APPENDIX E

WATER QUALITY OBJECTIVES/GOALS AND RELATED BENEFICIAL USE TABLES (E1-E3)

Appendix E1: Basin Plan Objectives for the San Joaquin Basin

Constituent	Location/Comment		Dates	Objective		
SACRAMENTO-SAN JOAQUIN BASIN PLAN OBJECTIVES (ref)						
Numeric						
Dissolved Oxygen	Outside Delta (legal boundaries)[4]	Cold/Spawning: Cosumnes, Mokelumne, Calaveras, Stanislaus from Goodwin Dam to SJR, Tuolumne from New Don Pedro Dam to SJR, Friant Dam to Mendota Pool, McSWAIN reservoir to SJR, Spawning[3]: Mendota dam to Vernalis, Mud Slough North, Salt Slough.	all	7.0 mg/L		
Specific Conductivity	San Joaquin River at Airport Way Bridge, Vernalis; Old River at Tracy Road Bridge[11]		Apr 1- Aug 31	700 µmhos/cm		
			Sep 1- Mar 31	1000 µmhos/cm		
pH[5]	In fresh waters with designated COLD or WARM beneficial		all	6.5 - 8.5		
Temperature[5]	Deer Creek, source to Cosumnes River. The following		See Resolution	Range 63-81ºF		
Constituent	**Location/Comment**		**Dates**	**Objective**		
Narrative						
pH[5]	Sacramento River and San Joaquin River Basins		all	Changes in normal ambient pH levels shall not exceed 0.5 in fresh waters with designated COLD or WARM beneficial uses.		
Temperature[5]	Sacramento River and San Joaquin River Basins		all	At no time or place shall the temperature of intrastate waters be increased more than 5 ºF above natural receiving water temperature.		
Toxicity	Sacramento River and San Joaquin River Basins		all	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.		
TSS	Sacramento River and San Joaquin River Basins		all	The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.		
SACRAMENTO-SAN JOAQUIN BASIN PLAN OBJECTIVES (by reference*)						
Specific Conductivity	Water Bodies Designated as Municipal and Domestic Supply (MUN)-Drinking Water. California Secondary MCL		all	Maximum Contaminant Level Ranges	Recommende	900 µmhos/cm
					Upper	1600 µmhos/cm
					Short Term	2200 µmhos/cm
BAY-DELTA AUTHORITY TARGETS (reference)						
Temperature[8]	San Joaquin River at Vernalis		April 1 - Jun 30	<68 ºF		
TOC	Source water quality for the Delta		all	3.0 mg/L		

*Title 22 of the California code of regulations, which are incorporated by reference into the Sacramento-San Joaquin Basin Plan Objectives: Table 64431-A (Inorganic Chemicals), Table 64449-A (Secondary Maximum contaminant Levels-consumer Acceptance Limits

[3] Spawning was used in areas designated as WARM and SPAWNING (Applied most limiting)

[4] Apply most limiting.

[5] Contains narrative and Numeric. Apply most limiting.

[7] Daily average temperature in all water-year types.

[8] Central Valley Regional Water Quality Control Board (CVRWQCB) Water Quality Control Plan

[11] Maximum 30-day running average of mean daily, in µmhos/cm

Appendix E2: Water Quality Goals for the San Joaquin Basin

Indicator(s)	Units	SJR-BENEFICIAL USE(S)			
		Drinking Water	Aquatic Life	Irrig. Water Supply	Rec. Use
E. coli	MPN/100mL				235 [v]
					298 [w]
					409 [x]
					575 [y]
Specific Conductivity	µmhos/cm			700 [e]	

[e] Water Quality for Agriculture (Ayers & Westcot)

[v] USEPA Guideline - Single Sample Maximum Allowable Density: designated Beach Area (upper 75% C.L.)

[w] USEPA Guideline - Single Sample Maximum Allowable Density: moderate full body contact recreation (upper 82% C.L.)

[x] USEPA Guideline - Single Sample Maximum Allowable Density: lightly used full body contact recreation (upper 90% C.L.)

[y] USEPA Guideline - Single Sample Maximum Allowable Density: infrequently used full body contact recreation (upper 95% C.L.)

Appendix E3: Site Specific Representations and Beneficial Use(s) By Sub-Areas

Site Specific Monitoring by Program and Sub-Watershed	Site ID	Drinking Water	AGRICULTURE		INDUSTRY			Recreation			Aquatic Life						Designated (D) or Tributary (T)	WILD	NAV
			AGR		PROC	IND	POW	REC-1		REC-2	Freshwater Habitat		Migration		Spawning				
		Municipal and Domestic Supply (MUN)	Irrigation	Stock Watering	PROCESS	SERVICE SUPPLY	POWER	Contact	Canoeing and Rafting	Other Non-Contact	Warm	Cold	Warm	Cold	Warm	Cold		Wild Habitat	NAVIGATION
SJR Main Stem Sites																			
SJR @ Patterson	541STC507	P	E	E	E			E	E	E	E		E	E	E		D	E	
SJR @ Vernalis	541SJC501	P	E	E	E			E	E	E	E		E	E	E		D	E	
SJR @ Crows Landing	535STC504	P	E	E	E			E	E	E	E		E	E	E		D	E	
Valley Floor Drainage																			
Hospital Creek @ River Rd. *	541STC042	P	E	E	E			E	E	E	E		E	E	E		T	E	
Hospital Creek @ 33 *	541STC529	P	E	E	E			E	E	E	E		E	E	E		T	E	
Ingram Creek @ River Rd. *	541STC040	P	E	E	E			E	E	E	E		E	E	E		T	E	
Ingram Creek @ Hwy 33 *	541STC528	P	E	E	E			E	E	E	E		E	E	E		T	E	
Salado Creek @ Hwy 33 *	541STC515	P	E	E	E			E	E	E	E		E	E	E		T	E	
Salado Creek at Oak Flat Road *	541 STC532	P	E	E	E			E	E	E	E		E	E	E		T	E	
Del Puerto Creek																			
Del Puerto Creek @ Vineyard *	541STC516	P	E	E	E			E	E	E	E		E	E	E		T	E	
Del Puerto Creek @ Hwy 33 *	541STC523	P	E	E	E			E	E	E	E		E	E	E		T	E	
Del Puerto Creek @ Rodgers *	541STC524	P	E	E	E			E	E	E	E		E	E	E		T	E	
Del Puerto Creek @ mile 3.9 *	542STC525	P	E	E	E			E	E	E	E		E	E	E		T	E	
Del Puerto Creek @ mile 13.6 *	542STC526	P	E	E	E			E	E	E	E		E	E	E		T	E	
Del Puerto Creek @ Deer Creek camp ground. Mi 16 (approx. 35 min. from I-5) *	542STC527	P	E	E	E			E	E	E	E		E	E	E		T	E	
Orestimba Creek																			
Orestimba Creek @ River Road *	541STC019	P	E	E	E			E	E	E	E		E	E	E		T	E	
Orestimba Creek @ Kilburn *	541STC518	P	E	E	E			E	E	E	E		E	E	E		T	E	
Orestimba Creek @ Hwy 33 *	541STC519	P	E	E	E			E	E	E	E		E	E	E		T	E	
Orestimba Creek @ Anderson *	541STC520	P	E	E	E			E	E	E	E		E	E	E		T	E	
Orestimba Creek @ Bell Rd *	541STC517	P	E	E	E			E	E	E	E		E	E	E		T	E	
Orestimba Creek @ Orestimba Rd *	541STC521	P	E	E	E			E	E	E	E		E	E	E		T	E	
Ag Drains and Hydromodifications																			
Grayson Drain *	541STC030		E	E	E			E	E	E	E		E	E	E		T	E	
CCID Main Canal @ JT crow *	541STC522		E	E	E			E	E	E	E		E	E	E		T	E	
Blewitt MWC Drain at Hwy 132 *	541STC531		E	E	E			E	E	E	E		E	E	E		T	E	

* = Beneficial uses not specifically designated, therefore current listing based on downstream beneficial use
E = Existing beneficial use
P = Potential beneficial use