APPENDIX E

Receiving Water Condition and Urban Runoff Assessment

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Appendix E –Receiving Water Condition and Urban Runoff Assessment

Appendices E.1 and E.2 present an assessment of receiving water conditions and the impact of urban discharges in San Dieguito River WMA during wet and dry weather, respectively. The list of receiving water conditions was developed on the basis of the 2010 303(d) list, applicable TMDLs, waterbodies with special biological significance, public input, and the priority pollutants or stressors identified from current and historical receiving water monitoring data. MS4 monitoring data compiled from the LTEA and WURMP Annual Reports, as well as any applicable TMDL WQBELs, are also evaluated in relation to the receiving water conditions to determine if a priority water quality condition existed.

The tables in Appendices E.1 and E.2 are presented by WQIP Subwatershed and 303(d) listed waterbody. In order to mirror the process used by the Responsible Agencies to assess the potential receiving water conditions for each waterbody, the data are presented in the order they were evaluated. The following is an illustration of how the reader might follow the process used to assess receiving water conditions in an example waterbody (Example Waterbody A):

- **303(d) Listings (Page E-5, reading left to right)** identifies the WQIP subwatershed, applicable TMDLs, and 303(d) listed waterbody (Example Waterbody A), and then presents the associated pollutants, impaired beneficial uses, and potential sources of impairment for Example Waterbody A as identified under the 2010 303(d) list.
- **Receiving Water Assessment and Conditions (Page E-6, reading left to right)**
  - **Receiving Water Assessment** identifies the WQIP subwatershed, applicable TMDLs, and 303(d) listed waterbody (Example Waterbody A), and then presents public input submitted in response to the public data call and NPDES receiving water monitoring station data for Example Waterbody A. The receiving water priorities identified were noted as exceeding water quality benchmarks in the 2005-2010 LTEA, the FY 11 & 12 WURMP, or both.
  - **Receiving Water Conditions** summarizes the receiving water conditions identified through the 303(d) listings and receiving water assessment, and states the applicable lines of evidence.
- **Urban Runoff Monitoring Assessment (Page E-7, reading left to right)** identifies the WQIP subwatershed and 303(d) listed waterbody (Example Waterbody A), and then presents the priority pollutants at the MS4 outfall, based on the Urban Runoff Monitoring Program and identified in the 2005-2010 LTEA and FY 11&12 WURMP Annual Reports, for Example Waterbody A. as well as the applicable WQBELs where appropriate.

Page E-8 then restarts the assessment with an evaluation of 303(d) listings for the next waterbody.

APPENDIX E.1

Wet Weather Receiving Water Condition Assessment

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WQIP Subwatershed	TMDL	303(d) Listed Waterbody	303(d) Listing(s)		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Above Lake Hodges	Bacteria TMDL	Cloverdale Creek	Phosphorus	Warm Fresh Water Habitat	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			TDS	Agricultural Supply	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
		Felicita Creek	Aluminum	Municipal & Domestic Supply	Unknown
			TDS	Municipal & Domestic Supply	Agricultural Return Flows, Flow Regulation/Modification, Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers
		Green Valley Creek	Chloride	Municipal & Domestic Supply	Unknown
			Manganese	Municipal & Domestic Supply	Unknown
			PCP	Municipal & Domestic Supply	Unknown
			Sulfates	Municipal & Domestic Supply	Unknown Point Source, Urban Runoff/Storm Sewers, Natural Sources, and Unknown Non-point Sources
		Kit Carson Creek	PCP	Municipal & Domestic Supply	Unknown
			TDS	Municipal & Domestic Supply	Agricultural Return Flows, Flow Regulation/Modification, Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Receiving Water Assessment					Receiving Water Conditions	
			Public Input	NPDES Receiving Water				Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP			
San Dieguito River Above Lake Hodges	Bacteria TMDL	Cloverdale Creek	No Input	SDC-TWAS-1, SDC-TWAS-2	Chlorpyrifos, Bifenthrin, BOD, COD, TSS, Turbidity, pH, Ammonia as N, Surfactants (MBAS), Toxicity (*H. azteca* acute), Fecal Coliform, Total P, Nitrate as N, TDS	Toxicity (*S. capricornutum* acute), Very Poor IBI, Fecal Coliform, *Enterococcus* , Total P, Dissolved P, TDS	Phosphorus not included because impact to WARM during wet weather is unknown. Phosphorus will be listed as contributing to impairment of WARM during dry weather.		
							TDS not included because impact to AGR during wet weather is unknown. TDS will be listed as contributing to impairment of AGR during dry weather.		
		Felicita Creek	No Input				Impairment of MUN due to aluminum in Felicita Creek during wet weather.	303(d)	
							TDS not included because impact to MUN during wet weather is unknown. TDS will be listed as contributing to impairment of MUN during dry weather.		
		Green Valley Creek	No Input				Impairment of MUN due to chloride, manganese, and PCP in Green Valley Creek during wet weather.	303(d)	
							Sulfates not included because impact to MUN during wet weather is unknown. Sulfates are listed as contributing to impairment of MUN during dry weather.		
		Kit Carson Creek	No Input				Impairment of MUN due to PCP in Kit Carson Creek during wet weather	303(d) (MS4 program does not monitor for PCP)	
							TDS is not included because impact to MUN during wet weather is unknown. TDS will be listed as contributing to impairment of MUN during dry weather.		

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Urban Runoff Monitoring Assessment		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Above Lake Hodges	Bacteria TMDL	Cloverdale Creek	TSS, Fecal Coliform	Fecal Coliform, TDS	*Enterococcus* , Fecal Coliform (Order No. R9-2013-0001; Attachment E.6)
		Felicita Creek			
		Green Valley Creek			
		Kit Carson Creek			

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	303(d) Listing(s)		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Above Lake Hodges	Bacteria TMDL	Lake Hodges	Color	Municipal & Domestic Supply	Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers
			Manganese	Municipal & Domestic Supply	Unknown
			pH	Municipal & Domestic Supply	Unknown
			Mercury	Municipal & Domestic Supply, Commercial/ Recreational Collection of Fish, Shellfish, or Organisms	Unknown
			Nitrogen	Municipal & Domestic Supply	Agriculture, Dairies, Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers
			Phosphorus	Municipal & Domestic Supply	Agriculture, Dairies, Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers
			Turbidity	Municipal & Domestic Supply	Unknown
			NA	NA	NA

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Receiving Water Assessment				Receiving Water Conditions	
			Public Input	NPDES Receiving Water			Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP		
San Dieguito River Above Lake Hodges	Bacteria TMDL	Lake Hodges	No Input	SDC-TWAS-1, SDC-TWAS-2	Chlorpyrifos, Bifenthrin, BOD, COD, TSS, Turbidity, pH, Ammonia as N, Surfactants (MBAS), Toxicity (*H. azteca* acute), Fecal Coliform, Total P, Nitrate as N, TDS	Toxicity (*S. capricornutum* acute), Very Poor IBI, Fecal Coliform, *Enterococcus* , Total P, Dissolved P, TDS	Impairment of MUN due to color, manganese, pH, and mercury in Lake Hodges during wet weather	303(d) (MS4 program does not monitor for manganese, pH, color, or mercury)
							Nitrogen and phosphorus not included because impacts to WARM during wet weather are unknown. Nitrogen and phosphorus will be listed as contributing to impairment of WARM during dry weather.	
							Impairment of MUN due to turbidity in Lake Hodges during wet weather	303(d) and historical data
							Exceedance of fecal coliform WQO at NPDES RW station during wet weather	RW monitoring data (historical and current) and Bacteria TMDL

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Urban Runoff Monitoring Assessment		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Above Lake Hodges	Bacteria TMDL	Lake Hodges	TSS, Fecal Coliform	Fecal Coliform, TDS	*Enterococcus* , Fecal Coliform (Order No. R9-2013-0001; Attachment E.6)

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	303(d) Listing(s)		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Above Sutherland Reservoir	Bacteria TMDL	Santa Ysabel Creek (Above Sutherland Reservoir)	Toxicity	Warm Fresh Water Habitat	Unknown Non-point Source
		Sutherland Reservoir	Color	Municipal & Domestic Supply	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			Iron	Municipal & Domestic Supply	Unknown
			Manganese	Municipal & Domestic Supply	Unknown
			pH	Municipal & Domestic Supply	Unknown
			Total Nitrogen as N	Warm Freshwater Habitat	Natural, Unknown, and Unknown Point Sources

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Receiving Water Assessment				Receiving Water Conditions	
			Public Input	NPDES Receiving Water			Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP		
San Dieguito River Above Sutherland Reservoir	Bacteria TMDL	Santa Ysabel Creek (Above Sutherland Reservoir)	No Input	NA	NA	NA	Impairment of WARM due to toxicity in Santa Ysabel Creek during wet weather	303(d)
		Sutherland Reservoir					Impairment of MUN due to color, iron, manganese, and pH in Sutherland Reservoir during wet weather	303(d)
							Total nitrogen not included because impact to WARM during wet weather is unknown. Total nitrogen will be listed as contributing to impairment of WARM during dry weather.	

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Urban Runoff Monitoring Assessment		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Above Sutherland Reservoir	Bacteria TMDL	Santa Ysabel Creek (Above Sutherland Reservoir)	NA	NA	*Enterococcus* , Fecal Coliform (Order No. R9-2013-0001; Attachment E.6)
		Sutherland Reservoir			

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	303(d) Listing(s)		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Below Lake Hodges	Bacteria TMDL	San Dieguito River	*Enterococcus*	Water Contact Recreation	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			Fecal coliform	Water Contact Recreation	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			Nitrogen	Warm Freshwater Habitat	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			Phosphorus	Warm Freshwater Habitat	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			TDS	Warm Freshwater Habitat	Unspecified Non-point Source, Unspecified Point Source
			Toxicity	Warm Freshwater Habitat	Unknown

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Receiving Water Assessment				Receiving Water Conditions	
			Public Input	NPDES Receiving Water			Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP		
San Dieguito River Below Lake Hodges	Bacteria TMDL	San Dieguito River	No Input	MLS (Below Lake Hodges)	TSS, Turbidity, Bifenthrin, Toxicity (*C. dubia* reproduction, *S. capricornutum* acute), Fecal Coliform, TDS	Toxicity (*C. dubia* reproduction), Very Poor IBI, Fecal Coliform, TDS	Impairment of REC-1 due to *Enterococcus* and fecal coliform in San Dieguito River during wet weather	303(d) and RW monitoring data (historical & current), and Bacteria TMDL
							Nitrogen and phosphorus not included because impact to WARM during wet weather is unknown. Nitrogen and phosphorus will be listed as contributing to impairment of WARM during dry weather.	
							TDS not included because impact to WARM during wet weather is unknown. TDS will be listed as contributing to impairment of WARM during dry weather.	
							Impairment of WARM due to toxicity in San Dieguito River during wet weather	303(d) and RW monitoring data (historical & current)

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Urban Runoff Monitoring Assessment		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Below Lake Hodges	Bacteria TMDL	San Dieguito River	Fecal Coliform	Fecal Coliform	*Enterococcus* , Fecal Coliform (Order No. R9-2013-0001; Attachment E.6)

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	303(d) Listing(s)		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Below Lake Hodges	Bacteria TMDL	Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	Indicator Bacteria	Water Contact Recreation	Unknown Non-point Source, Urban Runoff, Unknown Point Source
		Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth	Total Coliform	Shellfish Harvesting	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Receiving Water Assessment				Receiving Water Conditions	
			Public Input	NPDES Receiving Water			Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP		
San Dieguito River Below Lake Hodges	Bacteria TMDL	Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	No Input	MLS (Below Lake Hodges)	TSS, Turbidity, Bifenthrin, Toxicity (*C. dubia* reproduction, *S. capricornutum* acute), Fecal Coliform, TDS	Toxicity (*C. dubia* reproduction), Very Poor IBI, Fecal Coliform , TDS	Impairment of REC-1 due to indicator bacteria at the Pacific Ocean Shoreline during wet weather	Bacteria TMDL
		Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth	No Input				Impairment of SHELL due to total coliform at the Pacific Ocean Shoreline during dry weather.	303(d)

WQIP Subwatershed	TMDL	303(d) Listed Waterbody	Urban Runoff Monitoring Assessment		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Below Lake Hodges	Bacteria TMDL	Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	Fecal Coliform	Fecal Coliform	*Enterococcus* , Fecal Coliform, Total Coliform (Order No. R9-2013-0001; Attachment E.6)
		Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth			

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APPENDIX E.2

Dry Weather Receiving Water Condition Assessment

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WQIP Sub-watershed	TMDL	303(d) Listed Water-body	303(d) Listings		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Above Lake Hodges	Bacteria TMDL	Cloverdale Creek	Phosphorus	Warm Fresh Water Habitat	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			TDS	Agricultural Supply	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
		Felicita Creek	Aluminum	Municipal & Domestic Supply	Unknown
			TDS	Municipal & Domestic Supply	Agricultural Return Flows, Flow Regulation/Modification, Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers
		Green Valley Creek	Chloride	Municipal & Domestic Supply	Unknown
			Manganese	Municipal & Domestic Supply	Unknown
			PCP	Municipal & Domestic Supply	Unknown
			Sulfates	Municipal & Domestic Supply	Unknown Point Source, Urban Runoff/Storm Sewers, Natural Sources, and Unknown Non-point Sources
		Kit Carson Creek	PCP	Municipal & Domestic Supply	Unknown
			TDS	Municipal & Domestic Supply	Agricultural Return Flows, Flow Regulation/Modification, Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Receiving Water Assessment						Receiving Water Conditions	
			Public Input	NPDES Receiving Water			SMC Program		Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP	2005-2010 LTEA	FY 11 & 12 WURMP		
San Dieguito River Above Lake Hodges	Bacteria TMDL	Cloverdale Creek	No Input	SDC-TWAS1, SDC-TWAS-2	BOD, TSS, Turbidity, Surfactants (MBAS), Toxicity (*C. dubia*), Very Poor IBI, O/E, *Enterococcus* , Total N, Benthic Algae, Total P	Toxicity (*S. capricornutum* acute, C. dubia reproduction), Very Poor IBI, *Enterococcus* , Total P, Dissolved P, TDS	No Data	Sulfates, Poor IBI, Total N, Total P, TDS	Impairment of WARM due to eutrophication (phosphorus) in Cloverdale Creek during dry weather.	303(d) and RW monitoring data (historical & current)
									Impairment of AGR due to TDS in Cloverdale Creek during dry weather.	303(d) and RW monitoring data (historical & current)
		Felicita Creek	No Input						Impairment of MUN due to aluminum in Felicita Creek during dry weather.	303(d)
									Impairment of MUN due to TDS in Felicita Creek during dry weather.	303(d) and RW monitoring data (historical & current)
		Green Valley Creek	No Input						Impairment of MUN due to chloride, manganese, and PCP in Green Valley Creek during dry weather.	303(d)
									Impairment of MUN due to sulfates in Green Valley Creek during dry weather.	303(d) and RW monitoring data (historical & current)
		Kit Carson Creek	No Input						Impairment of MUN due to PCP in Kit Carson Creek during dry weather.	303(d) (MS4 program does not monitor for PCP)
									Impairment of MUN due to TDS in Kit Carson Creek during dry weather.	303(d) and RW monitoring data (historical & current)

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Urban Runoff Monitoring Assessment[a]		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Above Lake Hodges	Bacteria TMDL	Cloverdale Creek	Chloride, Sulfates, *Enterococcus* , Fecal Coliform, Total N, Total P, TDS	Chloride, Sulfates, *Enterococcus* , Fecal Coliform, Total N, Total P, Dissolved P, TDS	*Enterococcus* , Fecal Coliform (Order No. R9-2013-0001; Attachment E.6)
		Felicita Creek			
		Green Valley Creek			
		Kit Carson Creek			

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	303(d) Listings		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Above Lake Hodges	Bacteria TMDL	Lake Hodges	Color	Municipal & Domestic Supply	Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers
			Manganese	Municipal & Domestic Supply	Unknown
			pH	Municipal & Domestic Supply	Unknown
			Mercury	Municipal & Domestic Supply	Unknown
			Nitrogen	Municipal & Domestic Supply	Agriculture, Dairies, Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers
			Phosphorus	Municipal & Domestic Supply	Agriculture, Dairies, Unknown Non-point Source, Unknown Point Source, Urban Runoff/Storm Sewers
			Turbidity	Municipal & Domestic Supply	Unknown
			NA	NA	NA

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Receiving Water Assessment						Receiving Water Conditions	
			Public Input	NPDES Receiving Water			SMC Program		Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP	2005-2010 LTEA	FY 11 & 12 WURMP		
San Dieguito River Above Lake Hodges	Bacteria TMDL	Lake Hodges	No Input	SDC-TWAS1, SDC-TWAS-2	BOD, TSS, Turbidity, Surfactants (MBAS), Toxicity (*C. dubia*), Very Poor IBI, O/E, *Enterococcus* , Total N, Benthic Algae, Total P	Toxicity (*S. capricornutum* acute, C. dubia reproduction), Very Poor IBI, *Enterococcus* , Total P, Dissolved P, TDS	No Data	Sulfates, Poor IBI, Total N, Total P, TDS	Impairment of MUN due to color, manganese, pH, and mercury in Lake Hodges during dry weather.	303(d) (MS4 program does not monitor for manganese, pH, color, or mercury)
									Impairment of MUN due to eutrophication (nitrogen and phosphorus) in Lake Hodges during dry weather.	303(d) and RW monitoring data (historical & current)
									Impairment of MUN due to turbidity in Lake Hodges during dry weather.	303(d) and historical data
									Elevated *Enterococcus* levels at the NPDES RW station during dry weather.	RW monitoring data (historical and current)
									Poor IBI at the NPDES RW station during dry weather.	RW monitoring data (historical and current).
									Toxicity to *C. dubia* at the NPDES RW station during dry weather.	RW monitoring data (historical and current)

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Urban Runoff Monitoring Assessment[a]		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Above Lake Hodges	Bacteria TMDL	Lake Hodges	Chloride, Sulfates, *Enterococcus* , Fecal Coliform, Total N, Total P, TDS	Chloride, Sulfates, *Enterococcus* , Fecal Coliform, Total N, Total P, Dissolved P, TDS	*Enterococcus* , Fecal Coliform (Order No. R9-2013-0001; Attachment E.6)

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	303(d) Listings		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Above Sutherland Reservoir	Bacteria TMDL	Santa Ysabel Creek (Above Sutherland Reservoir)	Toxicity	Warm Fresh Water Habitat	Unknown Non-point Source
		Sutherland Reservoir	Color	Municipal & Domestic Supply	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			Iron	Municipal & Domestic Supply	Unknown
			Manganese	Municipal & Domestic Supply	Unknown
			pH	Municipal & Domestic Supply	Unknown
			Total Nitrogen as N	Warm Freshwater Habitat	Natural, Unknown, and Unknown Point Sources

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Receiving Water Assessment						Receiving Water Conditions	
			Public Input	NPDES Receiving Water			SMC Program		Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP	2005-2010 LTEA	FY 11 & 12 WURMP		
San Dieguito River Above Sutherland Reservoir	Bacteria TMDL	Santa Ysabel Creek (Above Sutherland Reservoir)	No Input	NA	NA	NA	NA	NA	Impairment of WARM due to toxicity in Santa Ysabel Creek during dry weather.	303(d)
		Sutherland Reservoir	No Input						Impairment of MUN due to color, iron, manganese, and pH in Sutherland Reservoir during dry weather.	303(d)
									Impairment of WARM due to eutrophication (total nitrogen) in Sutherland Reservoir during dry weather.	303(d)

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Urban Runoff Monitoring Assessment[a]		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Above Sutherland Reservoir	Bacteria TMDL	Santa Ysabel Creek (Above Sutherland Reservoir)	NA	NA	*Enterococcus* , Fecal Coliform (Order No. R9-2013-0001; Attachment E.6)
		Sutherland Reservoir			

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	303(d) Listings		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Below Lake Hodges	Bacteria TMDL	San Dieguito River	*Enterococcus*	Water Contact Recreation	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			Fecal Coliform	Water Contact Recreation	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			Nitrogen	Warm Freshwater Habitat	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			Phosphorus	Warm Freshwater Habitat	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
			TDS	Warm Freshwater Habitat	Unspecified Non-point Source, Unspecified Point Source
			Toxicity	Warm Freshwater Habitat	Unknown

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Receiving Water Assessment						Receiving Water Conditions	
			Public Input	NPDES Receiving Water			SMC Program		Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP	2005-2010 LTEA	FY 11 & 12 WURMP		
San Dieguito River Below Lake Hodges	Bacteria TMDL	San Dieguito River	Ammonia	MLS (Below Lake Hodges)	BOD, Toxicity (*S. capricornutum* acute), Poor IBI, O/E, *Enterococcus* , Fecal Coliform, Total N, Benthic Algae, TDS	Toxicity (*C. dubia*), Very Poor IBI, *Enterococcus* , Total N, Total P, Dissolved P, TDS	Chloride, Sulfates, TSS, Very Poor IBI, O/E, Total N, Benthic Algae, TDS	NA	Impairment of REC-1 due to *Enterococcus* in San Dieguito River during dry weather	303(d) and RW monitoring data (historical & current), and Bacteria TMDL
									Impairment of REC-1 due to fecal coliform in San Dieguito River during dry weather.	303(d) and RW monitoring data (historical), and Bacteria TMDL
									Impairment of unknown conditions due to eutrophication (ammonia)	Public Input
									Impairment of WARM due to nitrogen and phosphorus in San Dieguito River during dry weather.	303(d)
									Impairment of WARM due to TDS in San Dieguito River during dry weather.	303(d) and RW monitoring data (historical & current)
									Impairment of WARM due to toxicity in San Dieguito River during dry weather.	303(d) and RW monitoring data (historical & current)

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Urban Runoff Monitoring Assessment[a]		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Below Lake Hodges	Bacteria TMDL	San Dieguito River	*Enterococcus* , Total P, Total N, TDS	Chloride, Sulfates, *Enterococcus* , Fecal Coliform, Total N, Total P, Dissolved P, TDS	*Enterococcus* , Fecal Coliform (Order No. R9-2013-0001; Attachment E.6)

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	303(d) Listings		
			Pollutant(s)	Impaired Beneficial Use(s)	Potential Source(s)
San Dieguito River Below Lake Hodges	Bacteria TMDL	Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	Indicator Bacteria	Water Contact Recreation	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source
		Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth	Total Coliform	Shellfish Harvesting	Unspecified Non-point Source, Urban Runoff, Unspecified Point Source

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Receiving Water Assessment						Receiving Water Conditions	
			Public Input	NPDES Receiving Water			SMC Program		Receiving Water Conditions	Line(s) of Evidence
				Applicable Receiving Water Station(s)	2005-2010 LTEA	FY 11 & 12 WURMP	2005-2010 LTEA	FY 11 & 12 WURMP		
San Dieguito River Below Lake Hodges	Bacteria TMDL	Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	No Input	MLS (Below Lake Hodges)	BOD, Toxicity-S. capricornutum acute, Poor IBI, O/E, Enterococcus, Fecal Coliform, Total N, Benthic Algae, TDS	Toxicity-C. dubia, Very Poor IBI, Enterococcus, Total N, Total P, Dissolved P, TDS	Chloride, Sulfate, TSS, Very Poor IBI, O/E, Total N, Benthic Algae, TDS	NA	Impairment of REC-1 due to indicator bacteria at the Pacific Ocean Shoreline during dry weather.	Bacteria TMDL
		Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth	No Input						Impairment of SHELL due to total coliform at the Pacific Ocean Shoreline during dry weather.	303(d)

WQIP Sub-watershed	TMDL	303(d) Listed Water-body	Urban Runoff Monitoring Assessment[a]		
			MS4 Outfall and Dry Weather Monitoring Program		TMDL(s)
			2005-2010 LTEA	FY 11 & 12 WURMP	WQBELs
San Dieguito River Below Lake Hodges	Bacteria TMDL	Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	*Enterococcus* , Total P, Total N, TDS	Chloride, Sulfates, *Enterococcus* , Fecal Coliform, Total N, Total P, Dissolved P, TDS	*Enterococcus* , Fecal Coliform, Total Coliform (Order No. R9-2013-0001; Attachment E.6)
		Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth			

[a] No MS4 Outfall and Dry Weather Monitoring Program provided in the FY 11 &12 WURMP.

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