

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				northerly in Grandview and terminates at its confluence with existing Ortega Channel.			
	Existing	Ortega Channel Lateral A-1	RCP	The construction of Ortega Channel Lateral A-1 was completed in 1992. Ortega Channel Lateral A-1 is a 48 in RCP whose upstream origin is at the intersection of Trabuco Drive and Laguna Avenue. The RCP extends northerly in Laguna Avenue until it terminates at its confluence with existing Ortega Channel Lateral A.	Diameter = 48 in	440	114
	Existing	Ortega Channel Lateral A-2	RCP	The construction of Ortega Channel Lateral A-2 was completed in 1994. The upstream origin of the lateral is near the intersection of Grandview Avenue and Lakeridge Road. From there, the 36 in RCP extends northerly in Grandview until its	Diameter = 36 in	140	85

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				confluence with the existing Ortega Channel Lateral A.			
C	Proposed	Line C	RCP	The upstream origin of Line C is at the intersection of Windward Way and Grand Avenue as a 48in RCP. From there, the 48 in RCP extends easterly in Grand Avenue, transitions into a 60 in, then a 78 in RCP. Near the intersection of Blanche Drive and Grand Avenue, the 78 in RCP transitions into a 90 in RCP and extends northerly towards Lake Elsinore.	Diameter = 48 in	903	108
			RCP		Diameter = 60 in	350	264
			RCP		Diameter = 78 in	330	354
			RCP		Diameter = 90 in	280	522
		Line C-1	RCP	The upstream origin of Line C-1 is near the intersection of Santa Rosa Drive and Grand Avenue as a 48 in RCP. The RCP then extends westerly in Grand Avenue and transitions into a 66 in RCP. Near Blanche	Diameter = 48 in	433	84
			RCP		Diameter = 66 in	155	90
			RCP		Diameter = 78 in	255	174

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				Drive, the 66 in RCP transitions into a 78 in RCP and confluences with the proposed Line C.			
D	Proposed	Line D	RCP	The upstream origin of Line D is at a point approximately 840 ft south of the southern end of Santa Rosa Drive as a 60 in RCP. From there, the RCP extends northerly toward Santa Rosa Avenue, continues in Santa Rosa Avenue, transitions into a 66 in, 72 in, and 78 in RCP, then a daylight/outlet structure with an approximate length of 105 ft, width of 40 ft, and a maximum depth of 6.5 ft.	Diameter = 60 in	1,313	780
			RCP		Diameter = 66 in	380	780
			RCP		Diameter = 72 in	340	780
			RCP		Diameter = 78 in	140	780
E	Proposed	Line E	RCP	The upstream origin of Line E is near the intersection of the future alignment of Union Avenue and Esther Street as a 54 in RCP. From there, the RCP	Diameter = 54 in	904	204
			RCP		Diameter = 72 in	224	336

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				would extend northerly in Esther Street and transition into a 72 in RCP as it continues northerly and parallel to Olive Street towards Lake Elsinore.			
F	Proposed	Line F Debris Basin	Debris basin	The Line F Debris Basin is located at a point approximately 1,090 ft southwest of the intersection of Evergreen Street and Union Avenue at the upstream origin of proposed Line F and has a volume of 2.6 ac-ft and approximate ROW of 1.9 ac. The debris basin consists of a 36 in outlet pipe and a spillway structure.	Storage = 2.6 ac-ft Approx. ROW = 1.9 ac		215
		Line F	RCP	The upstream origin of Line F is at a point approximately 1,090 ft southwest of the intersection of Evergreen Street and Union Avenue as a 42 in RCP. From there, the 42 in RCP extends	Diameter = 42 in	727	215
			RCP		Diameter = 60 in	1,218	465
			RCP		Diameter = 66 in	377	540

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				easterly toward a point located approximately 1,000 ft southeast of the intersection of Evergreen Street and Union Avenue. Near this point, the 42 in RCP transitions into a 60 in RCP, a 66 in RCP, and then a daylight/outlet structure with an approximate length of 75 ft, width of 25 ft, and a maximum depth of 4.5 ft as it extends northerly and parallel to Evergreen Street toward Lake Elsinore.			
		Line F-1	RCP	The upstream origin of Line F-1 is at a point approximately 370 ft southwest of the intersection of Akley and Gillette Street as a 42 in RCP. From there, the 42 in RCP extends northwesterly for approximately 1,040 ft to its point of confluence with the	Diameter = 42 in	1,037	195

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				proposed Line F.			
G	Proposed	Line G	RCP	The upstream origin of Line G is near the intersection of Deeble Entrance and Grand Avenue as a 54 in RCP. From there, the 54 in RCP transitions into a 66 in RCP and continues westerly along Grand toward Adelfa Street. Near Adelfa Street, the 66 in RCP transitions into a 72 in RCP, then a daylight structure/outlet with an approximate length of 65 ft, width of 15 ft, and maximum depth of 6.5 ft as it continues northeasterly toward Lake Elsinore.	Diameter = 54 in	312	138
			RCP		Diameter = 66 in	180	168
			RCP		Diameter = 66 –in	225	276
			RCP		Diameter = 72 in	330	330
		Line G Water Quality Basin	Water quality basin	A 4.0 ac-ft water quality basin with an approximate ROW of 1.9 ac is proposed at the southwest corner of the intersection of Grand Avenue and Adelfa Street. The water quality basin is located	Storage = 4.0 ac-ft Approx. ROW = 1.9 ac		

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				west of an existing development located at the southeast corner of the intersection of Adelfa Street and Grand Avenue. The water quality basin would require a connection to the existing development drainage system.			
H	Proposed	Line H (Adelfa Channel)	RCP	The upstream origin of Line H is at Gillette Street as a 48 in RCP. From there, the 48 in RCP extends easterly towards Zellar Street and then northerly in Zellar Street. At Cottrell Boulevard, the 48 in RCP transitions into a 66 in RCP and extends easterly in Cottrell Boulevard. At Landerville Boulevard, the 66 in RCP transitions into an 84 in RCP and continues easterly in Cottrell Boulevard and then northerly in Blackwell	Diameter = 48 in	819	375
			RCP		Diameter = 66 in	50	375
			RCP		Diameter = 66 in	791	500
			RCP		Diameter = 84 in	1,924	960
			RCP		Diameter = 84 in	600	1,000

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				Boulevard toward Lake Elsinore.			
		Line H-1	RCP	The upstream origin of Line H-1 is approximately 127 ft south of Cottrell Boulevard in Adelfa Street. From there, the 42 in RCP extends northerly in Adelfa Street until its confluence with the proposed Line H.	Diameter = 42 in	127	125
		Line H-2	RCP	The upstream origin of Line H-2 is near the intersection of Brand Street and Anthony Ave as a 60 in RCP. From there, the 60 in RCP extends easterly in Anthony Avenue and heads northerly in Landerville Boulevard. At Peeler Avenue, the 60 in RCP transitions into a 54 in RCP and continues in Landerville Boulevard until its confluence with the proposed Line H at Cottrell Boulevard.	Diameter = 60 in	464	460
			RCP		Diameter = 54 in	710	460

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
		Lakeland Village Channel Debris/Attenuation Basin	Debris/attenuation basin	The debris/attenuation basin is proposed approximately 350 ft south of the southernmost end of Blackwell Boulevard and has a volume of 97 ac-ft and an approximate ROW of 10.8 ac.	Storage = 97 ac-ft Approx. ROW = 10.8 ac		
			Basin outlet		Diameter = 66 in	100	515
		Lakeland Village Channel	Rectangular channel	The upstream origin of the existing Lakeland Village Channel begins near the southernmost end of Blackwell Boulevard at the proposed debris/attenuation basin outlet. From there, the existing channel extends parallel to Baldwin Boulevard along the geographic low until it terminates at Lake Elsinore. The existing Lakeland Village Channel would remain and improvements	Width = 12 ft Depth = 4 ft	557	515
			Nelson RCB Culvert		Width = 12 ft Depth = 4 ft	65	515
			Hayes RCB Culvert		Width = 12 ft Depth = 4 ft	65	515
			Bobrick RCB Culvert		Width = 12 ft Depth = 4 ft	65	515
			MacKay RCB Culvert		Width = 12 ft Depth = 4 ft	65	515
			Brightman RCB Culvert		Width = 12 ft Depth = 4 ft	65	515
			Sutherland RCB Culvert		Width = 12 ft Depth = 4 ft	65	515
			Raley RCB Culvert		Width = 12 ft Depth = 4 ft	65	515
			Grand RCB		Width = 12 ft	65	515

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
			Culvert	would be made to the existing undersized culverts at Nelson, Hayes, Bobrick, MacKay, Brightman, Sutherland, Raley, and Grand to meet the existing capacity. The existing channel downstream of Grand Avenue would be removed and replaced with a 12 ft wide by 4 ft deep rectangular channel sized to convey 515 cfs.	Depth = 4 ft		
			Rectangular channel		Width = 12 ft Depth = 4 ft	614	515
	Existing	Lakeland Village Channel	Rectangular channel	The construction of Lakeland Village Channel was completed in 1955. Lakeland Village Channel is a concrete-bottom rectangular channel with Elmwood fence and rock pill channel walls. The upstream origin is near Nelson Avenue. The channel then extends northerly along existing wash and terminates at	Width = 12 ft Depth = 4 ft	1,850	Information not available
			Rectangular channel		Width = 7 ft Depth = 4.5 ft	600	Information not available

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				Lake Elsinore.			
I	Proposed	Line I Debris Basin	Debris basin	The Line I Debris Basin is located at a point approximately 265 ft south of Hayes Street and upstream of proposed Line I. The debris basin has a volume of 3.0 ac-ft and an approximate ROW of 0.9 ac. The debris basin consists of a 36 in outlet pipe and a spillway structure.	Storage = 3.0 ac-ft Approx. ROW = 0.9 ac		220
		Line I	RCP	The upstream origin of Line I is at a point approximately 265 ft south of Hayes Street as a 36 in RCP. From there, a 36 in RCP extends northerly in Wood Street. At Broomall Avenue, the 36 in RCP transitions into a 48 in RCP and continues in westerly in Broomall Avenue. At Dowman Street, the 48 in RCP transitions into a 72 in RCP and continues	Diameter = 36 in	491	220
			RCP		Diameter = 48 in	429	220
			RCP		Diameter = 72 in	548	490
			RCP		Diameter = 72 in	761	650
			RCP		Diameter = 90 in	490	705

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				northerly in Dowman Street, easterly in Brightman Avenue, and then northerly in Lorimer Street. At Grand Avenue, the 72 in RCP transitions into a 90 in RCP and outlets into Lake Elsinore.			
		Line I-1	RCP	The upstream origin of Line I-1 begins near the intersection of Baldwin Boulevard and Brightman Avenue as a 42 in RCP. From there, the 42 in RCP extends easterly in Brightman Avenue and transitions into a 48 in RCP at Churchill Street. The 48 in RCP extends easterly in Brightman Avenue until its confluence with the proposed Line I at Lorimer Street.	Diameter = 42 in	585	60
			RCP		Diameter = 42 in	250	100
			RCP		Diameter = 48 in	240	150
			RCP		Diameter = 48 in	540	185
	Existing	Churchill Street Drainage Ditch	Drainage ditch	The upstream origin of the Churchill Street drainage ditch is located at Grand Avenue. From	Base width = 2.5 ft Approximate depth = 3 ft	609	Information not available

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				there, a drainage ditch with a base width of 2.5 ft, depth of approximately 3 ft, and sideslope of 1.5:1, located on the west and east sides of Churchill Street, extends northerly toward Lake Elsinore.	Sideslope = 1.5:1		
J	Proposed	Line J	RCP	The upstream origin of Line J is near the intersection of Brightman Avenue and Benner Street as a 54 in RCP. From there, the 54 in RCP extends westerly in Brightman Avenue toward Turner Street. At Turner Street, the 54 in RCP transitions into a 60 in RCP. The 60 in RCP continues northerly in Turner Street and transitions into a 5 ft wide by 5 ft deep RCB. At Grand Avenue, the RCB transitions into a 7 ft wide by 5 ft deep RCB. The 7 ft wide by 5 ft deep RCB then	Diameter = 54 in	556	126
			RCP		Diameter = 60 in	436	228
			RCB		Width = 5 ft Depth = 5 ft	212	228
			RCB		Width = 7 ft Depth = 5 ft	450	336

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				transitions into a daylight/outlet structure with an approximate length of 350 ft, width of 7 ft, and maximum depth of 5 ft as it extends northerly toward Lake Elsinore.			
K		Line K Debris Basin	Debris basin	Line K Debris Basin is located at the southernmost end of Ginger Lane, upstream of the proposed Line K, and has a volume of 7.4 ac-ft and an approximate ROW of 4.8 ac. The debris basin consists of a 36 in outlet pipe and spillway structure.	Storage = 7.4 ac-ft Approx. ROW = 4.8 ac		527
	Proposed	Line K	RCP	The upstream origin of Line K is near the southernmost end of Ginger Lane. From there, the 60 in RCP extends northerly in Ginger Lane towards Grand Avenue. At Grand Avenue, the 60 in RCP transitions into a 78 in RCP and extends	Diameter = 60 in	1,275	527
			RCP		Diameter = 78 in	617	527
			RCB		Width = 7 ft Depth = 5 ft	944	527

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				easterly in Turtle Dove Drive. The 78 in RCP transitions into a 7 ft wide by 5 ft deep RCB, then into a daylight structure/outlet with an approximate length of 200 ft, width of 7 ft, and maximum depth of 5 ft as it continues easterly in Turtle Dove Drive toward Lake Elsinore.			
		Line K -1	RCP	The upstream origin of Line K-1 begins near the intersection of Kathryn Way and Grand Avenue as a 36 in RCP. The 36 in RCP extends westerly in Grand Avenue and then easterly and parallel to Vail Street. Near Lake Elsinore, the 36 in RCP transitions into a daylight/outlet structure with an approximate length of 265 ft, width of 10 ft and maximum depth of 3 ft.	Diameter = 36 in	1297	63
L	Proposed	Line L	Rectangular channel	The upstream origin of Line L begins at a point	Width = 6 ft Depth = 5 ft	765	535

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
			RCB	approximately 696 ft south of Grand Avenue. From there, the 6 ft wide by 5 ft deep rectangular channel extends along the geographic low. At Grand Avenue, the open channel transitions into a 7 ft wide by 7 ft deep RCB. The RCB then transitions into a 15 ft wide by 5 ft deep, to a 18 ft wide by 10 ft deep, to a 15 ft wide by 8 ft deep, to a 60 ft wide by 5 ft deep rectangular channel, then a daylight/outlet structure with an approximate length of 180 ft, width of 60 ft, and maximum depth of 5 ft, and outlets into Lake Elsinore.	Width = 7 ft Depth = 7 ft	110	535
			Rectangular channel		Width = 15 ft Depth = 5 ft	1,071	535
			Rectangular channel		Width = 18 ft Depth = 10 ft	323	535
			Rectangular channel		Width = 18 ft Depth = 10 ft	120	1,453
			Rectangular channel		Width = 15 ft Depth = 8 ft	606	1,453
			Rectangular channel		Width = 15 ft Depth = 8 ft	240	1,573
M	Proposed	Line M	RCP	The upstream origin of Line M is near the southern end of Koves Road as a 60 in RCP.	Diameter = 60 in	1,365	480
			RCP		Diameter = 66 in	832	614

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
			RCP	The 60 in RCP extends northerly in Koves Road and transitions into a 66 in RCP. At Grand Avenue, the 66 in RCP transitions into a 72 in RCP and extends westerly in Grand Avenue towards Gregory Place. At Gregory Place, the 72 in RCP transitions into a 90 in RCP and continues northerly in Gregory Place. At the geographic low, the 90 in RCP transitions into a 15 ft wide by 8 ft deep and then a 15 ft wide by 10 ft deep rectangular channel and conflues with the proposed Line L.	Diameter = 72 in	369	653
			RCP		Diameter = 90 in	1,173	710
			RCP		Diameter = 90 in	178	869
			Rectangular channel		Width = 15 ft Depth = 8 ft	806	869
			Rectangular channel		Width = 15 ft Depth = 8 ft	264	901
			Rectangular channel		Width = 15 ft Depth = 10 ft	130	901

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
N	Proposed	Line N Debris Basin	Debris basin	Line N Debris Basin is located a point approximately 690 ft south of Morrell Lane, just upstream of the proposed Line N, and has a volume of 9.3 ac-ft and approximate ROW of 2.9 ac. The debris basin consists of a 36 in low-flow outlet pipe and spillway structure.	Storage = 9.3 ac-ft Approx. ROW = 2.9 ac		822
		Line N	RCP	The upstream origin of Line N is at a point approximately 690 ft south of Morrell Lane, just downstream of the proposed Line N debris basin. From there, the 66 in RCP extends northerly towards Morrell Lane. At Morrell Lane, the 66 in RCP transitions into a 90 in RCP and continues northerly in Morrell Lane towards Grand Avenue. At Grand Avenue, the 90 in RCP transitions into a 102 in	Diameter = 66 in	614	822
			RCP		Diameter = 90 in	1,316	1,018
			RCP		Diameter = 90 in	1,000	1,050
			RCP		Diameter = 102 in	600	1,066
			RCP		Diameter = 102 in	1,860	1,236
			RCB		Width = 12 ft Depth = 7 ft	812	1,293
			Rectangular channel		Width = 20 ft Depth = 7 ft	398	1,369

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				RCP. The 102 in RCP extends westerly in Grand Avenue and northerly in Stoneman Street. At approximately 1,859 ft into Stoneman Street, the 90 in RCP transitions into a 12 ft wide by 7 ft deep RCB. From there, the RCB transitions into a 20 ft wide by 7 ft deep open channel, then a daylight/outlet structure with an approximate length of 230 ft, width of 50 ft, and maximum depth of 4 ft as it extends toward Lake Elsinore.			
		Lateral N-1	RCP	The upstream origin of Lateral N-1 is at a point approximately 367 ft west of Stoneman Street as a 36 in RCP. From there, the 36 in RCP extends easterly until its confluence with proposed Line N.	Diameter = 36 in	1,152	130
		Line N	Water quality	Line N Water Quality	Storage = 5.9		

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
		Water Quality Basin	basin	Basin is located at the southwest corner of the intersection of Palomar and Stoneman Street. The water quality basin has an approximate volume of 5.9 ac-ft and an approximate ROW of 3.7 ac and would require a connection to the drainage system of the tract located west of the proposed water quality basin.	ac-ft Approx. ROW = 3.7 ac		
	Existing	Stoneman Street Channel	Trapezoidal channel	The construction of Stoneman Street Channel was completed after 1966. Stoneman Street is a paved trapezoidal channel and has a typical base width of 24 ft and 6:1 sideslopes. The upstream origin begins near Stoneman Street at a point approximately 1,015 ft south of Grand Avenue and extends northerly in Stoneman Street until it terminates	Base width = 24 ft Sideslopes = 6:1	1,011	Information not available

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
Watershed	Proposed/ Existing	Facility Name	Facility Type	Facility Description	Facility Size	Approximate Facility Length (ft)	100-Year Q (cfs)
				approximately 300 ft north of Grand Avenue.			
O	Proposed	Line O-10 Debris Basin	Debris basin	Line O-10 Debris Basin is located near the intersection of Skylark Drive and Cissna Place, just upstream of the proposed Line O-10 and has a volume of 9.1 ac-ft and an approximate ROW of 1.8 ac. The debris basin consists of a 36 in RCP outlet and spillway structure.	Storage = 9.1 ac-ft Approx. ROW = 1.8 ac		502
		Line O-10	RCP	The upstream origin of Line O-10 is near the intersection of Skylark Drive and Cissna Place as a 66 in RCP. From there, the 66 in RCP extends northerly in Skylark Drive. At Grand Avenue, the 66 in RCP transitions into a 78 in RCP and extends easterly in Grand Avenue. At the geographic low between Gill Lane and Corydon Road, the 78 in RCP	Diameter = 66 in	2134	502
			RCP		Diameter = 78 in	2276	532
			Rectangular channel		Width = 20 ft Depth = 10 ft	1,293	779
			Rectangular channel		Width = 14 ft Depth = 8 ft	30	779

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				transitions into a 20 ft wide by 10 ft deep open channel. Just before the connecting to the existing Palomar Channel, the 20 ft wide by 10 ft deep transitions into a 14 ft by 8 ft deep open channel.			
		Line O-20 Debris Basin	Debris basin	Line O-20 Debris Basin is located at a point approximately 1,060 ft south of Grand Avenue on Borchard Drive, just upstream of the proposed Line O-20, and has a volume of 6.7 ac-ft and an approximate ROW of 2.1 ac.	Storage = 6.7 ac-ft Approximate ROW = 2.1 ac		356
		Line O-20	RCP	The upstream origin of Line O-20 is at a point approximately 1,060 ft south of Grand Avenue on Borchard Drive. From there, the 60 in RCP extends northerly in Borchard Drive. At Grand Avenue, the 60 in RCP transitions into a 72 in RCP, extends	Diameter = 60 in	1,215	356
			RCP		Diameter = 72 in	592	356

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				westerly in Grand Avenue and connects to the existing 78 in RCP in Ontario Way. The downstream terminus of the existing 78 in RCP transitions into a proposed 7 ft wide by 7 ft deep RCB. The RCB then transitions into a daylight/outlet structure with an approximate length of 300 ft, width of 50 ft, and maximum depth of 5 ft as it outlets into Lake Elsinore.			
	Existing	Corydon Channel	RCB	The construction of Corydon Channel was completed after 2006. Corydon Channel is a rectangular concrete channel with an average width of approximately 28.7 ft and depth of 12.5 ft. The upstream origin begins at Union Street	Width = 2–14 ft Depth = 8 ft	80	1,174
Rectangular channel			Typical base width = 28.7 ft Depth = 12.5 ft		317	1,174	
RCB			Width = 2–14 ft Depth = 8 ft		101	1,174	

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				as a double 14 ft wide by 8 ft deep RCB, transitions into a rectangular channel extending parallel to Union Street, transitions into a double 14 ft wide by 8 ft deep RCB and terminates at the confluence with existing Palomar Channel.			
		Palomar Channel	RCB	The construction of Palomar Channel was completed after 2006. Palomar Channel is a stone riprap-lined channel. The upstream origin begins at Corydon Street as a triple 14 ft wide by 4.2 ft deep RCB and transitions into a trapezoidal channel with base width ranging from 22 to 24 ft, top width ranging from 70 to 76 ft, depth ranging from 12 to 13 ft respectively, and	Triple width = 14 ft Depth = 4.2 ft	160	1036
			Trapezoidal channel		Base width = 22 ft Top width = 70 ft Depth = 12 ft Sideslope = 2:1	706	2233
					Base width = 24 ft Top width = 76 ft Depth = 13 ft Sideslope =	1245	2374

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				sideslope of 2:1. The trapezoidal channel extends northerly along Old Coach Road. At Palomar Street, the trapezoidal channel transitions into a 2–14 ft wide by 8 ft deep RCB.	2:1		
			RCB		Double width = 14 ft Depth = 8 ft	95	2374
		78 in RCP in Ontario Way	RCP	Upstream origin begins at Grand Avenue then extends northerly in Ontario Way towards Lake Elsinore for approximately 2,800 ft.	Diameter = 78 in	2,800	516
P	Proposed	Channel A	Trapezoidal channel	The upstream origin of Channel A begins at the downstream terminus of Sedco-Bryant Street Storm Drain Stage 1. From there, the 40 ft wide by 6 ft deep trapezoidal channel extends westerly along the geographic low. At Corydon Road, the trapezoidal channel transitions into a 42 ft wide by 6 ft deep RCB. The 42 ft wide by 6 ft	Width = 40 ft Depth = 6 ft Sideslope = 2:1	1,573	1,115
			RCB		Width = 42 ft Depth = 6 ft	60	1,115

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				deep RCB would replace the existing 42 ft wide by 4 ft deep RCB.			
	EXISTING	Sedco-Bryant Street Storm Drain Stage 1	RCP	The construction of Bryant Street Storm Drain Stage 1 was completed in 2008. The Bryant Street Storm Drain Stage 1 is a 30 in RCP. The upstream origin begins near Palomar Street. The storm drain then extends southerly in Bryant Street for approximately 1,325 ft then northerly and parallel to Union Street for approximately 810 ft where it terminates at the confluence with proposed Channel A.	Diameter = 30 in	2,131	18
		Sedco-Bryant Street Storm Drain	RCP	The construction of Bryant Street Storm Drain was completed after 2006. Bryant Street Storm Drain is a system of RCPs ranging in size from 42 in to 66 in. The	Diameter = 42 in	1,027	245
			RCP		Diameter = 48 in	860	292
			RCP		Diameter = 54 in	677	304
			RCP		Diameter = 66 in	1,027	313

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				upstream origin is at the existing Bryant Street Debris Basin Outlet located at the southernmost end of Sweet Nectar Road. From there, the storm drain extends northerly in Sweet Nectar Road and continues northerly in Bryant Street to Grand Avenue. The storm drain then travels northerly in Grand Avenue for approximately 1,016 ft, where it terminates.	66 in		
			Drainage ditch Tract 23111	The upstream origin of the paved ditch begins at the downstream terminus of Sedco-Bryant Street Storm Drain at Grand Avenue. From there, the paved ditch extends northerly and parallel to Bryant Street until it confluences with the proposed Channel A and existing Sedco-	Typical base width = 4 ft Typical top width = 12 ft Typical depth = 2 ft	2667	Information not available

Table ES-2, Detailed Project Description

Proposed Lakeland Village MDP Facilities							
<i>Watershed</i>	<i>Proposed/ Existing</i>	<i>Facility Name</i>	<i>Facility Type</i>	<i>Facility Description</i>	<i>Facility Size</i>	<i>Approximate Facility Length (ft)</i>	<i>100-Year Q (cfs)</i>
				Bryant Street Storm Drain Stage 1.			
		Sedco-Bryant Street Debris Basin	Debris basin	The construction of Bryant Street Debris Basin was completed after 2005. The Bryant Street Debris Basin is located upstream of the existing Bryant Street Storm Drain at the southernmost end of Sweet Nectar Road and has a volume of 1.2 ac-ft.	Storage = 1.2 ac-ft		245

Source: District 2012

ft = foot/feet; cfs = cubic foot/feet per second; ac-ft = acre-foot/feet; ac = acre(s); in = inch(es); RCP = reinforced concrete pipe____; RCB = reinforced concrete box; ROW = right-of-way

ES-1.4.1 Project Objectives

A clear statement of Project objectives allows for the analysis of reasonable alternatives to the Project. Reasonable alternatives, both on and off site, must be analyzed per Section 15126.6 of the CEQA Guidelines. The Project is intended to meet the following objectives, based on the concerns of the Project area:

1. Reduce the level of risk from flooding and debris flows to existing/future development and infrastructure to below the 100-year level.¹
2. Provide all-weather access along Grand Avenue by conveying 100-year tributary flood flows below the traveled way.
3. Provide a master drainage plan at the lowest construction and right-of-way acquisition cost.
4. Economically manage debris to ensure that the 100-year design capacity is maintained during major storm events.
5. Consider, and where feasible, incorporate regional water quality facilities to mitigate for the impacts from existing development and to improve the water quality of Lake Elsinore.
6. Avoid or minimize the impacts to potentially sensitive areas.

ES-1.4.2 Other Public Agencies Who May Use This CEQA Document or Issue Permits for Portions of the MDP Facilities

In addition to CEQA compliance, the Project is also being reviewed for the need to obtain permits and approvals under other federal, state, and local laws that may be applicable to the construction and maintenance of the MDP facilities. While these other permits and approvals are independent of the Draft PEIR, they will be coordinated as closely as possible. The following is a list of the permits potentially required for the future construction and maintenance of the MDP facilities.

U.S. Army Corps of Engineers

A Clean Water Act Section 404 permit will be required if the construction or maintenance of the MDP facilities involves the discharge or dredged or fill material within waters of the United States or adjacent wetlands.

RWQCB, Santa Ana Region

Compliance with the National Pollutant Discharge Elimination System Construction General Permit will be required for grading activities of 1 acre or larger.

¹ The 1% annual chance flood event.

If a 404 permit is required, then a Section 401 Water Quality Certification will be required.

A Waste Discharge Permit will be required if ground dewatering is necessary during tunneling activities or if waste is discharged into waters of the state.

California Department of Fish and Wildlife

A Fish and Game Code Section 1600 Streambed Alteration Agreement will be required if a jurisdictional streambeds or stream banks will be altered.

California Department of Transportation

Encroachment permits for crossings of State Route 74 will be required. Water Pollution Control Plans will also be required.

County of Riverside

Encroachment permits will be required to construct the MDP facilities within road rights-of-way.

City of Lake Elsinore

Encroachment permits will be required to construct the MDP facilities within road rights-of-way.

City of Wildomar

Encroachment permits will be required to construct the MDP facilities within road rights-of-way.

ES-1.5 Summary of Environmental Impacts

Table ES-3, Summary of Environmental Impacts and Mitigation Measures, provides a summary of the impact analysis related to the Project. The table identifies a summary of the significant environmental impacts resulting from the Project pursuant to the CEQA Guidelines Section 15123(b)(1); for more detailed discussion, please see Section 4.0 of this document. Table ES-3 also lists the applicable mitigation measures related to identified significant impacts, as well as the level of significance after mitigation is identified. As stated in Section 2.0 of the Draft PEIR, the IS prepared and circulated with the NOP for public review of the Project concluded that the Project would not result in significant impacts to agricultural resources, land use/planning, mineral resources, population/housing, public services, and recreation; therefore, these resource areas are not addressed in the Draft PEIR and consequently not mentioned in Table ES-3.

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<i>Aesthetics</i>		
Substantial adverse effect on a scenic vista. / Significant	No feasible measures proposed.	Significant and unavoidable
Substantially degrade the existing visual character or quality of the site and its surroundings. / Significant	No feasible measures proposed.	Significant and unavoidable
<i>Air Quality</i>		
Violate any air quality standard or contribute substantially to an existing or projected air quality violation. / Significant	<p>AIR-1: For all MDP facilities, to minimize impacts related to particulate matter (PM₁₀ and PM_{2.5}) generation from construction activities, consistent with SCAQMD Rule 403, the District shall ensure that fugitive dust generated by grading and construction activities will be kept to a minimum, with a goal of retaining dust on the site. The contractor shall be required to comply with the applicable provisions of SCAQMD Rule 403 and implement appropriate fugitive dust control measures that include watering, stabilized construction access to reduce tracking of mud or dirt onto public roads, covering trucks hauling loose materials off site, and street sweeping.</p> <p>AIR-2: The following measures shall be adhered to by the District and its contractors during project grading and construction to reduce NO_x from construction equipment related to water quality basins (or an activity of similar magnitude):</p> <ul style="list-style-type: none"> a) All off-road construction equipment with engines rated at greater than 100 horsepower shall be equipped with California Air Resources Board certified Tier 3 or better engines. Records shall be maintained by the contractor and provided to the District to verify the horsepower, model year, and tier of all equipment engines. b) The contractor shall maintain construction equipment in tune per the manufacturer's specifications and make available maintenance records to the District upon request. 	Significant and unavoidable

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). / Significant	AIR-1: See above. AIR-2: See above.	Significant and unavoidable
Expose sensitive receptors to substantial pollutant concentrations. / Significant	AIR-1: See above.	Less than significant
<i>Biological Resources</i>		
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. / Significant	BIO-1: Suitable habitat has been identified within the Project boundary within the NEPSSA, CASSA, and Burrowing Owl Survey Areas (see Table 4.3-4). All MDP facility alignments and impact footprints shall be reviewed by the District, City of Lake Elsinore, or City of Wildomar during project design in order to determine if suitable habitat conditions have changed from the analysis contained herein. If no changes have occurred, and no suitable habitat is present for CASSA species, NEPSSA species, or burrowing owls, then no further surveys are needed. For the MDP facilities identified as having suitable habitat on Table 4.3-4, those facilities will require habitat assessments and focused surveys conducted by a qualified biologist during the appropriate season. If species are found to be present in the footprint, further measures as recommended by the District's, City of Elsinore's, or City of Wildomar's qualified biologist shall be taken to avoid or minimize adverse project effects to these species and their habitat. Per Section 6.3.2 of the MSHCP, the District, City of Lake Elsinore or City of Wildomar shall avoid 90% of the areas providing long-term conservation value for the target species. For burrowing owls, if owls are found in the impact area of an MDP facility, Species Objective 5 from the MSHCP shall be implemented. If	Less than significant

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>avoidance is not feasible, then individual projects will require the approval of a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options.</p> <p>BIO-2: In order to avoid violation of the MBTA and California Fish and Wildlife Code, the District, City of Lake Elsinore and/or City of Wildomar shall ensure that site-preparation activities (removal of trees and vegetation) shall be avoided, to the greatest extent possible, during the nesting season (generally February 1 to August 31) of potentially occurring native and migratory bird species. If site-preparation activities are proposed during the nesting/breeding season (generally February 1 to August 31), a pre-activity field survey shall be conducted by the District's, City of Lake Elsinore's or City of Wildomar's qualified biologist to determine if active nests of species protected by the MBTA or the California Fish and Wildlife Code are present in the construction zone. If active nests are not located within the a future MDP facility alignment and appropriate buffer (i.e., within 500 feet of an active listed species or raptor nest, 300 feet of other sensitive or protected bird nests (non-listed), or within 100 feet of sensitive or protected songbird nests), construction may be conducted during the nesting/breeding season. However, if active nests are located during the pre-activity field survey, no grading or heavy equipment activity</p>	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>shall take place within at least 500 feet of an active listed species or raptor nest, 300 feet of other sensitive or protected (under MBTA or California Fish and Wildlife Code) bird nests (non-listed), or within 100 feet of sensitive or protected songbird nests until the nest is no longer active.</p> <p>BIO-3: All future MDP facilities within the mapped survey area Burrowing owls shall have a qualified biologist conduct a pre-construction survey for resident burrowing owls within 30 days prior to commencement of grading and construction activities. If ground-disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls. Take of active nests shall be avoided. The pre-construction survey and any relocation activity will be conducted following accepted protocols and in coordination with the Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service.</p>	
<p>Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. / Significant</p>	<p>BIO-4: As Permittees to the MSHCP, the District, City of Lake Elsinore, or City of Wildomar shall ensure that the construction of each future MDP facility shall be compliant with Section 6.1.2 of the MSHCP and documented as such. For areas not excluded as artificially created, the MSHCP requires 100% avoidance of riparian/riverine areas. If avoidance is not feasible, then individual projects will require the approval of a DBESP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options, to offset the loss of functions and values as they</p>	<p>Less than significant</p>

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>pertain to the MSHCP Covered Species. If riparian vegetation will be impacted, then focused surveys for least Bell’s vireo, southwestern willow flycatcher, and western yellow-billed cuckoo will be required if suitable habitat is present. If avoidance is not feasible, then individual projects will require the approval of a DBESP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options.</p> <p>BIO-5: The District, City of Lake Elsinore, or City of Wildomar shall conduct Project-specific jurisdictional delineations to determine the limits of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board, and CDFW jurisdiction for the MDP facilities listed in Table 4.3-5. Impacts to jurisdictional waters will need to be verified by the corresponding regulatory agency. If impacts are anticipated, then jurisdictional water will either a) be completely avoided or b) necessary permits from requisite jurisdictions will be obtained. Obtaining permits may include mitigation for impacts, which would most likely include similar mitigation to that offered in a DBESP such as restoration, creation and enhancement of resources in exchange for impacts from the project (same as MM HYDRO-4). The District, the City of Lake Elsinore, or the City of Wildomar shall be responsible for obtaining required regulatory permits for any jurisdictional features prior to ground disturbance.</p>	
<p>Have a substantial adverse effect on biological resources involved within a jurisdictional water features as defined by federal, state, or local regulations (e.g.,</p>	<p>BIO-5: See above.</p>	<p>Less than significant</p>

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
Section 404 of the Clean Water Act, Section 401 of the Clean Water Act, Section 1602 of California Fish and Game Code, Porter-Cologne Water Quality Control Act, etc.) through direct removal, filling, hydrological interruption, or other means. / Significant		
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. / Less than significant	None required	N/A
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. / Less than significant	None required	N/A
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. / Significant	<p>BIO-1: See above.</p> <p>BIO-3: See above.BIO-6: MDP facilities located within MSHCP Criteria Cells will require submittal of a JPR to the RCA by the District, City of Lake Elsinore, or City of Wildomar as Permittees to the MSHCP for review and approval to illustrate that the MDP facility does not affect the Reserve Assembly, demonstrate consistency with Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2, and demonstrate that the appropriate surveys and applicable mitigation measures (refer to MM BIO-1 through MM BIO-5, and MM BIO-8) have been conducted.</p> <p>BIO-7: A biological resource assessment shall be prepared by a qualified biologist during the design phase of each MDP facility. The biological resource assessment shall include project location, project description, regulatory context, methods for field surveys including weather, dates, and time of surveys, mapping, and results of the biological assessment. Since the Project is located within the Western Riverside County MSHCP</p>	Less than significant

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>Plan Area, the biological resources assessment shall also include a MSHCP Consistency Analysis and Findings pursuant to Sections 6.1.2, 6.1.3, 6.3.2, and 6.1.4 of the MSHCP. For MDP facilities located within a Criteria Cell, the biological resource assessment shall be included as part of the JPR application.</p> <p>BIO-8: As Permittees to the MSHCP, the District, City of Lake Elsinore, or City of Wildomar shall ensure where appropriate, future MDP facilities shall be surveyed for vernal pools and/or fairy shrimp habitat and documented as such. For areas not excluded as artificially created, the MSHCP requires 100% avoidance of vernal pools and fairy shrimp habitat. If avoidance is not feasible, then individual projects will require the approval of a DBESP including appropriate mitigation to offset the loss of functions and values as they pertain to the MSHCP covered species. Vernal pools and other seasonal ponding depressions will also need to be evaluated for Riverside and Vernal pool fairy shrimp.</p>	
<i>Cultural Resources</i>		
<p>Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. / Significant</p>	<p>CUL-1: Prior to final design of flood control facilities, a cultural resources survey not within an existing road rights-of-way within all areas <u>previously designated as archaeologically and culturally sensitive</u> shall be completed by a qualified archaeologist <u>with participation by the Pechanga Band of Luiseño Indians (Pechanga) Tribe</u>. The survey shall include an updated site records search at the Eastern Information Center (EIC) to locate all previously recorded archaeological sites within the proposed construction area of Master Drainage Plan (MDP) facilities. The survey shall assess the</p>	<p>Less than significant</p>

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>direct and indirect impact of the MDP facility. Consultation with the Pechanga Band of Luiseño Indians (Pechanga Tribe) shall be initiated at the beginning of the survey to request additional site information and requested participation in the Project. If the record search indicates that the area has been surveyed and the study is not older than 5 years, a reconnaissance survey shall verify the condition and location of any previously recorded archaeological sites. If previously recorded sites are relocated during the survey, any changes in site condition shall be documented on appropriate State Department Parks and Recreation (DPR) forms, documented in the final technical study as described further in MM CUL-3 and submitted to the EIC and the Pechanga Tribe, (upon request). Any prehistoric or historic sites identified during the survey shall be recorded on appropriate DPR forms, discussed and described in the technical study, and submitted to the EIC and the Pechanga Tribe, (upon request).</p> <p>CUL-2: If the cultural resources survey determines that construction of an MDP facility would potentially impact a prehistoric or historic archaeological site and <u>consultation with the design engineers or other appropriate staff evidences that avoidance is not feasible</u>, the Riverside County Flood Control and Water Conservation District (District), City of Lake Elsinore, or City of Wildomar shall have a qualified archaeologist develop a testing program which <u>can</u> include the excavation of shovel test pits and/or test units, in consultation with the Pechanga Tribe. The testing program shall fully define the boundaries of surface and subsurface materials, evaluate the integrity and</p>	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>significance of the site and collect surface and subsurface artifacts. The program shall include mapping of all site features, artifacts, and excavation locations. Related laboratory work shall be conducted to treat the materials that are recovered from the archaeological investigations in consultation with the Tribe.</p> <p>If construction of an MDP facility would potentially impact a historic architectural resource structure because the MDP facility cannot be moved to avoid the resource, a survey of the structure by a qualified architectural historian shall be required to assess the structure's significance. A review of primary and secondary documentary sources, such as tax assessor records, historic fire insurance maps, city directories, aerial photographs, and local building permit files, shall be conducted. The assessment shall take into account any events with which the structure is associated, any persons who may have lived in the structure, distinctive architectural characteristics, methods of construction, or association with a notable architect/designer. The assessment by the architectural historian shall recommend to the District, the City of Lake Elsinore, or the City of Wildomar guidelines to assist in the maintenance, repair, and renovation of the resource, if applicable.</p> <p>CUL-3: For MDP facilities not within existing roads or road rights-of-way that have prepared a cultural resources survey per MM CUL-1 and MM CUL-2 described above, a technical report shall be prepared that documents all of the information gathered from the survey, data gathered from the testing program of prehistoric or historic archaeological</p>	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>sites, and consultation efforts with the Pechanga Tribe. The report shall identify any significant cultural resources and evaluate the potential impacts to those resources, providing an analysis based upon a regional, landscape viewpoint. If any site evaluated would be impacted by construction of a proposed component, additional project-specific mitigation measures shall be required to reduce the level of impacts. These mitigation measures shall include one of the following or a combination thereof:</p> <ul style="list-style-type: none"> a. Redesign of the proposed component to avoid the significant cultural resource, thereby avoiding significant impacts. b. A data recovery program to recover sufficient cultural materials to exhaust the research potential of the site such that construction shall no longer represent a significant impact. <p>CUL-4: A data recovery program shall be required whenever avoidance from construction of MDP facilities has been demonstrated to be infeasible. The data recovery program shall include the excavation of a sufficiently large percentage of a subsurface deposit such that the research potential of the deposit will be exhausted. Typically, a 5% sample of the deposit will be required; however, sample sizes in the data recovery program will be determined on a per site basis in consultation with the Pechanga Tribe. Laboratory analysis and research shall be conducted to catalog all recovered materials and interpret the data. Interpretation of the site <u>and any proposed destructive testing methods</u> shall take into account the traditional beliefs and customs of the Tribe.</p>	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>CUL-5: Indirect impacts may be identified where construction of MDP facilities would occur adjacent to a significant resource. In cases where construction activities are planned adjacent to known cultural resources, temporary fencing shall be placed around the site boundary by the Project archaeologist and the Pechanga Tribe prior to the start of construction activities to prevent access to the site. All temporary fencing shall be removed once the construction activities are completed.</p> <p>CUL-6: Ground disturbances associated with construction of proposed MDP facilities that contain recorded archaeological sites identified in the cultural records survey (MM CUL-1 and MM CUL-2) and archaeological sites identified in the technical report (MM CUL-3), regardless of significance, shall be monitored by a qualified archaeologist. Monitoring of construction activities shall ensure that any materials uncovered during construction activities are identified and adequately recorded. If the site is prehistoric, a local Native American observer shall also be retained by the District, the City of Lake Elsinore, or the City of Wildomar to monitor construction activities.</p> <p>Not all MDP facilities will be constructed by the District. For District-administered contracts, monitors from the <u>Pechanga Tribe</u> shall be allowed to monitor grading and ground-disturbing activities pursuant to the executed Master Cultural Resources Treatment and Tribal Monitoring Agreement between the Pechanga Tribe and the District. Additionally, the hired contractor would use the District's plans and</p>	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>specifications, which would include all the mitigation measures outlined in this section.</p> <p>For MDP facilities located in the cities of Lake Elsinore and Wildomar where those jurisdictions will have lead agency authority over the project constructing the MDP facility, the cities can utilize the mitigation measures outlined herein, or prepare its own California Environmental Quality Act (CEQA) document with mitigation measures and/or incorporation of conditions of approval in its project approval process that addresses monitoring activities within proximity to recorded archaeological sites.</p> <p>CUL-7: A pre-construction workshop shall be conducted by a qualified archaeologist for an MDP facility <u>that has required additional cultural resources studies per MM CUL-1 and MM CUI-2 described above and further mitigation measures not located within roads or roads right of way.</u> The workshop shall address the following: review the types of archaeological resources that may be uncovered; provide examples of common archaeological artifacts to examine <u>using replicas whenever possible</u>; describe why monitoring is required; identify monitoring procedures; describe what would temporarily stop construction and for how long; describe a reasonable worst-case resource discovery scenario (i.e., discovery of intact human remains or a substantial midden deposit); and describe reporting requirements and the responsibilities of the construction supervisor and crew. The workshop shall make attendees aware of prohibited activities, including unauthorized collecting of artifacts, which can result in impact on cultural</p>	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>resources <u>and which further may violate state and federal law, as well as applicable mitigation measures and conditions of approval for this Project.</u></p> <p>CUL-8: In the event cultural remainsresources are encountered during construction of any MDP facilities, work shall stop immediately until a qualified archaeologist is retained to determine the potential significance of the find, <u>if one is not already present.</u> If the remainsresources are prehistoric, the District, the City of Lake Elsinore, or the City of Wildomar shall contact the Pechanga Tribe and abide by the District and Pechanga Master Agreement related to treatment of resources unexpectedly uncovered. Measures per the Master Agreement between the District and the Pechanga Tribe shall include giving all cultural items, including ceremonial items and archaeological items to the Pechanga; waiving ownership of any items found in favor of the Pechanga; no photography shall be taken of any articles found; and no destructive testing shall occur on ceremonial and/or sacred objects and human remains unless permission is granted by the Pechanga Tribe.</p>	
<p>Cause a substantial adverse change in the significant of an archaeological resource pursuant to §15064.5. / Significant</p>	<p>CUL-1: See above.</p> <p>CUL-2: See above.</p> <p>CUL-3: See above.</p> <p>CUL-4: See above.</p> <p>CUL-5: See above.</p> <p>CUL-6: See above.</p> <p>CUL-7: See above.</p>	<p>Less than significant</p>

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<p>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. / Significant</p>	<p>CUL-8: See above.</p> <p>CUL-9: A literature search, and/or paleontological resources field survey (or surveys) by a certified paleontologist shall be completed prior to construction of any MDP facility that lie within the High or Undetermined potential sensitivity paleontological resource area. Relevant treatment for the site as recommended by the Society for Vertebrate Paleontology shall be applied, if needed. If the results of such survey (or surveys) identify the presence of potentially significant paleontological resources, avoidance or other appropriate measures (such as excavation, analysis, and interpretation of resources) potentially leading to curation in perpetuity in a facility that meets the standards of the State of California Guidelines for the Curation of Archaeological Collections and 36 CFR 79, shall be implemented.</p> <p>CUL-10: In the unlikely event that paleontological resources such as vertebrate, plant, or invertebrate fossils are discovered during construction or site disturbance, work shall stop within the area of the discovery and the District, along with possibly the County of Riverside, the City of Lake Elsinore, or the City of Wildomar Planning Department, shall be contacted so that a qualified paleontologist can be consulted to determine the extent or quality of the find and make recommendations for further action, if necessary.</p>	<p>Less than significant</p>
<i>Geology and Soils</i>		
<p>Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction. / Significant</p>	<p>GEO-1: In order to ensure individual MDP facilities are placed on the least unstable areas, or designed in a way to address any unstable geologic conditions (i.e., liquefaction), grading and earthwork construction shall conform to <i>Standard Specifications for</i></p>	<p>Less than significant</p>

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p><i>Public Works Construction</i> (the “Greenbook”) and grading specifications shall be developed by a geotechnical consultant hired by the Riverside County Flood Control and Water Conservation District (District), the City of Lake Elsinore, or the City of Wildomar. Typical earthwork considerations include:</p> <ul style="list-style-type: none"> • Remedial grading requirements for any given site are determined based on a site-specific geotechnical investigation to provide stable ground for any proposed structures. Generally, the upper weathered formational materials or loose soils are removed until dense, relatively “non-compressible” soils (alluvium or Formation materials) are encountered. • Topsoil and vegetation layers, root zones, and similar surface materials are typically not suitable for reuse as engineered fill and are normally stripped and either stockpiled for reuse in landscape areas or removed from the site. Most alluvial materials and bedrock materials are considered suitable for reuse as compacted engineer fills. However, excavations in the bedrock materials may generate oversize materials that are difficult to handle in engineered fills. Typically, cobbles and boulders larger than 6 inches in diameter are not placed in structural fill under settlement-sensitive improvements and may require special handling and grading procedures. <p>GEO-2: In order to provide a safe and stable earthfill dam that would be associated with debris basins or water quality basins, during all phases of construction and operation, the following criteria must be met in accordance with the U.S. Department of the Interior, Bureau of Reclamation, <i>Design of Small Dams</i> (BOR 1987):</p> <ol style="list-style-type: none"> a) The embankment, foundation, 	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>abutments, and reservoir rim must be stable and must not develop unacceptable deformations under all loading conditions brought about by construction of the embankment, reservoir operation, and earthquake.</p> <p>b) Seepage flow through the embankment, foundation, abutments, and reservoir rim must be controlled to prevent excessive uplift pressures; piping; instability; sloughing; removal of material by solutioning; or erosion of material into cracks, joints, or cavities. The amount of water lost through seepage must be controlled so that it does not interfere with planned Project functions.</p> <p>c) The reservoir rim must be stable under all operating conditions to prevent the triggering of a landslide into the reservoir that could cause a large wave to overtop the dam.</p> <p>d) The embankment must be safe against overtopping or encroachment of freeboard during occurrence of the IDF (inflow design flood) by the provision of sufficient spillway and outlet works capacity.</p> <p>e) Freeboard must be sufficient to prevent overtopping by waves.</p> <p>f) Camber should be sufficient to allow for settlement of the foundation and embankment, but not included as part of the freeboard.</p> <p>g) The upstream slope must be protected against wave erosion, and the crest and downstream slope must be protected against wind and rain erosion.</p> <p>GEO-3: In order to address risk of seismic</p>	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>activities such as land spreading or slope instability, future proposed MDP facilities will be assessed by the District, the City of Lake Elsinore, or the City of Wildomar through a qualified geologist to determine whether they are located in areas prone to these types of seismic activities. If so, a geotechnical report (field exploration and borings) shall be prepared during the design phase. The geotechnical report shall include a site-specific seismic evaluation to determine the intensity of ground shaking on the specific MDP facility. MDP facilities within a liquefaction hazard zone per the Riverside County General Plan shall also be evaluated for liquefaction-induced settlement. An analysis of lateral spreading affects to properties adjacent to the lake edge and where future MDP facilities are proposed as well as a review to determine whether the potential for landsliding or slope instability exists shall be performed by a qualified geologist and provided to the District during the design phase.</p> <p>Additionally, future site-specific geologic review shall be performed to determine whether the potential for land sliding or slope instability exist, especially for MDP facilities located on the higher elevations of the Project boundary.</p>	
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving landslides or mudflows.	<p>GEO-2: See above.</p> <p>GEO-3: See above.</p>	Less than significant
Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.	<p>GEO-1: See above.</p> <p>GEO-2: See above.</p> <p>GEO-3: See above.</p>	Less than significant
<i>Greenhouse Gas Emissions</i>		
Generate greenhouse gas emissions,	AIR-2: See above.	Less than

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
either directly or indirectly, that may have a significant impact on the environment. / Less than significant		significant
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. / Less than significant	AIR-2: See above.	Less than significant
<i>Hazards and Hazardous Materials</i>		
Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment. / Significant	<p>HAZ-1: As part of the final design of each Master Drainage Plan (MDP) facility, the design engineer or designee shall check the MDP facility alignments for any properties or nearby properties listing on the most recent Hazardous Waste and Substance List provided by the Riverside County Department of Environmental Health pursuant to Section 65962.5 of the Government Code. Also, before proposed MDP facilities are constructed, the proponent should generate a report from Enviromapper, GeoTracker, and EnviroStor to ensure no new waste sites with reported releases have been documented within proximity to the facilities. If the location of said MDP facility is on the Hazardous Waste and Substances List, Enviromapper, GeoTracker, or EnviroStor, avoidance of that property or properties will be the first consideration; if avoidance is infeasible, MM HAZ-2 shall be implemented.</p> <p>HAZ-2: If the selected MDP facility traverses a site listed on the Hazardous Waste and Substances List, Enviromapper, GeoTracker, or EnviroStor, and avoidance is not feasible or if there are other indications that a site could be contaminated, a Phase I Environmental Site Assessment (ESA) for the MDP facility will be prepared by a consultant hired by the Riverside County Flood Control and Water Conservation District (District), the City of Lake Elsinore, or the City of Wildomar. If the Phase I</p>	Less than significant

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>ESA prepared pursuant to the current ASTM standards identifies possible contamination along the MDP facility alignment, then all recommended subsurface investigation measures listed in the Phase I ESA will be implemented by the District, the City of Lake Elsinore, or the City of Wildomar. Based on subsurface investigations characterizing subsurface contamination, remediation measures (such as excavation of contaminated soil, bioremediation, or soil-vapor extraction), shall be implemented for the applicable MDP facility or an alternative facility alignment will be chosen. The District, the City of Lake Elsinore, or the City of Wildomar shall be responsible for reviewing and complying with the recommendations of the Phase I ESA.</p> <p>HAZ-3: All environmental investigation and/or remediation shall be conducted under a work plan approved by jurisdictional regulatory agencies overseeing hazardous waste cleanups until the applicable regulatory standard is met.</p> <p>HAZ-4: Prior to any excavation, grading activities, or soil removal on known contaminated sites, or if contaminated soil (i.e., soil with visible sheen or detectable odor) is encountered during construction, a complete characterization of the soil will be conducted by qualified personnel hired by the District, the City of Lake Elsinore, or the City of Wildomar Prior to the disposal of excavated materials, soil sampling shall be conducted in accordance with the County of Riverside Department of Environmental Health Site Assessment and Cleanup, Corrective Action Guidelines document (County of Riverside 2007). The guidelines set forth the number of samples to be</p>	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>collected per volume of stockpiled soil (i.e., two random samples from stockpiles less than 10 cubic yards); sample analytical methods depend on the current and historical property use and known contamination. If the soil is contaminated, it shall be properly disposed of according to California's Land Disposal restrictions (22 CCR 19). If site remediation involves the removal of contamination, then contaminated material shall be transported off site by a licensed handler/hauler to a licensed hazardous waste disposal facility.</p> <p>HAZ-5: If during construction of a specific MDP facility, soil and/or groundwater contamination is suspected, construction in the area of the suspected contamination shall cease and appropriate health and safety measure shall be implemented. The construction contractor shall contact the respective jurisdictional enforcement agency (i.e., City of Lake Elsinore, City of Wildomar, County of Riverside) to obtain the necessary information on appropriate measures and their implementation. The measures recommended by the applicable enforcement agency will be implemented.</p>	
<i>Hydrology and Water Quality</i>		
<p>Violate or conflict with any adopted water quality standards or waste discharge requirements. / Significant</p>	<p>HYDRO-1: During any construction or maintenance activities that require ground disturbance for future Master Drainage Plan (MDP) facilities, the Riverside County Flood Control and Water Conservation District (District), County of Riverside, and Cities of Lake Elsinore and Wildomar shall comply with the current statewide Construction General Permit for projects resulting in land disturbances of 1 acre. Where projects result in disturbance to less than 1 acre of land, the District, County of Riverside, and</p>	<p>Less than significant</p>

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>Cities of Lake Elsinore and Wildomar shall comply with the local grading ordinance and install best management practices (BMPs) to ensure that sediment is not transported beyond the project limits or into sensitive areas such as wetlands and water bodies. A De Minimus discharge shall be obtained from the RWQCB when required for dewatering activities.</p> <p>HYDRO-2: Future landscape maintenance activities using pesticides (i.e., herbicides or rodenticides) around the MDP facilities shall be phosphorus and nitrogen free or be in conformance with the phosphorus and nitrogen Total Maximum Daily Loads (TMDLs) outlined in the 303(d) list for Lake Elsinore.</p> <p>HYDRO-3: Prior to construction of future MDP facilities that may be located in waters of the United States or waters of the state, the District, County of Riverside, and Cities of Lake Elsinore and Wildomar shall obtain all necessary permits to comply with the federal Clean Water Act (CWA) state discharge permitting requirements, 404 Permits, 401 Permits, 1602 Permits, and California Porter-Cologne Water Quality Control Act permit. Restoration, enhancement, or creation may be required as a result of these regulatory permits and could include such activities on MDP facilities (such as within basins) or could occur off site, but within the same watershed. Mitigation ratios shall be determined at the time specific MDP facilities are proposed for construction in the future.</p>	
<p>Result in substantial discharges of typical stormwater pollutants (e.g., sediment from construction activities, hydrocarbons and metals from motor vehicles, nutrients and pesticides from landscape maintenance</p>	<p>HYDRO-1: See above.</p>	<p>Less than significant</p>

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
activities, metals or other pollutants from industrial operation) or substantial changes to surface water quality including, but not limited to, temperature, dissolved oxygen, pH, or turbidity. / Significant		
Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). / Less than significant	None required.	N/A
Substantially alter the existing drainage pattern of the site or area, including through the alteration of a watercourse or wetland, in a manner which would result in substantial erosion or siltation on- or off-site.	HYDRO-1: See above. HYDRO-4: Project-specific jurisdictional delineations will be required to determine the limits of the U.S. Army Corps of Engineers (ACOE), RWQCB, and California Department of Fish and Wildlife (CDFW) jurisdiction for the MDP facilities listed in Table 4.3-5. Impacts to jurisdictional waters will need to be verified by the corresponding regulatory agency. If impacts are anticipated, then either a) jurisdictional water will be completely avoided or b) necessary permits from requisite jurisdictions will be obtained. Obtaining permits may include mitigation for impacts, which would most likely include similar mitigation to that offered in a Determination of Biological Equivalent or Superior Preservation (DBESP) such as restoration, creation and enhancement of resources in exchange for impacts from the project (same as MM BIO-5).	Less than significant

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.	<p>HYDRO-1: See above.</p> <p>HYDRO-4: See above.</p>	Less than significant
Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems. / Less than significant	None required.	N/A
Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. / Less than significant	None required.	N/A
Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow. / Less than significant	None required	N/A
<i>Noise</i>		
Expose people to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. / Significant	<p>NOISE-1: In order to mitigate the noise impact associated with construction noise in the City of Lake Elsinore, and in order to address the City of Lake Elsinore’s noise criteria related to construction noise, the Riverside County Flood Control and Water Conservation District (District) or entity constructing a Master Drainage Plan (MDP) facility within the City of Lake Elsinore shall ensure or require prior to grading or demolition permit issuance that:</p> <ul style="list-style-type: none"> • All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers. • Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible. Unattended construction vehicles shall not idle for more than 5 minutes when located 	Significant and unavoidable

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>within 200 feet from residential properties.</p> <ul style="list-style-type: none"> • During construction, stationary construction equipment shall be placed such that emitted noise is directed away from or shielded from the residences. • During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors. A plan should be provided to the City of Lake Elsinore identifying the staging areas prior to issuance of a construction permit. <p>Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners and residents to contact the job superintendent if necessary.</p>	
Expose people to or generate excessive ground-borne vibration or ground-borne noise levels. / Less than significant	None required.	N/A
Cause a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project. / Significant	NOISE-1: See above.	Significant and unavoidable
<i>Transportation/Traffic</i>		
Conflict with an adopted plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. / Significant	TRANS-1: To reduce traffic congestion or disruption that may occur during individual Master Drainage Plan (MDP) facility construction or maintenance activities, especially the MDP facilities located within existing road alignments, prior to construction, the Riverside County Flood Control and Water Conservation District (District), City of Lake Elsinore, City of Wildomar, or developers shall prepare a Traffic Control Plan. The Traffic Control Plan will detail and coordinate all traffic movement through the project area and will be implemented throughout project construction. The Traffic Control Plan will also ensure that private property and emergency access will be maintained at all times.	Less than significant

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>Methods to maintain access may include, but are not limited to: temporary bridge crossings (i.e., steel plates or structural design bridges) for all driveway entrances to be closed to vehicular access for any period exceeding 4 hours; use of construction signs, barricades and delineators; and the use of flaggers during construction. All work proposed by the District, City of Lake Elsinore, City of Wildomar, or developers, within state right-of-way requires lane and shoulder closure charts. Also, all roadway features such as signs, pavement delineation, roadway surface, etc. within the State right-of-way must be protected, maintained in a temporary condition, and/or restored by the District, City of Lake Elsinore, City of Wildomar, or developers. The Traffic Control Plan shall be prepared in accordance with the California Department of Transportation (Caltrans) <i>Manual of Traffic Controls for Construction and Maintenance Work Zones</i>. If work requires complete road closure, then the public shall be notified within 10 days of that closure.</p> <p>TRANS-2: In order to address potential impacts along State Route (SR) 74, the District, City of Lake Elsinore, City of Wildomar, or developer shall obtain an Encroachment Permit from the Caltrans for any project activities within SR 74 including but not limited to alterations to existing improvements and conform to current Caltrans design standards and construction practices.</p> <p>TRANS-3: In order to ensure that construction activities within SR 74 conform to current Caltrans design standards and construction practices, prior to encroachment permit issuance, the District, City of Lake Elsinore, City of Wildomar, or</p>	

Table ES-3, Summary of Environmental Impacts and Mitigation Measures

Threshold / Impact Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	developers shall submit street, grading and drainage construction plans to Caltrans for review and approval.	
Conflict with an adopted congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the appropriate congestion management agency for designated roads or highways. / Significant	TRANS-1: See above.	Less than significant
Conflict with adopted policies, plans, or programs regarding public transit, bicycle, pedestrian facilities, or other alternate transportation or otherwise decrease the performance or safety of such facilities. / Significant	TRANS-1: See above.	Less than significant
<i>Utilities</i>		
Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? / Less than significant	None required.	N/A

ES-1.6 Areas of Controversy/Issues to Be Resolved

Section 15123(b) (2) of the CEQA Guidelines requires that areas of controversy known to the lead agency must be stated in the EIR summary. Issues of interest to the public and public agencies were identified during the 30-day public comment period of the IS and NOP. A public scoping meeting was held at the District on September 28, 2011.

Written comments from agencies and interested parties in response to the NOP were received from the following:

- Native American Heritage Commission
- California Department of Transportation
- California Department of Fish and Wildlife
- South Coast Air Quality Management District
- Linda Ridenour.

The IS, NOP, distribution list, and comment letters received during the NOP review period are included in Appendix A of this Draft PEIR.

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR identify issues to be resolved; this includes the choice among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved for the Project include decisions by the District, the County of Riverside, and the Cities of Lake Elsinore and Wildomar as to whether this Draft PEIR adequately describes the potential environmental impacts of the Project, the recommended mitigation measures should be adopted or modified, additional mitigation measures need to be applied, the Project should or should not be approved as proposed, or the Project should be modified based on the alternatives considered in this Draft PEIR.

ES-1.7 Summary of Project Alternatives

Section 15126.6 of the CEQA Guidelines identifies the parameters within which consideration and discussion of alternatives to the Project should occur. As stated in this section of the guidelines, alternatives must focus on those that are reasonably feasible and that attain most of the basic objectives of the Project. Each alternative must be capable of avoiding or substantially lessening any significant effects of the Project. During the Draft PEIR analysis, impacts to greenhouse gas emissions and utilities and service systems were found to be less than significant and no mitigation measures were necessary. With mitigation incorporated, impacts to biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and traffic remain less than significant. Even with mitigation incorporated, impacts to air quality and noise were found to be significant and unavoidable for construction emissions only. Impacts related to aesthetics were found to be significant and there are no feasible mitigation measures that could be implemented that would reduce or minimize impacts to scenic resources. Cumulatively, the Draft PEIR will demonstrate that the Project does not contribute to significant impacts to biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, transportation and traffic, and utilities and service systems. However, cumulative impacts to aesthetics and noise are considered significant and a Statement of Overriding Conservation is required. The rationale for selecting the alternatives to be evaluated and a discussion of the “No Project” alternative are also required, per Section 15126.6.

This Draft PEIR includes an evaluation of the following alternatives:

- Alternative 1 – No Build Alternative
- Alternative 2 – Upsizing Facilities
- Alternative 3 – Debris Basins and Floodplain Buyout.

Alternative 1 is the **No Project Alternative**; thus, there are no new facilities proposed under this alternative. For this alternative, flood protection is only provided by the existing District and non-District maintained drainage facilities within the Lakeland Village area. Existing drainage facilities include Lime Street Channel, Ortega Channel Lateral A-1 Debris Basin, Ortega Channel, Ortega Channel Lateral A, Ortega Channel Lateral A-1, Ortega Channel Lateral A-2, Lakeland Village Channel, Churchill Street Drainage Ditch, Stoneman Street Channel, Corydon Channel, Palomar Channel, Ontario Way Storm Drain, Tract 23111 Drainage Ditch, Sedco–Bryant Street Storm Drain Stage 1, and Sedco–Bryant Street Storm Drain and Debris Basin.

Alternative 2, the **Upsizing Facilities Alternative**, consists of a network of open channels and storm drains large enough to convey bulk flows originating from the Santa Ana Mountains. Alternative 2 proposes 21 underground storm drains (approximately 45,000 linear feet), four open channels (approximately 9,000 linear feet), two debris basins, and one debris/detention basin. The proposed storm drains and open channels are sized to convey “bulked flows” (i.e., flows that include both stormwater runoff and its associated debris load) to Lake Elsinore. The two debris basins are proposed upstream of the existing Ortega and Lime Street Channels to capture sediment before entering the channels. These channels historically have been subject to debris accumulation and frequent maintenance due to relatively flat slopes. A debris/detention basin is proposed upstream of the existing Lakeland Village Channel to capture debris and attenuate flow during a 100-year storm event.

Alternative 2 also proposes improvements to the following existing facilities:

- Lime Street Channel – Floodwalls (2 feet high) would be added to the top of the channel. The existing 48-inch diameter pipe along Hill Street would be replaced with a 72-inch pipe.
- Ortega Channel – Floodwalls (2 feet high) would be added to the portion of Ortega Channel downstream of Grand Avenue.
- Lakeland Village Channel – The existing double 36-inch culverts located at Nelson Avenue, Bobrick Avenue, MacKay Avenue, Brightman Avenue, Sutherland Avenue, Raley Avenue, and Grand Avenue would be replaced with a 12-foot by 4-foot reinforced concrete box.

Alternative 3, the **Debris Basins plus Floodplain Buyout Alternative**, is a drainage system that consists of open channels, storm drains, and debris basins. Alternative 3 proposes 17 underground storm drains (approximately 37,000 linear feet), four open channels (approximately 7,000 linear feet), and eight debris basins. Like Alternative 2, Alternative 3 includes improvements to the existing Lime Street, Ortega, and Lakeland Village Channels, such as flood walls and larger culverts. Alternative 3 also proposes the acquisition of properties and the removal of over 200 structures located within the FEMA mapped SFHAs. This alternative also proposes enlarging the existing culverts located along Grand Avenue, including those located within the SFHAs, to convey the 100-year storm flow.

Table ES-4, Comparison of Alternatives, provides a summary of the alternatives impact analysis considered in the Draft PEIR and identifies the areas of potential environmental effects per CEQA, and ranks each alternative as better, the same, or worse than the proposed Project with respect to each issue area that was found to have potentially significant impacts. The analysis comparing the impacts of the alternatives with the preferred alternative is discussed further in Section 8.0 of this Draft PEIR.

Table ES-4, Comparison of Alternatives

Environmental Issue Area	Proposed Project	Alternative 1 – No Project	Alternative 2 – Upsizing Facilities	Alternative 3 – Debris Basins and Floodplain Buyout
<i>Aesthetics – Scenic resources</i>	Significant, no feasible mitigation proposed	Better	Slightly better	Slightly better
<i>Air Quality – Air quality standard</i>	Significant even with mitigation	Better	Better	Better
<i>Air Quality – Cumulatively considerable contribution to a criteria pollutant</i>	Significant even with mitigation	Better	Better	Better
<i>Air Quality – Sensitive receptors</i>	Less than significant with mitigation incorporated	Better	Same	Same
<i>Biological Resources – Candidate, sensitive, or special-status species</i>	Less than significant impacts with mitigation incorporated	Slightly better	Same	Worse
<i>Biological Resources – Riparian habitat</i>	Less than significant impacts with mitigation incorporated	Better	Same	Better
<i>Biological Resources – Jurisdictional water features</i>	Less than significant impacts with mitigation incorporated	Better	Same	Better
<i>Biological Resources – Native resident or migratory fish or wildlife species</i>	Less than significant	Same	Same	Same
<i>Biological Resources – Local policies or ordinances</i>	Less than significant	Slightly better	Same	Same
<i>Biological Resources – Conflict with the provisions of an adopted habitat conservation plan</i>	Less than significant impacts with mitigation incorporated	Better	Same	Same

Table ES-4, Comparison of Alternatives

Environmental Issue Area	Proposed Project	Alternative 1 – No Project	Alternative 2 – Upsizing Facilities	Alternative 3 – Debris Basins and Floodplain Buyout
<i>Cultural Resources – Historical resources</i>	Less than significant impacts with mitigation incorporated	Better	Same	Same
<i>Cultural Resources – Archaeological resources</i>	Less than significant impacts with mitigation incorporated	Better	Same	Same
<i>Cultural Resources – Paleontological resources</i>	Less than significant impacts with mitigation incorporated	Better	Same	Same
<i>Geology and Soils – Seismic-related ground failure</i>	Less than significant impacts with mitigation incorporated	Slightly better	Same	Same
<i>Geology and Soils – Landslides or mudflows</i>	Less than significant impacts with mitigation incorporated	Worse	Same	Same
<i>Geology and Soils – On- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse</i>	Less than significant impacts with mitigation incorporated	Better	Same	Same
<i>Hazards and Hazardous Materials – List of hazardous materials sites</i>	Less than significant impacts with mitigation incorporated	Better	Same	Same
<i>Hydrology and Water Quality – Violate adopted water quality standards or waste discharge requirements</i>	Less than significant impacts with mitigation incorporated	Worse	Worse	Worse
<i>Hydrology and Water Quality – Substantial discharges of typical stormwater pollutants or substantial changes to surface water quality</i>	Less than significant impacts with mitigation incorporated	Worse	Worse	Worse

Table ES-4, Comparison of Alternatives

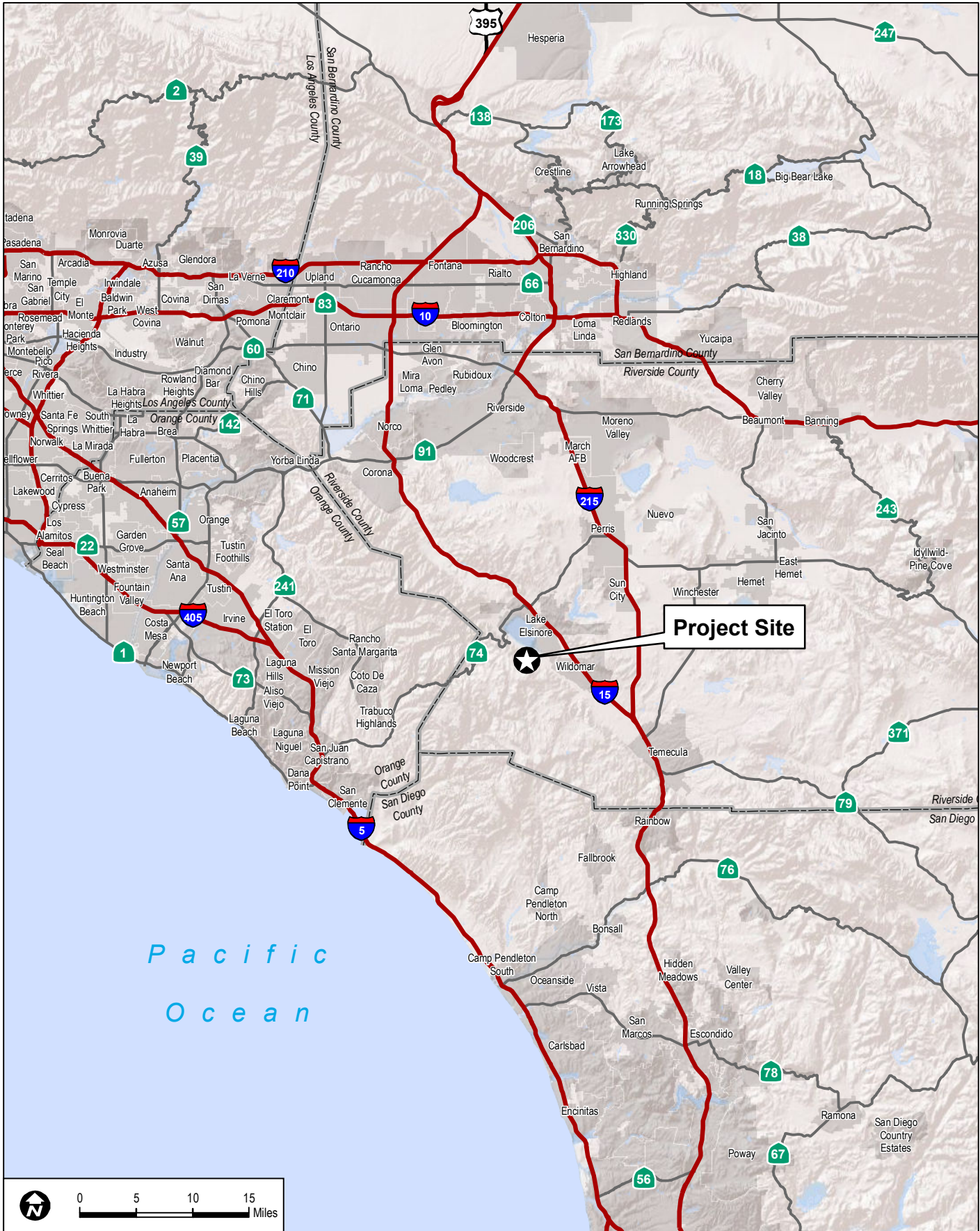
Environmental Issue Area	Proposed Project	Alternative 1 – No Project	Alternative 2 – Upsizing Facilities	Alternative 3 – Debris Basins and Floodplain Buyout
<i>Hydrology and Water Quality – Substantial depletion of groundwater supplies or interference with groundwater recharge</i>	Less than significant	Better	Worse	Better
<i>Hydrology and Water Quality – Substantially alter existing drainage pattern that would result in substantial erosion or siltation on- or off-site</i>	Less than significant impacts with mitigation incorporated	Better	Same	Same
<i>Hydrology and Water Quality – Substantially alter existing drainage pattern that would result in flooding on- or off-site</i>	Less than significant with mitigation	Worse	Same	Same
<i>Hydrology and Water Quality – Runoff water</i>	Less than significant	Worse	Same	Same
<i>Hydrology and Water Quality – Flooding</i>	Less than significant	Worse	Same	Same
<i>Hydrology and Water Quality – Inundation by seiche, tsunami, or mudflow</i>	Less than significant	Worse	Same	Same
<i>Noise – Noise levels</i>	Significant even after mitigation	Better	Same	Same
<i>Noise – Ground-borne vibration or ground-borne noise levels</i>	Less than significant	Better	Same	Same
<i>Noise – Ambient noise</i>	Significant even with mitigation	Better	Same	Same
<i>Transportation/Traffic – Circulation system</i>	Less than significant impacts with mitigation incorporated	Worse	Same	Same

Table ES-4, Comparison of Alternatives

Environmental Issue Area	Proposed Project	Alternative 1 – No Project	Alternative 2 – Upsizing Facilities	Alternative 3 – Debris Basins and Floodplain Buyout
<i>Transportation/Traffic – Congestion management program</i>	Less than significant with mitigation	Better	Same	Same
<i>Transportation/Traffic – Alternate transportation</i>	Less than significant with mitigation	Better	Same	Same

ES-1.8 References

Caltrans (California Department of Transportation). 2011. "Route 74 – Scenic Highway." Accessed September 9, 2011. http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm.



Project Site

Pacific
Ocean



0 5 10 15 Miles

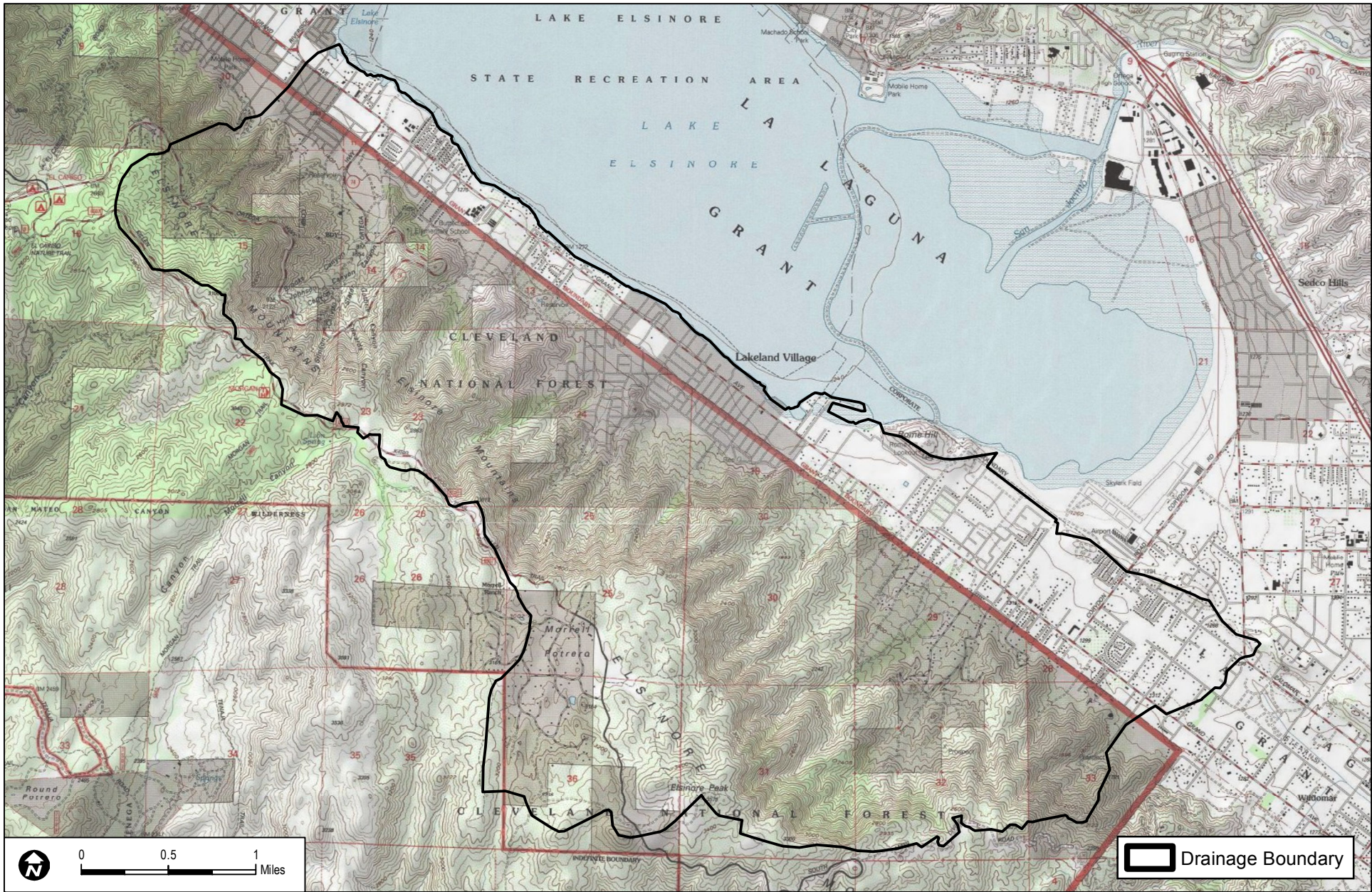
DUDEK

6736

**FIGURE ES-1
Regional Map**

LAKELAND VILLAGE MDP DRAFT PROGRAM EIR

INTENTIONALLY LEFT BLANK



DUDEK

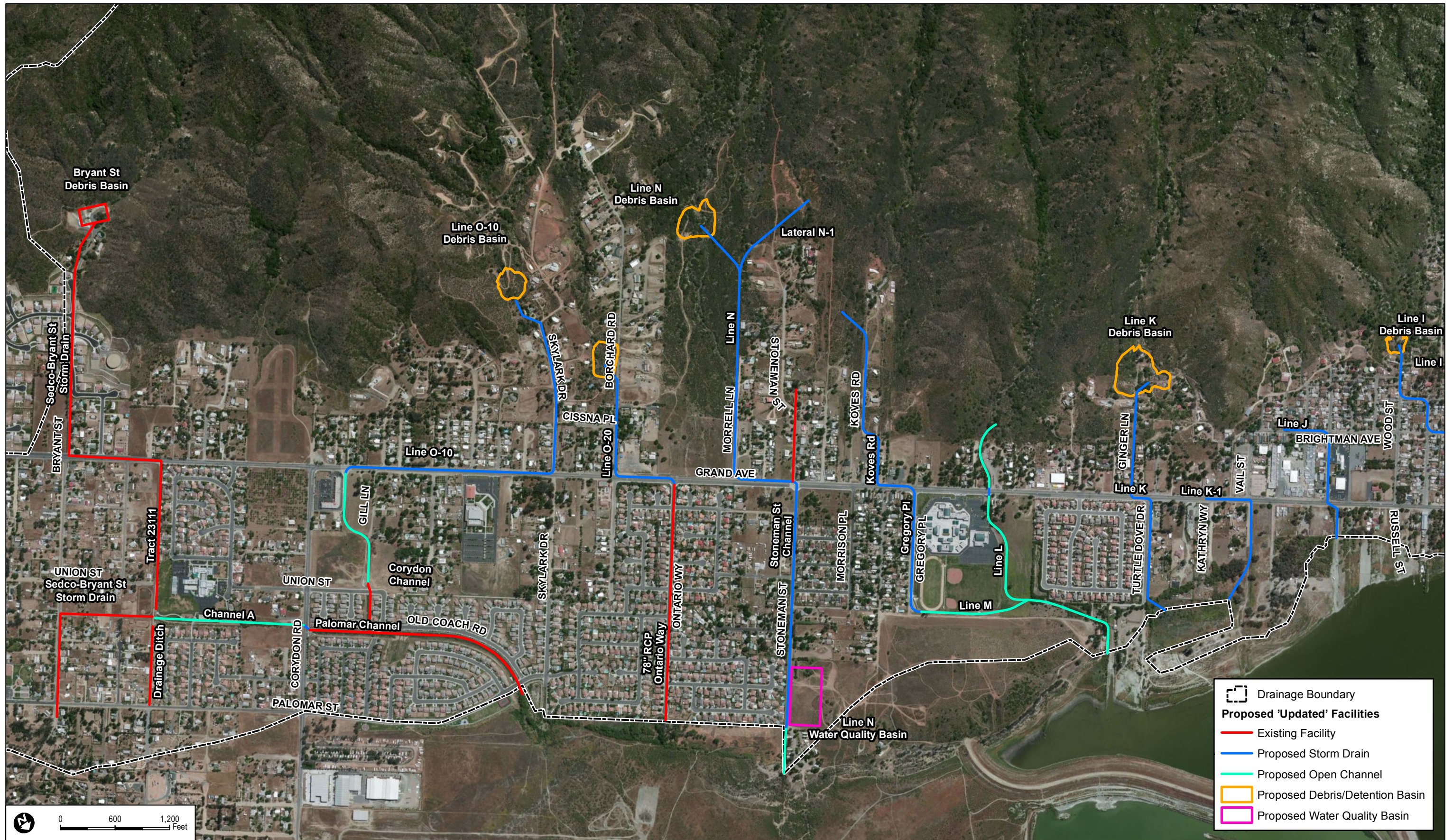
SOURCE: USGS 7.5-Minute Series Alberhill, Elsinore and Wildomar Quadrangles.

**FIGURE ES-2
Vicinity Map**

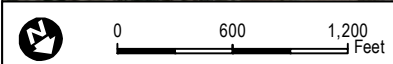
6736

LAKELAND VILLAGE MDP DRAFT PROGRAM EIR

INTENTIONALLY LEFT BLANK



- Drainage Boundary
- Proposed 'Updated' Facilities**
- Existing Facility
- Proposed Storm Drain
- Proposed Open Channel
- Proposed Debris/Detention Basin
- Proposed Water Quality Basin



SOURCE: Riverside County Flood Control and Water Conservation District 2012;
County of Riverside MSHCP; Bing Maps

DUDEK

6736

LAKELAND VILLAGE MDP DRAFT PROGRAM EIR

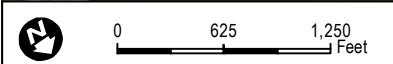
FIGURE ES-3a
Proposed MDP Facilities (Left)

INTENTIONALLY LEFT BLANK



Lake Elsinore

 Drainage Boundary
Proposed 'Updated' Facilities
— Existing Facility
— Proposed Storm Drain
— Proposed Open Channel
 Proposed Debris/Detention Basin
 Proposed Water Quality Basin



DUDEK SOURCE: Riverside County Flood Control and Water Conservation District 2012; County of Riverside MSHCP; Bing Maps

FIGURE ES-3b
Proposed MDP Facilities (Right)

INTENTIONALLY LEFT BLANK

4.4 Cultural Resources

The focus of the following discussion and analysis, based on the initial study (IS), public scoping session, and comments received during the Notice of Preparation (NOP) public comment period, is related to the Project's potential impacts related to substantial adverse change in the significance of a historical resource as defined in the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15064.5), substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5, and directly or indirectly destroying a unique paleontological resource or site or unique geologic feature.

Potential impacts from the Project on disturbance of human remains were found to be less than significant in the IS and therefore are not further discussed in the Draft Program Environmental Impact Report (PEIR) (see Appendix A).

Cultural resources include archaeological resources (both prehistoric and historic), historic architectural resources (physical properties, structures, or built items), and traditional cultural resources (those important to living Native Americans for religious, spiritual, heritage, or traditional reasons). Though not specifically cultural, paleontological resources (prehistoric life, fossils) are also considered. The assessment of cultural resource considerations for the Project area is based on results of an archaeological site records and literature search of the California Historical Resources Information System at the Eastern Information Center (EIC), conducted on January 20, 2011, by Dudek.

4.4.1 Setting and Project Baseline

Cultural Setting

As discussed in the Riverside County General Plan and the Riverside County Integrated Project Final Program Environmental Impact Report (County of Riverside 2003; County of Riverside TLMA n.d.), the cultural history of Riverside County is divided chronologically into three periods: prehistoric, ethnohistoric, and historic. Native American culture predominates in the prehistoric and ethnohistoric periods of County history, beginning with the settlement of the Southern California region 10,000 to 12,000 years ago and extending through time to initial Euro-American settlement in the late 18th century when the mission system was established, disrupting native life ways. Most natives were removed to reservations set aside in Riverside County and nearby vicinities, further disrupting, and to a large extent, ending, the persistence of native life ways.

Prior to Spanish colonization in the late 18th century, the geographic area within the Project boundary was inhabited by the Luiseño and possibly other Native Americans (possible previous occupation by the Juaneño based on their place names and creation myths and overlapping use or influence by adjacent groups including the Gabrielino, Serrano, and Cahuilla (City of Lake Elsinore 2011)). Luiseño is derived from the Mission San Luis Rey and has been used in Southern California to refer to Takic-speaking people associated with the mission. The Luiseño territory comprised of 1,500 square miles of Southern California.

Specifically, the Pechanga Tribe asserts that the Project area is part of the Tribe's aboriginal territory, as evidenced by the existence of Luiseño place names, *tóota yixélval* (rock art, pictographs, petroglyphs, cupules), named villages and habitation areas, traditional landscapes, Traditional Cultural Properties, and tangible and intangible cultural resources within the Project boundary (Pechanga Tribe 2013a). Specifically, Lake Elsinore is a Traditional Cultural Property as designated by the Pechanga Tribe and figures prominently in the Tribe's Origin and Creation stories. Very important and significant events in the Tribe's history have occurred in and around Lake Elsinore (Pechanga Tribe 2013b). Lake Elsinore is known to the Tribe as *Páayaxchi*; this name is also the name of a village known to exist within the Project boundary.

With the independence of Mexico in the early 19th century, the mission period came to an end, and it became common practice for large land grants to be issued to those friendly with the Nationalistic Mexican cause. The ranchero, Julian Manriquez, received the grant for Rancho La Laguna (which encompassed approximately 20,000 acres) and established a rancho in the area in the early 1844. The Mexican period soon ended with the Treaty of Guadalupe-Hidalgo in 1848, which ceded much of the southwest to the United States, including all the lands around La Laguna, the City of Lake Elsinore's historic name. Gold deposits were discovered in the region shortly after the war's end. In 1858, Augustin Machado acquired Rancho La Laguna and became the first landowner to call the lakeshore home since the Indians.

With the construction of the Atchison, Topeka, & Santa Fe Railroad and the discovery of mineral ores in the late 19th century, immigration began to increase significantly to the lake area. Many people also visited looking for recreational opportunity. Also, mining played an important role in the economic and social development within the area from the Gold Rush to the present day. Tin ore, coal, clay, and minor amounts of gold have historically been extracted from the area. The most prosperous mine was the Good Hope Mine which produced over \$2 million worth of gold during its working years. Coal was also discovered in the 1880s and was used to process gold, operate fire kilns, and to heat homes. Given the railroad and attraction of Lake Elsinore for recreation and gold mining prospects, Lake Elsinore experienced development along the lake shore.

As a result of its historical evolution, the area surrounding Lake Elsinore encompasses significant prehistoric and historical archaeological sites in addition to a rich record of fossil life. The Elsinore Naval Military Academy and the Adobe Machado House Butterfield Stage Stop (also known as P-7230 – Juan Machado Home/Rippley Ranch), are community recognized significant historical resources according to the city of Lake Elsinore's General Plan Draft PEIR.. The Adobe Machado House Butterfield Stage Stop is located near the Line A Water Quality (WQ) Basin. Based on the EIC records search, P-8663/CA-RIV-6176H was also identified as cultural resources within the Project boundary. P-8663/CA-RIV-6176H is a wooden pumphouse located near Stoneman Street Channel.

Based on the confidential records search, prehistoric archaeological sites are within the Project boundary and include lithic scatters, habitation sites, and bedrock milling features. Lithic scatters are flaking stations that may indicate possible opportunistic quarrying activities or tool reduction stations. Habitation Sites are temporary camps or transition areas that exploit an immediate or seasonal resource. Habitation sites are usually located near watercourses and its tributaries. Associated artifact assemblages may include, but are not limited to, ground stone, lithic debitage, and bedrock milling features. Bedrock milling features are grinding stations that are typically located along watercourses and its tributaries near exposed bedrock outcrops typically granite or granodiorite with suitable resources in the area for processing.

The Pechanga Tribe Ethnography of the Lake Elsinore Area (2013) stated that there are villages and named places recorded within the Project boundary. Some of the places refer to gathering areas, while others recall specific events important to the Luiseño culture and history.

Paleontological Setting

Paleontological resources are the fossilized biotic remains of ancient environments. They are valued for the information they yield about the history of the earth and its past ecological settings. Figure 4.4-1 illustrates the paleontological resources sensitivity mapping within the Project boundary. As depicted in Figure 4.4-1, the valley floor surrounding most of Lake Elsinore and the upper regions in the southeasterly portion as well as the fan deposits flanking the Santa Ana Mountains within the Project boundary are of undetermined paleontological sensitivity. The valley floor and upper regions within the central and westerly portion of the Project are considered to have low paleontological sensitivity.

The Society of Vertebrate Paleontology has defined the two categories of potential paleontological sensitivity for geologic units as follows:

- Low: Geologic units are assigned to this category when few significant nonrenewable vertebrate, invertebrate, or plant fossils have been recovered from the same unit nearby.
- Undetermined: Geologic units are assigned to this category when there is little or no past history available to base a sensitivity assessment on.

Archaeological Records Search Results

Dudek conducted a records search of the California Historical Resources Information System at the EIC, University of California, Riverside, on January 20, 2011. The records search was conducted to identify all recorded archaeological sites and investigations within 1 mile of the proposed Master Drainage Plan (MDP) facilities. The records search identified not only archaeological sites, but historic resources, and previous cultural resource surveys within the Project area. The EIC records search is divided up into two categories: recorded resources and previous cultural studies. The EIC records

indicate that 57 recorded cultural resources have been documented within the Project area and 68 previous cultural resource studies have been conducted within 1 mile of the proposed MDP facilities.

In addition to the EIC records search, a search of the Native American Heritage Commission's Sacred Land File was conducted on February 10, 2011, in order to determine the location of any sacred and/or burial sites within the Project boundary. The search did not indicate the presence of Native American sacred heritage resources within the Project boundary.

Generally speaking, the proposed water quality and debris basins are located within undeveloped or minimally developed areas. There is the potential that intact, previously undisturbed prehistoric cultural resources are located within the footprint of the proposed water quality and debris basins that have not been previously surveyed.

Based on the records search, of the four proposed water quality basins, three are located in areas that have been previously studied:

- Line A WQ Basin
- Line B WQ Basin
- Line N WQ Basin.

The remaining unstudied water quality basin, Line G WQ Basin, will require further study when specific projects and disturbance are proposed.

In addition to the previous survey areas identified, the EIC records search also identified several recorded cultural resources near future MDP facilities. A wooden pumphouse, recorded in the records search, is located within the northern portion of the proposed Line N WQ basin. The pumphouse may date to the late 19th or early 20th century. The remains of a residence that may have been constructed in the 1940s or 1950s and was at least partially constructed of adobe brick has been identified in the upslope of the pumphouse. The Juan Machado Home/Ripley Ranch, listed on the records search, is listed in the Office of Historic Preservation Directory of Properties in the Historic Properties Directory File as potentially eligible for inclusion on the National Register of Historic Places (NRHP). This resource is located immediately adjacent to the proposed Line A WQ basin.

Another recorded site is located near proposed Line O-10 Debris Basin. The site is a prehistoric bedrock milling station. Nine grinding holes were observed on one boulder but other grinding/milling features were noted in the "site area." Flakes and ground stone artifacts were observed on the ground surface. The site record indicates that the area has been heavily disturbed by grading for house pads and roads but that intact deposits may be present. The area surrounding this debris basin has not been the subject to previous surveys.

Of the nine proposed debris basins, only three have been previously studied:

- Line A Debris Basin
- Line B Debris Basin
- Line N Debris Basin.

The majority of the Lakeland Village Debris Basin has been previously studied.

Therefore, the following remaining five debris basins may need to be further evaluated when specific projects and disturbance are proposed in the future:

- Line F Debris Basin
- Line K Debris Basin
- Line N Debris Basin
- Line O-20 Debris Basin
- Line O-10 Debris Basin.

4.4.2 Related Regulations

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 established the NRHP as the official federal list of cultural resources that have been nominated by state offices for their historical significance at the local, state, or national level. Properties listed in the NRHP, or determined eligible for listing, must meet certain criteria for historical significance and possess integrity of form, location, and setting. Significance is determined by four aspects of American history or prehistory recognized by the NRHP criteria:

- Association with events that have made a significant contribution to the broad pattern of our history; or
- Association with the lives of persons significant in our past; or
- Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possess high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or
- Has yielded, or has the potential to yield, information important to the prehistory or history.

Eligible properties must meet at least one of the above criteria and exhibit integrity. The integrity of a subject property is measured by the degree to which the resource retains its historical properties and conveys its historical character. Integrity also depends on the degree to which the original fabric has been retained, and the reversibility of any changes to the property.

Properties listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

State

California Public Resources Code (Section 5097.98)

California Public Resources Code, Section 5097.98, addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the CEQA Guidelines. The Project will be required to comply with California Public Resources Code, Section 5097.98, should any unknown human remains be discovered during site disturbance.

California Health and Safety Code Sections 7050.5, 7051, 5052, and 7054

Sections 7050.5, 7051, 5052, and 7054 of the Health and Safety Code collectively address the illegality of interference with human burial remains, as well as the disposition of Native American burials in archaeological sites. The law protects such remains from disturbance, vandalism, or inadvertent destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including the treatment of remains prior to, during, and after evaluation, and reburial procedures. The Project will be required to comply with these sections of the Health and Safety Code.

California Register of Historical Resources

The California Register of Historical Resources is an authoritative guide to identifying the state's historical resources. It establishes a list of those properties which are to be protected from substantial adverse change (California Public Resources Code, Section 5024.1).

A historical resource may be listed in the California Register of Historical Resources if it meets any of the following criteria:

- a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

- b. Is associated with the lives of persons important in our past.
- c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- d. Has yielded, or may be likely to yield, information important in prehistory or history.

Senate Bill 18

The Local and Tribal Intergovernmental Consultation process, commonly known as Senate Bill (SB) 18 was signed into law in September of 2004 and took effect on March 1, 2005. Senate Bill 18 established responsibilities for local governments to contact, provide notice to, refer plans to, and consult with California Native American Tribes. The purpose of this consultation process is to protect the identity of the cultural place and to develop appropriate and dignified treatment of the cultural place in any subsequent project. The consultation is required whenever a General Plan, Specific Plan, or Open Space Designation is proposed for adoption or to be amended. As part of the application process, California Native American Tribes must be given the opportunity to consult with the applicant (if applicable) of the Project and with the Riverside County Flood Control and Water Conservation District (District), the City of Lake Elsinore, or the City of Wildomar for the purpose of preserving, mitigating impacts to, and identifying cultural places located on project land within District or City of Lake Elsinore or Wildomar jurisdiction. The Project does not include a General Plan Amendment or Specific Plan Amendment or include an Open Space Designation; therefore, SB 18 does not apply to the Project.

California Public Resources Code Section 5097.5 and Section 30244

California Public Resources Code, Section 5097.5, prohibits “knowing and willful” excavation upon, removal, destruction, injury, and defacement of any historic or prehistoric ruins, burial grounds, or archaeological or vertebrate paleontological site situated on public lands (lands under state, county, city, district, or public authority ownership or jurisdiction, or the ownership or jurisdiction of a public corporation), except where the agency with jurisdiction has granted express permission. Section 30244 requires reasonable mitigation for impacts on archaeological or paleontological resources that occur as a result of development on public lands.

Local

Riverside County Historical Commission – County Historic Landmark Program

The power to identify and advise the Riverside County Board of Supervisors (Board) concerning historical matters is assigned to the Riverside County Historical Commission (Commission) by Resolution No. 2005-345. The Commission was established by Board Resolution on May 6, 1968. The resolution of 1968 was amended on March 15, 1971; May 4, 1982 (Resolution 82-131); and September

13, 2055 (Resolution 2005-345). The Commission operates under established bylaws approved by the Board on September 13, 2005.

Pursuant to the County resolution establishing the County Historical Commission, its purpose is to “advise the Board of Supervisors in historic matters of the County of Riverside...; to discover and identify persons, events, and places of historical importance within Riverside.” Pursuant to this charge, the Commission established criteria and procedures to identify and recognize historic landmarks in Riverside County. Such identification and recognition does not convey any regulatory authority to the Commission over properties assigned landmark status.

The Commission adopted Riverside County Historic Landmark criteria and procedures in 2008 that outline the criteria for historic landmark designation and the procedures for application and review.

Riverside County General Plan

Riverside County’s General Plan (County of Riverside 2003) includes a section on cultural and paleontological resources and provides policies regarding the treatment and preservation of cultural, historical, and paleontological resources within the County. The following policies are applicable to the Project:

Open Space Policy 19.2: Review all proposed development for the possibility of archaeological sensitivity.

Open Space Policy 19.6: Enforce the Historic Building Code so that historical buildings can be preserved and used without posing a hazard to public safety.

Open Space Policy 19.8: Require that whenever existing information indicates that a site proposed for development may contain biological, cultural, paleontological, or other scientific resources, a report shall be filed stating the extent and potential significance of the resources that may exist within the proposed development and appropriate measures through which the impacts of development may be mitigated.

Open Space Policy 19.9: Require that when existing information indicates that a site proposed for development may contain paleontological resources, a paleontologist shall monitor site grading activities, with the authority to halt grading to collect uncovered paleontological resources, curate any resources collected with an appropriate repository, and file a report with the Planning Department documenting any paleontological resources that are found during the course of site grading.

City of Wildomar General Plan

The City of Wildomar has incorporated Riverside County's General Plan. Therefore, the above policies related to the Riverside County General Plan also apply to the City of Wildomar.

City of Lake Elsinore General Plan

The City of Lake Elsinore General Plan (City of Lake Elsinore 2011) includes a section on cultural and paleontological resources and provides goals, policies, and implementation programs regarding the treatment and preservation of cultural, historical, and paleontological resources within the City. The following policies are applicable to the Project:

- Policy 6.1:** Encourage the preservation of significant archeological, historical, and other cultural resources located within the City.
- Policy 6.3:** When significant archaeological sites or artifacts are discovered on a site, coordination with professional archeologists, relevant state agencies, and concerned Native American tribes regarding preservation of sites or professional retrieval and preservation of artifacts prior to development of the site shall be required. Because ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices, developers should waive any and all claims to ownership and agree to return all Native American ceremonial items and items of cultural patrimony that may be found on a project site to the appropriate tribe for treatment. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act.
- Policy 6.4:** If archaeological excavations are recommended on a project site, the City shall require that all such investigations include Native American consultation, which shall occur prior to project approval.
- Policy 7.1:** Consult with California Native America tribes prior to decision-making processes for the purpose of preserving cultural places located on land within the City's jurisdiction that may be affected by the proposed plan, in accordance with State requirements.
- Policy 8.1:** For development in areas delineated as "High" or "Undetermined" potential sensitivity for paleontological resources, require the project applicant to hire a certified paleontologist, who must perform a literature search and/or survey and apply the relevant treatment for the site as recommended by the Society of Vertebrate Paleontology.

Policy 9.1: Require the developer to obtain a professional, qualified historian to conduct a literature search and/or survey for any project that entails demolition or modification of an existing structure that may be of historical value in relation to the City's cultural heritage.

Policy 10.1: Continue to implement the Historic Preservation Guidelines that guide historic preservation efforts as set forth in the Historic Elsinore Design Guidelines and the Downtown Master Plan (Society of Vertebrate Paleontology 2011).

4.4.3 Comments Received in Response to the Notice of Preparation

A comment letter was received from the NAHC dated September 19, 2011, in response to the NOP. The contents of this letter are included in Appendix A.

4.4.4 Significance Threshold Criteria

The District has not established local CEQA significance thresholds as described in Section 15064.7 of the CEQA Guidelines. The NOP for the PEIR included the IS (Environmental Checklist) to show the areas being analyzed in the PEIR (refer to Appendix A of this PEIR). Accordingly, and based on the IS, the Project would have a significant impact on cultural resources if the Project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.4.5 Environmental Impacts Before Mitigation

The following analysis is programmatic. Since no specific facilities are being proposed for disturbance or construction by approval of this PEIR, the following is an analysis of the potential known resources within the Project boundary, and how future facilities will be analyzed in light of what is presented below in the future. The District, City of Lake Elsinore, or City of Wildomar will use the following analysis and mitigation measures, if applicable, in guiding their future study and analysis.

Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

As discussed in Section 4.4.1, Setting and Project Baseline, most of the MDP facilities are located in existing disturbed/developed areas, as most of the MDP facilities are located in road rights-of-way, and therefore, limited new disturbance will occur as a result of the Project. However, there is still the potential for sensitive and important cultural resources in areas that have had previous disturbances. Therefore, future MDP facilities that are proposed within existing road rights-of-way would have a less than significant impact to

~~historical resources since these areas have already been previously disturbed and no further studies/surveys would be required. Additionally, the~~ The proposed water quality and debris basins, ~~however,~~ are located in mainly undisturbed areas. Since it is known that the Project area contains sensitive archaeological resources, future studies/surveys would be required for all MDP facilities. Significant effects upon historic structures or features are evaluated by determining the presence or absence of historic status with respect to the MDP facility in question, and then determining the potential for Project implementation to affect the structure or feature if it possesses historic status.

As previously discussed, Juan Machado Home/Rippley Ranch, is listed in the Office of Historic Preservation Directory of Properties in the Historic Properties Directory File as potentially eligible for inclusion on the NRHP. Additionally, based on the information provided by the Pechanga Tribe, the area around this adobe structure may contain sensitive archaeological resources. The Line A WQ Basin is proposed immediately adjacent to this resource; therefore, further studies and analysis will be conducted prior to final design of this facility so that avoidance of this cultural resource can be evaluated. If avoidance is not feasible, Mitigation Measures (**MM CUL-1** through **MM CUL 8**) shall reduce impacts to less than significant.

Also, as previously mentioned, P-8663/CA-RIV-6176H, a wooden pumphouse, may date back to the late 19th or early 20th century. The remains of a residence that may have been constructed in the 1940s or 1950s and partially constructed of adobe brick were identified upslope of the pumphouse. Since the Line N WQ Basin is being proposed near the wooden pumphouse, this resource would need to be further evaluated prior to final design of this facility so that avoidance of this cultural resource can be evaluated. If avoidance is not feasible, mitigation measures **MM CUL-1** through **MM CUL-8** shall reduce impacts to less than significant.

If construction of MDP facilities is within road rights-of-way and underground, then the Project will not result in the destruction or relocation of the known historic resources listed above. The MDP facility alignment that was used in the records search is conceptual at this time. When specific MDP facilities are proposed in the future, and the MDP facility changes include expansion of rights-of-way and/or aboveground structures that would impact known historic resources, then field surveys and additional analysis shall be prepared per mitigation measures **MM CUL-1**, **MM CUL-2**, and **MM CUL-3**. With the implementation of mitigation measures **MM CUL-1**, **MM CUL-2**, and **MM CUL-3**, impacts to historical resources will be reduced to **less than significant with mitigation incorporated**.

Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

There are some MDP facilities located in proximity to known archaeological resources. There are also MDP facilities, specifically the basins, that are in relatively undisturbed areas that have not been subject to past surveys, and so it is unknown whether or not there are resources that could be impacted by the Project.

Even though some facilities have been subject of surveys before, for any MDP facility, implementation of **MM CUL-1**, **MM CUL-2**, and **MM CUL-3** will ensure that the site is surveyed ahead of impacts. Conducting surveys closer to when impacts will occur will allow for avoidance to be considered in final design of the MDP facility and any refinements to mitigation measures can be implemented at that point in time. That said, there are also MDP facilities located in existing roads and/or road rights-of-way that would disturb already disturbed lands, and the likelihood of finding archaeological resources would be very low. For all the MDP facilities, **MM CUL-6** through **MM CUL-8** will be required, so that if any remains or artifacts are uncovered during construction activities, then work must stop and the property authorities contacted.

A recorded archaeological site is located near proposed Line O-10 Debris Basin. The site is a prehistoric bedrock milling station. Nine grinding holes were observed on one boulder but other grinding/milling features were noted in the area of this site. Flakes and ground stone artifacts were observed on the ground surface. The site record indicates that the area has been heavily disturbed by grading for house pads and roads but that intact deposits may be present. The area surrounding this debris basin has not been the subject to previous surveys. Prior to final design of this facility, further cultural resource surveys need to be conducted to determine if the debris basin can avoid this resource. If avoidance is not feasible, mitigation measures **MM CUL-1** through **MM CUL-8** shall reduce impacts to less than significant.

As requested by the NAHC, when specific MDP facilities are proposed, the project proponent for the MDP facility shall conduct a Sacred Lands file search with the NAHC. Implementation of **MM CUL-1** through **MM CUL-6** will be required to be implemented for the MDP facilities not located within existing roads or road rights-of-way. For any MDP facilities located in existing road rights-of-way, **MM CUL-7** and **MM CUL-8** will also ensure that if any unknown resources are encountered, that work will stop and the appropriate measures will be taken to protect the resource. Implementation of **MM CUL-1** through **MM CUL-8** will reduce potential impacts to cultural resources to **less than significant with mitigation incorporated**.

Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

According to Figure 4.4-1, the majority of MDP facilities are within Low and Undetermined areas of Paleontological Resources. A portion of the Stoneman Street Channel and the Stoneman WQ Basin are located in an area considered to have High Potential of Paleontological Resources per Figure 4.4-1. The City of Lake Elsinore's Policy 8.1 requires surveys and study of project impacts on paleontological resources for projects within High and Undetermined areas and implementation of proper measures to reduce impacts. Since some of the MDP facilities are located within the City of Lake Elsinore and within the High and Undetermined Paleontological Resources area, future proposed MDP facilities within the Project boundary would be required to prepare a literature search and/or survey by a certified paleontologist (**MM CUL-9** and **MM CUL-10**).

Compliance with federal, state, and local regulations pertaining to paleontological resources and compliance with City of Lake Elsinore's Cultural Resources Policy 8.1, at a programmatic level, will prevent future MDP facilities from resulting in significant impacts to paleontological resources. Specific MDP facilities that are proposed for construction in the future must demonstrate that the Project will not result in significant impacts to paleontological resources through implementation of **MM CUL-9** and **MM CUL-10**. Therefore, impacts will be considered **less than significant with mitigation incorporated**.

4.4.6 Mitigation Measures

The CEQA Guidelines require an Environmental Impact Report to describe feasible mitigation measures which could minimize significant adverse impacts (14 CCR 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts to historical resources, archaeological resources, and paleontological resources. The following measures shall be implemented to reduce potentially significant impacts to cultural resources to below the level of significance.

MM CUL-1 Prior to ~~final~~ design of flood control facilities, a cultural resources survey ~~not within an existing road rights-of-way~~ within all areas previously designated as archaeologically and culturally sensitive shall be completed by a qualified archaeologist with participation by the Pechanga Band of Luiseño Indians (Pechanga) Tribe. The survey shall include an updated site records search at the Eastern Information Center (EIC) to locate all previously recorded archaeological sites within the proposed construction area of Master Drainage Plan (MDP) facilities. The survey shall assess the direct and indirect impact of the MDP facility. Consultation with the ~~Pechanga Band of Luiseño Indians (Pechanga Tribe)~~ shall be initiated at the beginning of the survey to request additional site information and requested participation in the Project. If the record search indicates that the area has been surveyed and the study is not older than 5 years, a reconnaissance survey shall verify the condition and location of any previously recorded archaeological sites. If previously recorded sites are relocated during the survey, any changes in site condition shall be documented on appropriate State Department Parks and Recreation (DPR) forms, documented in the final technical study as described further in **MM CUL-3** and submitted to the EIC and the Pechanga Tribe, ~~(upon request)~~. Any prehistoric or historic sites identified during the survey shall be recorded on appropriate DPR forms, discussed and described in the technical study, and submitted to the EIC and the Pechanga Tribe, ~~(upon request)~~.

MM CUL-2 If the cultural resources survey determines that construction of an MDP facility would potentially impact a prehistoric or historic archaeological site and consultation with the design engineers or other appropriate staff evidences that avoidance is not feasible, the Riverside County Flood Control and Water Conservation District (District), City of

Lake Elsinore, or City of Wildomar shall have a qualified archaeologist develop a testing program which can includes the excavation of shovel test pits and/or test units, in consultation with the Pechanga Tribe. The testing program shall fully define the boundaries of surface and subsurface materials, evaluate the integrity and significance of the site and collect surface and subsurface artifacts. The program shall include mapping of all site features, artifacts, and excavation locations. Related laboratory work shall be conducted to treat the materials that are recovered from the archaeological investigations in consultation with the Tribe.

If construction of an MDP facility would potentially impact a historic architectural resource structure because the MDP facility cannot be moved to avoid the resource, a survey of the structure by a qualified architectural historian shall be required to assess the structure's significance. A review of primary and secondary documentary sources, such as tax assessor records, historic fire insurance maps, city directories, aerial photographs, and local building permit files, shall be conducted. The assessment shall take into account any events with which the structure is associated, any persons who may have lived in the structure, distinctive architectural characteristics, methods of construction, or association with a notable architect/designer. The assessment by the architectural historian shall recommend to the District, the City of Lake Elsinore, or the City of Wildomar guidelines to assist in the maintenance, repair, and renovation of the resource, if applicable.

- MM CUL-3** For MDP facilities ~~not within existing roads or road rights-of-way~~ that have prepared a cultural resources survey per **MM CUL-1** and **MM CUL-2** described above, a technical report shall be prepared that documents all of the information gathered from the survey, data gathered from the testing program of prehistoric or historic archaeological sites, and consultation efforts with the Pechanga Tribe. The report shall identify any significant cultural resources and evaluate the potential impacts to those resources, providing an analysis based upon a regional, landscape viewpoint. If any site evaluated would be impacted by construction of a proposed component, additional project-specific mitigation measures shall be required to reduce the level of impacts. These mitigation measures shall include one of the following or a combination thereof:
- a. Redesign of the proposed component to avoid the significant cultural resource, thereby avoiding significant impacts.
 - b. A data recovery program to recover sufficient cultural materials to exhaust the research potential of the site such that construction shall no longer represent a significant impact.

- MM CUL-4** A data recovery program shall be required whenever avoidance from construction of MDP facilities has been demonstrated to be infeasible. The data recovery program shall include the excavation of a sufficiently large percentage of a subsurface deposit such that the research potential of the deposit will be exhausted. Typically, a 5% sample of the deposit will be required; however, sample sizes in the data recovery program will be determined on a per site basis in consultation with the Pechanga Tribe. Laboratory analysis and research shall be conducted to catalog all recovered materials and interpret the data. Interpretation of the site and any proposed destructive testing methods shall take into account the traditional beliefs and customs of the Tribe.
- MM CUL-5** Indirect impacts may be identified where construction of MDP facilities would occur adjacent to a significant resource. In cases where construction activities are planned adjacent to known cultural resources, temporary fencing shall be placed around the site boundary by the Project archaeologist and the Pechanga Tribe prior to the start of construction activities to prevent access to the site. All temporary fencing shall be removed once the construction activities are completed.
- MM CUL-6** Ground disturbances associated with construction of proposed MDP facilities that contain recorded archaeological sites identified in the cultural records survey (**MM CUL-1** and **MM CUL-2**) and archaeological sites identified in the technical report (**MM CUL-3**), regardless of significance, shall be monitored by a qualified archaeologist. Monitoring of construction activities shall ensure that any materials uncovered during construction activities are identified and adequately recorded. If the site is prehistoric, a local Native American observer shall also be retained by the District, the City of Lake Elsinore, or the City of Wildomar to monitor construction activities.

Not all MDP facilities will be constructed by the District. For District-administered contracts, monitors from the Pechanga Tribe shall be allowed to monitor grading and ground-disturbing activities pursuant to the executed Master Cultural Resources Treatment and Tribal Monitoring Agreement between the Pechanga Tribe and the District. Additionally, the hired contractor would use the District's plans and specifications, which would include all the mitigation measures outlined in this section.

For MDP facilities located in the cities of Lake Elsinore and Wildomar where those jurisdictions will have lead agency authority over the project constructing the MDP facility, the cities can utilize the mitigation measures outlined herein, or prepare its own California Environmental Quality Act (CEQA) document with mitigation measures and/or incorporation of conditions of approval in its project approval process that addresses monitoring activities within proximity to recorded archaeological sites.

MM CUL-7 A pre-construction workshop shall be conducted by a qualified archaeologist for an MDP facility that has required additional cultural resources studies per MM CUL-1 and MM CUI-2 described above and further mitigation measures not located within roads or roads right-of-way. The workshop shall address the following: review the types of archaeological resources that may be uncovered; provide examples of common archaeological artifacts to examine using replicas whenever possible; describe why monitoring is required; identify monitoring procedures; describe what would temporarily stop construction and for how long; describe a reasonable worst-case resource discovery scenario (i.e., discovery of intact human remains or a substantial midden deposit); and describe reporting requirements and the responsibilities of the construction supervisor and crew. The workshop shall make attendees aware of prohibited activities, including unauthorized collecting of artifacts, which can result in impact on cultural resources and which further may violate state and federal law, as well as applicable mitigation measures and conditions of approval for this Project.

The following mitigation measure has been included in order to address accidental discoveries of archaeological resources not identified in cultural resources surveys.

MM CUL-8 In the event cultural ~~remains~~resources are encountered during construction of any MDP facilities, work shall stop immediately until a qualified archaeologist is retained to determine the potential significance of the find, if one is not already present. If the ~~remains~~resources are prehistoric, the District, the City of Lake Elsinore, or the City of Wildomar shall contact the Pechanga Tribe and abide by the District and Pechanga Master Agreement related to treatment of resources unexpectedly uncovered. Measures per the Master Agreement between the District and the Pechanga Tribe shall include giving all cultural items, including ceremonial items and archaeological items to the Pechanga; waiving ownership of any items found in favor of the Pechanga; no photography shall be taken of any articles found; and no destructive testing shall occur on ceremonial and/or sacred objects and human remains unless permission is granted by the Pechanga Tribe.

The following mitigation measures are provided to reduce potential impacts to paleontological resources to less than significant levels:

MM CUL-9 A literature search, and/or paleontological resources field survey (or surveys) by a certified paleontologist shall be completed prior to construction of any MDP facility that lie within the High or Undetermined potential sensitivity paleontological resource area. Relevant treatment for the site as recommended by the Society of Vertebrate Paleontology shall be applied, if needed. If the results of such survey (or surveys) identify the presence of potentially significant paleontological resources, avoidance or other

appropriate measures (such as excavation, analysis, and interpretation of resources) potentially leading to curation in perpetuity in a facility that meets the standards of the State of California Guidelines for the Curation of Archaeological Collections and 36 CFR 79, shall be implemented.

MM CUL-10 In the unlikely event that paleontological resources such as vertebrate, plant, or invertebrate fossils are discovered during construction or site disturbance, work shall stop within the area of the discovery and the District, along with possibly the County of Riverside, the City of Lake Elsinore, or the City of Wildomar Planning Department, shall be contacted so that a qualified paleontologist can be consulted to determine the extent or quality of the find and make recommendations for further action, if necessary.

4.4.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

Because this is a PEIR, specific MDP facilities are not being proposed at this time. As outlined above, there are some MDP facilities located in areas that may have more potential to impact cultural resources than others. For those MDP facilities located in sensitive areas, near known resources or unsurveyed areas, implementation of the mitigation measures identified in Section 4.4.6 would mitigate potential adverse impacts on cultural resources to levels below significance.

4.4.8 References

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

City of Lake Elsinore. 2011. *Draft General Plan*. Chapter 4.0 – Resource Protection and Preservation. Accessed November 30, 2011. http://issuu.com/cityoflakeelsinore/docs/chapter_4.0_-_resource_protection_and_preservation?mode=window&backgroundcolor=%23222222.

County of Riverside. 2003. *Riverside County General Plan*.

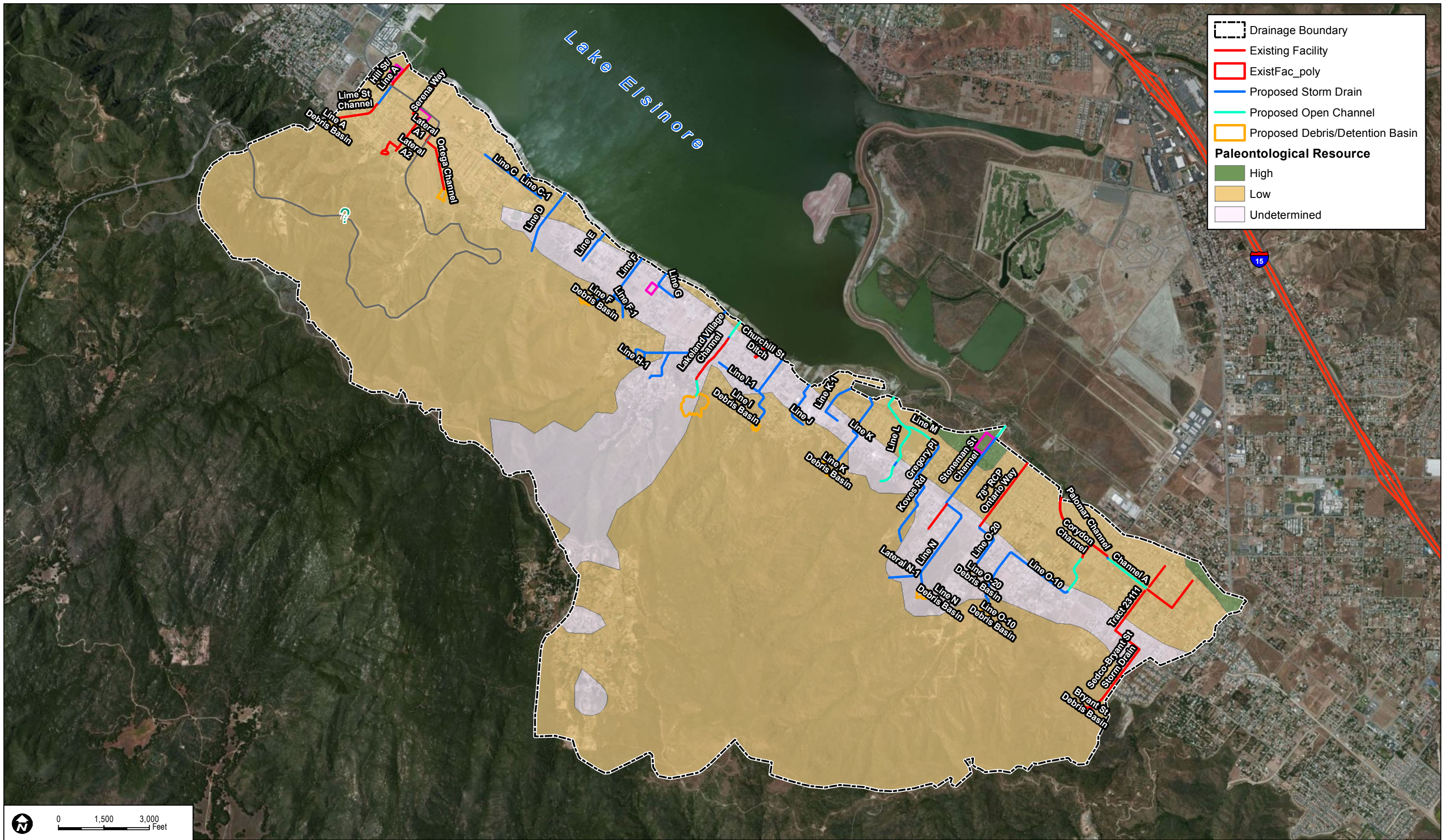
County of Riverside TLMA (Transportation and Land Management Agency). n.d. *Riverside County Integrated Project Final Program Environmental Impact Report*.

Dudek. 2011. *Environmental Constraints Analysis*. February 9, 2011.

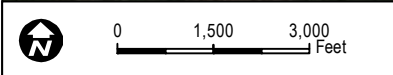
Pechanga Tribe. 2013a. *Pechanga Tribe Ethnography of the Lake Elsinore Area – Páayaxchi and Its Surrounds*. February 8, 2013.

Pechanga Tribe. 2013b. Pechanga Tribe Comments on the Proposed Mitigation Measures for the Programmatic Environmental Impact Report, Lakeland Village MDP. January 18, 2013.

Society of Vertebrate Paleontology. 2011. "Policy Statements." Accessed November 30, 2011.
<http://www.vertpaleo.org/ConformableImpactMitigationGuidelinesCommittee.htm>.



Drainage Boundary
 Existing Facility
 ExistFac_poly
 Proposed Storm Drain
 Proposed Open Channel
 Proposed Debris/Detention Basin
Paleontological Resource
 High
 Low
 Undetermined



DUDEK

SOURCE: Riverside County Flood Control and Water Conservation District 2010;
Bing Maps

6736

LAKELAND VILLAGE MDP DRAFT PROGRAM EIR

**FIGURE 4.4-1
Paleontological Resources**

INTENTIONALLY LEFT BLANK

4.8 Hydrology and Water Quality

The focus of the following discussion and analysis, based on the initial study (IS), public scoping session, and comments received during the Notice of Preparation (NOP) public comment period, is related to the Project's potential impacts to water quality standards or waste discharge requirements; discharges of stormwater pollutants, or substantial changes to surface water quality, including but not limited to, temperature, dissolved oxygen, pH, or turbidity; substantial depletion of groundwater supplies, or substantial interference with groundwater recharge such that there would be net deficit in aquifer volume or a lowering of the local groundwater table level; substantial alteration to the existing drainage patterns that would result in substantial erosion or siltation on- or off-site; substantial alteration to the existing drainage pattern that would result in flood on- or off-site, creation or contribution to runoff water, which would exceed the capacity of the existing or planned stormwater drainage systems; exposure of people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; and exposure of people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow from implementation of the Project. Potential impacts from the Project on placing housing within a 100-year flood hazard area and placing structures or fill within a 100-year flood hazard area which would impede or redirect flood flows were found to have no impact in the IS for the Project and therefore are not further discussed in the Draft Program Environmental Impact Report (PEIR) (see Appendix A).

4.8.1 Setting and Project Baseline

Hydrology

The Project boundary is within the Santa Ana regional watershed, which is drained by the Santa Ana River. The primary natural surface water features within proximity to the Project boundary is Lake Elsinore. Lake Elsinore is a natural lake measuring approximately 5 miles long by 2 miles wide. The lake varies widely in size as it responds to hydrologic conditions, ranging from 6,000 acres in very wet years to a dry lakebed in drought years. In an effort to maintain a more constant lake level, a levee was constructed in 1995. The levee also provides flood protection up to an elevation of 1,262 feet for the southern end of the lake, known as the Back Basin.

Lake Elsinore is fed by three primary sources of water: runoff from local tributaries (8% of total input to the lake), direct precipitation inputs to the lake (20%), and inflows from the San Jacinto River (72%). Groundwater does not play a major role in lake levels due to the presence of a relatively impermeable layer of clay soil beneath the lake.

Groundwater

The Elsinore Groundwater Basin underlies the Elsinore Valley. The basin is bounded on the southwest by the Santa Ana and Elsinore Mountains along the Willard Fault and active Elsinore Fault. The Elsinore

Groundwater basin is primarily supplied by infiltration of precipitation in the surrounding watershed. Other sources of inflow include infiltration along the San Jacinto River channel upstream of Lake Elsinore and agricultural and residential return flows. Municipal pumping for potable water is the only major outflow from the Elsinore Groundwater Basin. Some additional groundwater pumping is performed as necessary to maintain the elevation of the lake at 1,240 feet above mean sea level.

Under natural conditions, groundwater should generally flow from the northwest to the southeast beneath Lake Elsinore. However, because faults cutting the sediments impede groundwater movement, groundwater flow is dominantly contained within fault blocks in the basin. The difference between groundwater levels on the northwest side and the southeast side is more than 300 feet. Groundwater depths in the lake currently range from about 250 feet in the northwest to more than 600 feet in the southeast.

The Elsinore Valley Municipal Water District (EVMWD) Groundwater Management Plan includes a groundwater budget analysis of the Elsinore basin for 1990–2001. The results of the analysis indicate that the basin experienced an average annual deficit of approximately 1,800 acre-feet per year over the 11-year period studied. Eight of the 11 years analyzed had a deficit, while the remaining 3 years corresponded to above-average annual precipitation totals. In addition, water levels in wells in the southern portion of the basin dropped more than 200 feet in the same 11-year period, providing further evidence of a groundwater overdraft condition. Continuing overdraft may lead to ground subsidence as soils compact over long periods of time, although no clear evidence of subsidence has currently been identified around Lake Elsinore.

Flooding

Some areas within the Project boundary are within a 100-year floodplain (see Figure 4.8-1). Presently, flooding occurs over portions of the Project boundary, which in most areas of the floodplain extend into currently developed urban areas. The existing channels do not provide adequate upstream control at the mouths of the mountains, thus only picking up a portion of the floodwaters, and the remaining runoff takes the form of sheet flooding towards the lake. The Riverside County Flood Control and Water Conservation District (District) is responsible for the maintenance and operation for flood control facilities including debris dams, storm channels, and storm drains.

Water Quality

Water pollutant sources within the Project boundary have historically been caused by agricultural operations that use chemicals and fertilizers on their land. The State Water Resources Control Board (SWRCB), in compliance with the Clean Water Act (CWA) Section 303(d), maintains a list of impaired water bodies in the state. Lake Elsinore is included on this list due to the presence of four pollutants or stressors: high nutrient levels from unknown point sources, organic enrichment/low dissolved oxygen from unknown point sources, sedimentation/siltation from local urban runoff and storm drains, and toxicity from unknown non-point

sources. Fluctuating water levels in Lake Elsinore and algal blooms triggered by excess nutrients have also caused significant impairment of the ecology and recreational use of Lake Elsinore.

Lake Elsinore

On December 20, 2004, the Santa Ana Regional Water Quality Control Board (RWQCB) adopted Resolution R8-2004-0037 amending the Basin Plan to incorporate the Lake Elsinore and Canyon Lake Nutrient Total Maximum Daily Loads (TMDLs). These TMDLs were subsequently approved by the State Board on May 19, 2005, by the Office of Administrative Law on July 26, 2005, and by the U.S. Environmental Protection Agency (EPA) on September 30, 2005. These TMDLs include urban WLAs that are now incorporated into Chapter 5 of the Basin Plan. For both Canyon Lake and Lake Elsinore, the TMDLs specify causal numeric targets (nitrogen and phosphorus) and response numeric targets (chlorophyll a, dissolved oxygen and un-ionized ammonia). The TMDLs also specify nitrogen and phosphorus WLAs (point source discharges) and LAs (nonpoint source discharges) for each lake. Compliance with interim dissolved oxygen and chlorophyll a numeric targets is to be achieved by December 31, 2015. Compliance with the final numeric targets and WLAs and LAs is to be achieved by December 31, 2020. The LAs and WLAs are specified as 10-year running average.

Lake Elsinore is an impaired water body due to the impacts of nutrients, organic enrichment/low dissolved oxygen, polychlorinated biphenyls (PCBs) and unknown toxicity. The eutrophic impairment in Lake Elsinore is attributable to increased nutrient loading (phosphorus and nitrogen) and the resulting increased growth of biota, phytoplankton and other aquatic plants. Nutrients washed off from source areas are transported to Lake Elsinore by a variety of drainage courses, but during wet years the vast majority of nutrients come from stormflows through Canyon Lake and not the Project watershed.

The TMDL specifies the allowable amounts of nitrogen and phosphorus in Lake Elsinore. According to the Lake Elsinore TMDL Staff Report to Resolution R8-2004-0037, approximately 172 kilograms of excess nitrogen is delivered to Lake Elsinore from existing urban land uses within the local watershed. Existing urban phosphorus loads met waste load allocation requirements and required no further reduction (presuming operation of the aeration system and compliance with TMDL requirements for Canyon Lake).

In response to the TMDL requirement, Riverside County developed a Comprehensive Nutrient Reduction Plan (CNRP). The CNRP is designed to achieve compliance with the allowable amounts of Nitrogen and Phosphorous by 2020. The CNRP includes the following elements: watershed-based best management practices (BMPs) to reduce nutrient loading in urban runoff during wet weather; the operation of an in-lake aeration system; and monitoring activities to assess compliance with the TMDL. The CNRP would achieve the water quality objectives primarily through the implementation of the aeration system because reducing the amount of pollutants generated in the watershed to meet the compliance standards would be nearly impossible and extremely costly. However, watershed-based BMPs are required to supplement the aeration system, particularly to address increased nitrogen loads associated with existing and future land use.

The CNRP estimates that urban areas generate 0.08 kg/acre/year of Total Phosphorous and 0.42 kg/acre/year of Total Nitrogen. Reduction of nutrient loads within conveyance systems is generally the result of settling of suspended solids and stormwater infiltration within channels and upstream lakes. According to the CNRP, only 25% of the Total Phosphorous generated in the local Lake Elsinore watershed settles out before it reaches the lake, and just 17% of the Nitrogen settles out. The low reduction percentages are due to the close proximity of urban development to the lake.

The RWQCB sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the CWA to include the beneficial uses of specific water bodies, the levels of water quality that must be met and maintained to protect those uses, and the state's anti-degradation policy.

Water quality standards for all ground and surface waters overseen by the RWQCB are documented in the Basin Plan (2008). Beneficial uses consist of all the various ways that water can be used for the benefit of people and/or wildlife. Five beneficial uses are recognized within the Santa Ana Region pertaining to the Project. All of the beneficial uses have been designated for surface water bodies and groundwater in the vicinity of the Project as summarized in Table 4.8-1, Beneficial Uses for Receiving Waters in Proximity to the Project.

**Table 4.8-1
Beneficial Uses for Receiving Waters in Proximity to the Project**

Receiving Waters		303(d) List Impairments	Designated Beneficial Uses
Lake Elsinore		Nutrients, Organic Enrichment/Low Dissolved Oxygen, PCBs, and Unknown Toxicity	MUN [^] , REC1, REC2, WARM, WILD
Definitions of Beneficial Uses			
MUN	Waters used for community, military, municipal or individual water supply systems. Uses may also include drinking water supply.		
REC 1	Water contact recreation waters, used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.		
REC 2	Non-contact water recreation waters, used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include picnicking, sunbathing, hiking, beachcombing, and camping, boating, sightseeing, and aesthetic enjoyment in conjunction of the above activities.		
WARM	Warm freshwater habitat waters support warm water ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates.		
WILD	Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.		

Source: SWRCB 2008.

* Intermittent beneficial use for Reaches 3 and 4.

[^] Excepted from MUN.

In 1994, the Regional Board listed Lake Elsinore as water quality limited and as an impaired water body in accordance with Section 303(d) of the CWA due to the impact of nutrients, polychlorinated biphenyls (PCBs) and unknown toxicity to the beneficial uses the lake provides (warm freshwater aquatic habitat (WARM), body contact recreation (RECI), non-body contact recreation (REC2), and wildlife habitat (WILD)). Municipal and Domestic Supply (MUN) indicates that the water body has been specifically accepted from the MUN designation in accordance with the criteria specified in the “Sources of Drinking Water Policy.” As reported by the RWQCB, the narrative water quality objectives pertaining to excessive algae growth and dissolved oxygen are not being met in Lake Elsinore, as demonstrated by a history of significant algae blooms and low dissolved oxygen concentrations. Lake Elsinore beneficial uses adversely impacted include WARM, RECI, REC2, and WILD. Per Section 303(d) of the CWA, the RWQCB established a Total Maximum Daily Load (TMDL) for phosphorus and nitrogen loading to Lake Elsinore. Table 4.8-2 outlines the both “casual” and “response” interim and final TMDL numeric targets for Lake Elsinore. Casual targets are those for phosphorous and nitrogen. Response targets include chlorophyll a and dissolved oxygen. These targets are specified to assess water quality improvements in the lake. Ammonia targets are specified to prevent un-ionized ammonia toxicity to aquatic life.

Table 4.8-2
Lake Elsinore TMDL Numeric Targets

Indicator	Lake Elsinore
Total Phosphorus concentration (Final)	Annual average no greater than 0.1 mg/L; to be attained no later than 2020
Total Nitrogen concentration (Final)	Annual average no greater than 0.75 mg/L; to be attained no later than 2020
Ammonia nitrogen concentration (Final)	Calculated concentrations to be attained no later than 2020 Accute: 1-hour average concentration of total ammonia nitrogen (mg/L) not to exceed, more than once every three years on the average, the CMC (acute criteria), where $CMC = 0.4111(1+10^{(7.204-pH)} + 58.4/(1+10^{(pH-7.204)}))$ Chronic: thirty-day average concentration of total ammonia nitrogen (mg/L) not to exceed, more than once every three years on the average, the CCC (chronic criteria) $CCC = (0.0577/(1+10^{(7.688-pH)}) + 2.487/(1+10^{(pH-7.688)})) \times \min(2.85, 1.45 \times 10^{(0.028(25-T))})$
Chlorophyll a concentration (Interim)	Summer average no greater than 40 µg/L; to be attained no later than 2015
Chlorophyll a concentration (Final)	Summer average no greater than 25 µg/L; to be attained no later than 2020
Dissolved oxygen concentration (Interim)	Depth average no less than 5 mg/L; to be attained no later than 2015
Dissolved oxygen concentration (Final)	No less than 5 µg/L 1 meter above lake bottom, to be attained no later than 2020

Source: RWQCB 2004.

Note: Compliance with targets to be achieved as soon as possible, but no later than the date specified.

Phosphorus and nitrogen TMDLs for Lake Elsinore are shown in Table 4.8-3. The TMDLs, expressed as 10-year running averages, will implement the numeric targets and thereby attain water quality standards.

**Table 4.8-3
Nutrient TMDLs and Compliance Dates for Lake Elsinore**

TMDL	Final Total Phosphorous TMDL (kg/yr)	Final Total Nitrogen TMDL (kg/yr)
Lake Elsinore	28,584	239,025

Source: RWQCB 2004.

Note: Final compliance to be achieved as soon as possible, but no later than December 31, 2020. TMDL specified as 10-year running average.

The dominant application of phosphorous and nitrogen is in agricultural use (i.e., fertilizers). PCBs are used as coolants and insulating fluids for transformers and capacitors as well as plasticizers in paints and cements, pesticides extenders, flame retardants, lubricating oils, sealants, etc.

4.8.2 Related Regulations

Federal

Clean Water Act

The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. It operates on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit; permit review is the CWA's primary regulatory tool. The following paragraphs provide additional details on specific sections of the CWA.

Section 404

CWA Section 404 regulates the discharge of dredged and fill materials into "waters of the United States," which include oceans, bays, rivers, streams, lakes, ponds, and wetlands. Project proponents must obtain a permit from the U.S. Army Corps of Engineers (ACOE) for all discharges of dredged or fill material into Waters of the United States, including wetlands, before proceeding with a proposed activity. Before any actions that may impact surface waters are carried out, a delineation of jurisdictional waters of the United States must be completed, following ACOE protocols, in order to determine whether the project study area encompasses wetlands or other waters of the United States that qualify for CWA protection.

Section 404 permits may be issued only for the least environmentally damaging practicable alternative. That is, authorization of a proposed discharge is prohibited if there is a practicable alternative that would have less adverse impacts and lacks other significant adverse consequences.

Section 402

CWA Section 402 regulates discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program, administered by the EPA. In California, the SWRCB is authorized by the EPA to oversee the NPDES program through the Regional Water Quality Control Boards (RWQCBs). The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits. Activities covered by Section 402 include the following:

Construction General Permit

Pursuant to CWA Section 402(p), which requires regulations for permitting of certain stormwater discharges, the SWRCB has issued statewide general NPDES Permit and Waste Discharge Requirements for stormwater discharges from construction sites.

Under this Construction General Permit, discharges of stormwater from construction sites of one or more acres are required to obtain individual NPDES permits for stormwater discharges or be covered under the General Permit for Discharges of Storm Water Associated with Construction Activity. Effective July 1, 2010, the updated Construction General Permit requires several additional items in order to be eligible for coverage under the Construction General Permit. The permit requires a risk-based permitting approach, dependent upon the likely level of risk imparted by a project. The permit also contains several compliance items, including:

- Additional mandatory Best Management Practices (BMPs) to reduce erosion and sedimentation, which may include incorporation of vegetated swales, setbacks and buffers, rooftop and impervious surface disconnection, bioretention cells, rain gardens, rain cisterns, implementation of pollution/sediment/spill control plans, training, and other structural and non-structural actions;
- Sampling and monitoring for non-visible pollutants;
- Soil characteristics monitoring and reporting at the project site;
- Effluent monitoring and annual compliance reports;
- Monitor receiving waters and conduct bioassessments;
- Development and adherence to a Rain Event Action Plan that must be designed to protect all exposed portions of the site within 48 hours prior to any likely precipitation event;
- Requirements for Post-Construction Storm Water Performance Standards;
- Technology-Based Numeric Action Levels for pH and turbidity;

- Technology-Based Numeric Effluent Limitations for pH and turbidity (when applicable);
- Mandatory training/certification requirements under a specific curriculum. Under the permit, monitoring, reporting, and training requirements for management of stormwater pollutants are also required.

Coverage under the Construction General Permit is accomplished by completing and filing a Notice of Intent with the SWRCB. Each applicant under the Construction General Permit must ensure that a Stormwater Pollution Prevention Plan (SWPPP) is prepared prior to grading and implemented during construction. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction. The Construction General Permit requires the control of pollutants to meet Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology (BAT/BCT) standards.¹ Compliance with the requirements of the Construction General Permit is used as one method to evaluate project construction–related impacts on surface water quality.

The municipal separate storm sewer system (MS4) permits issued to the Riverside County Co-Permittees by the Santa Ana RWQCB regulate stormwater quality in the Project area. The fourth MS4 permits have been issued by each RWQCB and are referred to as the Fourth-Term MS4 Permits. The District and the Cities of Lake Elsinore and Wildomar are Permittees under the Fourth-Term MS4 Permits. Under these permits, the District, the County of Riverside, and the Cities of Lake Elsinore and Wildomar² (Co-Permittees) are required to enforce and comply with stormwater discharge requirements outlined in Order No. R8-2010-0033 (NPDES No. CAS 618033). It should be noted that Order No. R8-2010-0033 (NPDES No. CAS 618033), approved in January 2010, superseded Order No. R8-2002-0011 except for enforcement purposes and in order to meet the provisions contained in Division 7 of the California Water Code and provisions of the federal CWA.

¹ BAT/BCT are CWA, technology-based standards that are applicable to construction site stormwater discharges. Federal law specifies factors relating to the assessment of BAT, including age of the equipment and facilities involved; the process employed; the engineering aspects of the application of various types of control techniques; process changes; the cost of achieving effluent reduction; non-water quality environmental impacts (including energy requirements); and other factors as the administrator of the EPA deems appropriate. Factors relating to the assessment of BCT include reasonableness of the relationship between the costs of attaining a reduction in effluent and the effluent reduction benefits derived; comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources; the age of the equipment and facilities involved; the process changes; non-water quality environmental impact (including energy requirements); and other factors as the administrator deems appropriate. The administrator has not issued regulations specifying BAT or BCT for construction site discharges.

² Urban runoff from City of Wildomar discharges into watersheds within the Santa Ana RWQCB and the San Diego RWQCB jurisdictions. Since the Project area is only located in the Santa Ana River Region, the San Diego Region Santa Margarita Drainage Area is not discussed herein.

The following list highlights requirements, plans and topics of discussion resulting from the MS4 Permit:

- Illegal Discharges
- Allowable Discharges
- Total Maximum Daily Load (TMDL)
- Riverside County Water Quality Management Plan for Urban Runoff
- Drainage Area Management Plan (DAMP)
- Water Quality Management Plan (WQMP)
- Low Impact Development (LID)
- Basin Plan

Section 401

Under CWA Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States must obtain certification from the state in which the discharge would originate, or, if appropriate, from the interstate water pollution control agency with jurisdiction over the affected waters at the point where the discharge would originate. Therefore, all projects that have a federal component and that may affect the quality of the state's waters (including projects that require federal agency approval, such as issuance of a Section 404 permit) must also comply with CWA Section 401. Section 401 certification or waiver is under the jurisdiction of the Santa Ana RWQCB.

State

California Toxics Rule

Because of gaps in California's regulations, the EPA promulgated the California Toxics Rule (40 CFR 131.38), which established numeric water quality criteria for certain toxic substances in California surface waters. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for water bodies that are designated by the Santa Ana RWQCB as having beneficial uses protective of aquatic life or human health. The California Toxics Rule criteria are applicable to the receiving waters from the Project area.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) established the principal California legal and regulatory framework for water quality control. The Porter-Cologne Act is

embodied in the California Water Code. The California Water Code authorizes the State Water Resources Control Board (SWRCB) to implement the provisions of the federal CWA.

The State of California is divided into nine regions governed by RWQCBs. The RWQCBs implement and enforce provisions of the California Water Code and the CWA under the oversight of the SWRCB. The MDP area is located within the purview of the Santa Ana RWQCB (Region 8) and San Diego Regional Water Quality Control Board (Region 9), and must comply with applicable elements of the region's Basin Plan, as well as the Porter-Cologne Act.

Each RWQCB must formulate and adopt a water quality control plan for its region. The Santa Ana RWQCB has adopted and periodically amends a water quality control plan titled Water Quality Control Plan for the Santa Ana River Basin. The Santa Ana RWQCB Basin Plan must conform to the policies set forth in the Porter-Cologne Act as established by the SWRCB in its state water policy. The Porter-Cologne Act also provides the RWQCBs with authority to include within its basin plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

California Department of Fish and Wildlife Section 1600 et seq. (Lake or Streambed Alteration Agreement Program)

Under Sections 1600–1616 of the California Fish and Game Code, the CDFW regulates projects that affect the flow, channel, or banks of rivers, streams, and lakes. Section 1602 requires public agencies and private individuals respectively to notify and enter into a streambed or lakebed alteration agreement with CDFW before beginning construction of a project that will divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake, or use materials from a streambed.

State Watershed Management Initiative

In 2004, the SWRCB and the Regional Boards developed the Watershed Management Initiative (WMI) to address water quality improvements of impaired water bodies. The WMI is an integrated planning process in part designed to more effectively direct State and Federal funds to the highest priority water quality activities. Its distinguishing feature is the integration of the various regional, state, and EPA programs on a watershed basis. The participating agencies in the WMI are the nine RWQCBs, the SWRCB, and the EPA. The Integrated Plan is composed of individual chapters written by each of the nine RWQCBs, as well as chapters prepared by the SWRCB and the EPA.