.00	8300.00	45
Stilling Basin: Basin Steps	1	Pumps	77	77				0.50	74																			
Stilling Basin: Basin Steps	2	Cranes	88	91				0.16	83																			
Stilling Basin: Basin Steps	2	Rough Terrain Forklifts	85	88				0.20	81																			
Stilling Basin: Basin Steps	2	Generator Sets	82	85				0.50	82																			
Stilling Basin: Basin Steps	1	Bore/Drill Rigs	84	84				0.20	77																			
Stilling Basin: Basin Steps	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Stilling Basin: Basin Steps	1	Skid Steer Loaders	80	80				0.40	76																			
Stilling Basin: Basin Steps	2	Cement and Mortar Mixers	85	88				0.40	84																			
Stilling Basin: Chute Blocks	2	Surfacing Equipment	76	79	90	0.00	5070.00	0.40	75	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	46	0.00	970.00	64	0.00	400.00	72	0.00	8300.00	45
Stilling Basin: Chute Blocks	1	Pumps	77	77				0.50	74																			
Stilling Basin: Chute Blocks	2	Cranes	88	91				0.16	83																			
Stilling Basin: Chute Blocks	2	Rough Terrain Forklifts	85	88				0.20	81																			
Stilling Basin: Chute Blocks	2	Generator Sets	82	85				0.50	82																			
Stilling Basin: Chute Blocks	1	Bore/Drill Rigs	84	84				0.20	77																			
Stilling Basin: Chute Blocks	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Stilling Basin: Chute Blocks	1	Skid Steer Loaders	80	80				0.40	76																			
Stilling Basin: Chute Blocks	2	Cement and Mortar Mixers	85	88				0.40	84																			
Stilling Basin: Dentated Sill	2	Surfacing Equipment	76	79	90	0.00	5070.00	0.40	75	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	46	0.00	970.00	64	0.00	400.00	72	0.00	8300.00	45
Stilling Basin: Dentated Sill	1	Pumps	77	77				0.50	74																			
Stilling Basin: Dentated Sill	2	Cranes	88	91				0.16	83																			
Stilling Basin: Dentated Sill	2	Rough Terrain Forklifts	85	88				0.20	81																			
Stilling Basin: Dentated Sill	2	Generator Sets	82	85				0.50	82																			
Stilling Basin: Dentated Sill	1	Bore/Drill Rigs	84	84				0.20	77																			
Stilling Basin: Dentated Sill	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Stilling Basin: Dentated Sill	1	Skid Steer Loaders	80	80				0.40	76																			
Stilling Basin: Dentated Sill	2	Cement and Mortar Mixers	85	88				0.40	84																			
Spillway Slab Construction: RCC Foundation Support Block	1	Bore/Drill Rigs	84	84	93	0.00	5070.00	0.20	77	53	0.00	9785.00	47	0.00	9035.00	48	0.00	7640.00	49	0.00	800.00	69	0.00	600.00	71	0.00	8300.00	48
Spillway Slab Construction: RCC Foundation Support Block	6	Pumps	77	85				0.50	82																			
Spillway Slab Construction: RCC Foundation Support Block	1	Plate Compactors	82	82				0.20	75																			
Spillway Slab Construction: RCC Foundation Support Block	1	Cranes	88	88				0.16	80																			
Spillway Slab Construction: RCC Foundation Support Block	4	Generator Sets	82	88				0.50	85																			
Spillway Slab Construction: RCC Foundation Support Block	3	Tractors/Loaders/Backhoes	80	85				0.40	81																			
Spillway Slab Construction: RCC Foundation Support Block	3	Rollers	85	90				0.20	83																			
Spillway Slab Construction: RCC Foundation Support Block	3	Rubber Tired Dozers	85	90				0.40	86																			
Spillway Slab Construction: RCC Foundation Support Block	5	Off-Highway Trucks	84	91				0.40	87																			
Spillway Slab Construction: Spillway Chute Slab	2	Surfacing Equipment	76	79	90	0.00	5070.00	0.40	75	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	47	0.00	800.00	66	0.00	600.00	69	0.00	8300.00	46
Spillway Slab Construction: Spillway Chute Slab	1	Pumps	77	77				0.50	74																			
Spillway Slab Construction: Spillway Chute Slab	2	Cranes	88	91				0.16	83																			
Spillway Slab Construction: Spillway Chute Slab	2	Rough Terrain Forklifts	85	88				0.20	81																			
Spillway Slab Construction: Spillway Chute Slab	2	Generator Sets	82	85				0.50	82																			
Spillway Slab Construction: Spillway Chute Slab	1	Bore/Drill Rigs	84	84				0.20	77																			
Spillway Slab Construction: Spillway Chute Slab	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Spillway Slab Construction: Spillway Chute Slab	1	Skid Steer Loaders	80	80				0.40	76																			
Spillway Slab Construction: Spillway Chute Slab	3	Cement and Mortar Mixers	85	90				0.40	86																			
Spillway Slab Construction: Stilling Basin Slab	2	Surfacing Equipment	76	79	90	0.00	5070.00	0.40	75	50	0.00	9785.00	44	0.00	9035.00	45	0.00	7640.00	47	0.00	800.00	66	0.00	600.00	69	0.00	8300.00	46
Spillway Slab Construction: Stilling Basin Slab	1	Pumps	77	77				0.50	74																			
Spillway Slab Construction: Stilling Basin Slab	2	Cranes	88	91				0.16	83																			
Spillway Slab Construction: Stilling Basin Slab	2	Rough Terrain Forklifts	85	88				0.20	81																			
Spillway Slab Construction: Stilling Basin Slab	2	Generator Sets	82	85				0.50	82																			
Spillway Slab Construction: Stilling Basin Slab	1	Bore/Drill Rigs	84	84				0.20	77																			
Spillway Slab Construction: Stilling Basin Slab	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Spillway Slab Construction: Stilling Basin Slab	1	Skid Steer Loaders	80	80				0.40	76																			
Spillway Slab Construction: Stilling Basin Slab	3	Cement and Mortar Mixers	85	90				0.40	86																			
Spillway Slab Construction: Zone B	2	Bore/Drill Rigs	84	87	83	0.00	5070.00	0.20	80	43	0.00	9785.00	37	0.00	9035.00	38	0.00	7640.00	39	0.00	800.00	59	0.00	600.00	62	0.00	8300.00	39
Spillway Slab Construction: Zone B	1	Skid Steer Loaders	80	80				0.40	76																			
Spillway Slab Construction: Zone B	1	Forklifts	85	85				0.20	78																			
Spillway Slab Construction: Zone C	2	Bore/Drill Rigs	84	87	83	0.00	5070.00	0.20	80	43	0.00	9785.00	37	0.00	9035.00	38	0.00	7640.00	39	0.00	800.00	59	0.00	600.00	62	0.00	8300.00	39
Spillway Slab Construction: Zone C	1	Skid Steer Loaders	80	80				0.40	76																			
Spillway Slab Construction: Zone C	1	Forklifts	85	85				0.20	78																			
Spillway Drains and Cleanouts: Wall Drains & Cleanouts	1	Excavators	85	85	82	0.00	5070.00	0.40	81	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	39	0.00	800.00	58	0.00	600.00	61	0.00	8300.00	38
Spillway Drains and Cleanouts: Wall Drains & Cleanouts	1	Skid Steer Loaders	80	80				0.40	76																			
Spillway Drains and Cleanouts: Longitudinal Drains & Cleanouts	1	Excavators	85	85	82	0.00	5070.00	0.40	81	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	39	0.00	800.00	58	0.00	600.00	61	0.00	8300.00	38
Spillway Drains and Cleanouts: Longitudinal Drains & Cleanouts	1	Skid Steer Loaders	80	80				0.40	76																			
Spillway Drains and Cleanouts: Transverse Drains & Cleanouts	1	Excavators	85	85	82	0.00	5070.00	0.40	81	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	39	0.00	800.00	58	0.00	600.00	61	0.00	8300.00	38
Spillway Drains and Cleanouts: Transverse Drains & Cleanouts	1	Skid Steer Loaders	80	80				0.40	76																			
Spillway Drains and Cleanouts: Drain Gravel	1	Tractors/Loaders/Backhoes	80	80	84	0.00	5070.00	0.40	76	44	0.00	9785.00	38	0.00	9035.00	39	0.00	7640.00	41	0.00	800.00	60	0.00	600.00	63	0.00	8300.00	40
Spillway Drains and Cleanouts: Drain Gravel	1	Rubber Tired Dozers	85	85				0.40	81																			
Spillway Drains and Cleanouts: Drain Gravel	1	Off-Highway Trucks	84	84				0.40	80																			
Spillway Drains and Cleanouts: Filter Sand	1	Tractors/Loaders/Backhoes	80	80	84	0.00	5070.00	0.40	76	44	0.00	9785.00	38	0.00	9035.00	39	0.00	7640.00	41	0.00	800.00	60	0.00	580.00	63	0.00	8300.00	40
Spillway Drains and Cleanouts: Filter Sand	1	Rubber Tired Dozers	85	85				0.40	81																			
Spillway Drains and Cleanouts: Filter Sand	1	Off-Highway Trucks	84	84				0.40	80																			
Surface Ditch from Landfill: Excavation	1	Excavators	85	85	82	0.00	5070.00	0.40	81	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	39	0.00	870.00	57	0.00	580.00	61	0.00	8300.00	38
Surface Ditch from Landfill: Excavation	1	Skid Steer Loaders	80	80				0.40	76																			
Surface Ditch from Landfill: Drop Structures	1	Excavators	85	85	82	0.00	5070.00	0.40	81	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	39	0.00	870.00	57	0.00	580.00	61	0.00	8300.00	38
Surface Ditch from Landfill: Drop Structures	1	Skid Steer Loaders	80	80				0.40	76																			
Surface Ditch from Landfill: Ditch Lining	1	Excavators	85	85	86	0.00	5070.00	0.40	81	46	0.00	9785.00	40	0.00	9035.00	41	0.00	7640.00	42	0.00	870.00	61	0.00	580.00	64	0.00	8300.00	41
Surface Ditch from Landfill: Ditch Lining	1	Skid Steer Loaders	80	80				0.40	76																			
Surface Ditch from Landfill: Ditch Lining	1	Cranes	88	88				0.16	80																			
Surface Ditch from Landfill: Ditch Lining	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Surface Ditch from Landfill: Ditch Lining	1	Forklifts	85	85				0.20	78																			
Downstream Apron: Concrete Apron	1	Forklifts	85	85	88	0.00	5070.00	0.20	78	47	0.00	9785.00	42	0.00	9035.00	42	0.00	7640.00	44	0.00	1300.00	59	0.00	150.00	78	0.00	8300.00	43
Downstream Apron: Concrete Apron	1	Generator Sets	82	82				0.50	79																			
Downstream Apron: Concrete Apron	1	Skid Steer Loaders	80	80				0.40	76																			
Downstream Apron: Concrete Apron	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Downstream Apron: Concrete Apron	1	Skid Steer Loaders	80	80				0.40	76																			
Downstream Apron: Concrete Apron	1	Cement and Mortar Mixers	85	85				0.40	81																			
Downstream Apron: Concrete Apron	1	Cranes	88	88				0.16	80																			
Downstream Apron: Concrete Apron	1	Pumps	77	77				0.50	74																			
Downstream Apron: Concrete Apron	1	Bore/Drill Rigs	84	84				0.20	77																			
Downstream Apron: Zone C	2	Bore/Drill Rigs	84	87	83	0.00	5070.00	0.20	80	43	0.00	9785.00	37	0.00	9035.00	38	0.00	7640.00	39	0.00	1300.00	55	0.00	150.00	74	0.00	8300.00	39
Downstream Apron: Zone C	1	Skid Steer Loaders	80	80				0.40	76																			
Downstream Apron: Zone C	1	Forklifts	85	85				0.20	78																			
Downstream Apron: Riprap Apron	1	Excavators	85	85	86	0.00	5070.00	0.40	81	46	0.00	9785.00	40	0.00	9035.00	41	0.00	7640.00	42	0.00	1300.00	57	0.00	150.00	76	0.00	8300.00	41
Downstream Apron: Riprap Apron	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Downstream Apron: Riprap Apron	2	Dumpers/Tenders	84	87				0.40	83																			
Downstream Apron: Riprap Bedding	1	Excavators	85	85	86	0.00	5070.00	0.40	81	46	0.00	9785.00	40	0.00	9035.00	41	0.00	7640.00	42	0.00	1300.00	57	0.00	150.00	76	0.00	8300.00	41
Downstream Apron: Riprap Bedding	1	Tractors/Loaders/Backhoes	80	80				0.40	76																			
Downstream Apron: Riprap Bedding	2	Dumpers/Tenders	84	87				0.40	83																			
Furnish and Install Electrical / Controls and Instrumentation	1	Forklifts	85	85	84	0.00	5070.00	0.20	78	43	0.00	9785.00	38	0.00	9035.00	38	0.00	7640.00	40	0.00	620.00	62	0.00	715.00	61	0.00	8300.00	39
Furnish and Install Electrical / Controls and Instrumentation	1	Skid Steer Loaders	80	80				0.40	76																			
Furnish and Install Electrical / Controls and Instrumentation	1	Excavators	85	85				0.40	81																			
Furnish and Install Aeration System	1	Forklifts	85	85	84	0.00	5070.00	0.20	78	43	0.00	9785.00	38	0.00	9035.00	38	0.00	7640.00	40	0.00	320.00	67	0.00	1330.00	55	0.00	8300.00	39
Furnish and Install Aeration System	1	Skid Steer Loaders	80	80				0.40	76																			
Furnish and Install Aeration System	1	Excavators	85	85				0.40	81																			
Part 1 Furnish and Install Erosion Control Measures	1	Skid Steer Loaders	80	80	82	0.00	5070.00	0.40	76	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	39	0.00	775.00	58	0.00	600.00	61	0.00	8300.00	38
Part 1 Furnish and Install Erosion Control Measures	1	Excavators	85	85				0.40	81																			
Part 2 Furnish and Install Erosion Control Measures	1	Skid Steer Loaders	80	80	82	0.00	5070.00	0.40	76	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	39	0.00	775.00	58	0.00	600.00	61	0.00	8300.00	38
Part 2 Furnish and Install Erosion Control Measures	1	Excavators	85	85				0.40	81																			
Part 3 Furnish and Install Erosion Control Measures	1	Skid Steer Loaders	80	80	82	0.00	5070.00	0.40	76	42	0.00	9785.00	36	0.00	9035.00	37	0.00	7640.00	39	0.00	775.00	58	0.00	600.00	61	0.00	8300.00	38
Part 3 Furnish and Install Erosion Control Measures	1	Excavators	85	85				0.40	81																			
Embankment Mitigation	4	Rubber Tired Dozers	85	91	92	0.00	5070.00	0.40	87	52	0.00	9785.00	46	0.00	9035.00	47	0.00	7640.00	49	0.00	775.00	68	0.00	600.00	71	0.00	8300.00	48
Embankment Mitigation	2	Excavators	85	88				0.40	84																			
Embankment Mitigation	2	Graders	85	88				0.40	84																			

						Receptor 1 - Irvine Regional Park					Receptor 2 - Residences Along Jamboree Road			Receptor 3 - Oak Canyon Park			Receptor 4 - Lakeview Park Camping Area			Receptor 5 - Sensitive Bird Species South of Dam			Receptor 6 - Sensitive Bird Species North of the Dam			Receptor 7 - Sensitive Bird Species Near Primary Staging Area		
Phase Name	Number per Day	Equipment Type	Typical Noise Level 50 ft from Source, dBA	Noise Level 50 ft Multiple Equipment, dBA	Construction Phase Noise Level, dBA	Hard/Soft	Distance	Utilization	Noise Level with Utilization	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level	Hard/Soft	Distance	Noise Level
Embankment Mitigation	2	Tractors/Loaders/Backhoes	80	83				0.40	79																			
Embankment Mitigation	4	Dumpers/Tenders	84	90				0.40	86																			
Embankment Mitigation	3	Plate Compactors	82	87				0.40	83																			
Note: A new phase was added to the Project. This phase includes the mitigated placement of the embankment. The type and amount of construction equipment that would be utilized during this new phase was obtained from the Applicant and the Project team.																												