APPENDICES

APPENDIX A

ACRONYMS AND ABBREVIATIONS

AML	average monthly limitation
BAF	bioaccumulation factor
basin plans	regional water quality control plans
BCF	bioconcentration factor
BDRSWG	Bay-Delta Reclamation Sub-Work Group
BMP	best management practice
BPJ	best professional judgment
BPTCP	Bay Protection & Toxic Clean-up Program
CCC	Criteria Continuous Concentration/California Coastal Commission
CCR	California Code of Regulations
CDD	chlorodibenzo-*p*-dioxin
CDF	chlorodibenzofuran
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CMC	Criteria Maximum Concentration
CTR	California Toxics Rule
CTR criteria	California Toxics Rule criteria for priority pollutants
CV	coefficient of variation
CWA	Clean Water Act
CZARA	Coastal Zone Act Reauthorization Amendments
DFG	California Department of Fish and Game
DHS	California Department of Health Services
DMR	Discharge Monitoring Report
EBEP	Enclosed Bays and Estuaries Plan
ECA	effluent concentration allowance
EIR	Environmental Impact Report
FED	Functional Equivalent Document
g	gram(s)
g/L	gram(s) per liter (parts per thousand, ppt)
GLI	Great Lakes Initiative
GNPI	Guidance for NPDES Permits Issuance
ISWP	Inland Surface Waters Plan
kg	kilogram(s)
K_p	Partition Coefficient
L	liter(s)
LA	load allocation

LTA	long-term average
MBP	Marine Bioassay Project
MCL	Maximum Concentration Level
MDC	maximum downstream concentration
MDL	method detection limit/maximum daily limitation
mg	milligram(s)
mg/L	milligram(s) per liter (parts per million, ppm)
mgd	million gallons per day
ML	minimum level
MOU	Memorandum Of Understanding
µg/L	micrograms per liter (parts per billion, ppb)
µg/mg	micrograms per milligram
ng/L	nanogram(s) per liter (parts per trillion, pptr)
NOAA	National Oceanic and Atmospheric Agency
NOEL	No Observed Effect Level
NPDES	National Pollutant Discharge Elimination System
NPSMP	Nonpoint Source Management Plan
OEHHA	Office of Environmental Health Hazard Assessment
OP	California Ocean Plan
PCB	polychlorinated biphenyl
PEC	projected effluent concentration
PEL	preliminary effluent limitations
pg/L	picograms per liter (parts per quadrillion)
POTW	publicly-owned treatment works
ppb	parts per billion
ppm	parts per million
ppq	parts per quadrillion
ppt	parts per thousand
pptr	parts per trillion
PQL	practical quantitation level
PRC	Protocol Review Committee
QA/QC	quality assurance/quality control
Q_e	effluent flow
Q_u	upstream receiving water flow
RWQCB(s)	Regional Water Quality Control Board(s)
SMW	State Mussel Watch
SSO	site-specific objective
STORET	U.S. EPA's water quality data base (storage & retrieval system)
SWCC	State Water Conservation Coalition
SWRCB	State Water Resources Control Board
TCDD	tetrachlorodibenzo-*p*-dioxin
TCDF	tetrachlorodibenzofuran
TEF	toxicity equivalence factor

TIE	toxicity identification evaluation
TMDL	total maximum daily load
TRE	toxicity reduction evaluation
TSD	U.S. EPA's Technical Support Document
TSM	Toxic Substance(s) Monitoring (Program)
TU	toxicity unit
TU_c	toxicity unit chronic
UAA	use attainability analysis
U.S. EPA	U.S. Environmental Protection Agency
WDR	waste discharge requirements
WER	Water Effects Ratio
WET	Whole Effluent Toxicity
WLA	wasteload allocation
WMI	Watershed Management Initiative
WQBEL	water quality-based effluent limit
WQO	water quality objectives
1Q10	(see Appendix B)
7Q10	(see Appendix B)
30Q5	(see Appendix B)

APPENDIX B

DEFINITION OF TERMS

ACUTE TOXICITY, as used in the context of mixing zones, refers to aquatic lethality caused by passage through the mixing zone by migrating fish moving up or downstream, or by less mobile forms drifting through an effluent plume, or benthic organisms within the mixing zone boundaries.

ACUTELY TOXIC CONDITIONS, as used in the context of mixing zones, refers to lethality that occurs to mobile aquatic organisms that move or drift through the mixing zone, or to benthic organisms that live within the mixing zone.

ANTHROPOGENIC: Pertaining to, or resulting from human activities and behavior (e.g., treated wastewater, industrial wastewater, stormwater, etc.).

ARITHMETIC MEAN (μ) also called the average, is easily calculated as described below:

Arithmetic mean = $\mu = \Sigma x / n$
where:
Σx is the sum of the measured ambient water concentrations, and
n is the number of samples.

Simply put, the measured ambient water concentrations are first added, then divided by the number of samples.

AVERAGE MONTHLY LIMITATION (AML) means the highest allowable average of daily pollutant discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of measurements.

AVERAGE WEEKLY LIMITATION means the highest allowable average of daily pollutant discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of measurements.

BIOACCUMULATION is the uptake, concentration, and retention of substances by an organism from its surrounding medium through gill membranes or epithelial tissue and from food.

BIOACCUMULATIVE pollutants are those substances are taken up by an organism from its surrounding medium through gill membranes or epithelial tissue and from food. Generally, these substances are concentrated and retained in the body of the organism.

BIOLOGICALLY-BASED DESIGN FLOW refers to the method for determining design flows developed by the U.S. EPA Office of Research and Development which directly uses the averaging periods and exceedance frequencies specified in the acute and chronic aquatic life criteria for individual pollutants (e.g., 1 day and 3 years for acute criteria, and 4 days and 3 years for the chronic criteria). Biologically-based design flows can be calculated using the program DFLOW.

CARCINOGENIC pollutants are substances that are known to cause cancer in living organisms.

COEFFICIENT OF VARIATION (*CV*) is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

COMPLETELY-MIXED DISCHARGE CONDITION means no measurable difference in the concentration of a pollutant exists across a transect of the water body at or near the discharge point.

CONFIDENCE LEVEL is the percentage applied in the following formula to derive the percentile (P_n), where P_n is the percentile of the data distribution represented by the highest concentration in the data of the number of samples (n) in the data set: $P_n = (1 - \text{confidence level})^{1/n}$.

DILUTION CREDIT is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio.

DILUTION RATIO is the critical low flow of the receiving water divided by the flow of the effluent discharged.

DYNAMIC permit limits are based on considerations of the variability in receiving water and effluent flow rates. For example, discharges could be limited to a percentage of receiving water flow.

ESTIMATED STANDARD DEVIATION (σ) is calculated as follows:

Estimated standard deviation = $\sigma = (\Sigma [(x - \mu)^2] / (n - 1))^{0.5}$
where:
x is the observed value;
μ is the arithmetic mean of the observed values; and
n is the number of samples.

EXCEEDANCE is defined to occur whenever the instantaneous concentration of a pollutant in the receiving water is above the criterion/objective.

EXCURSION is defined to occur whenever the average concentration of a pollutant in the

receiving water over the duration of the averaging period is above the criterion/objective.

GEOMETRIC MEAN is the exponential of the arithmetic mean value of the measured concentrations' natural logarithms. It can be calculated as follows:

Geometric mean = $(x_1x_2x_3....x_n)^{1/n}$
where:

$(x_1x_2x_3....x_n)$ is the product of the measured concentrations, and n is the number of samples.

HARMONIC MEAN (FLOW) is the ratio of the geometric mean flow to the arithmetic mean flow. It is expressed as $Q_{hm} = Q_{gm} / Q_{am}$.

INCOMPLETELY-MIXED DISCHARGE CONDITION is a condition that does not meet the meaning of a completely-mixed discharge condition.

INITIAL DILUTION is the process that results in the rapid and irreversible turbulent mixing of wastewater with receiving water near the point of discharge.

MAJOR DISCHARGER shall mean municipal NPDES facilities with $\geq$ 1 million gallons per day design flow and non-municipal NPDES facilities with $\geq$ 80 points.

MAXIMUM DAILY LIMITATION (MDL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

MAXIMUM DAILY MEAN FLOW (of effluent) is the highest arithmetic mean of daily mean flows observed over the period of discharge.

MEAN DAILY MEAN FLOW (of effluent) is the arithmetic mean of daily mean flows observed over the period of discharge.

MEDIAN is the middle number, if the observed ambient water concentrations are arranged in numerical order. For an even number of samples, the median is the average of the two middle numbers. Half of all measurements are below the median and half are above the median.

MINOR DISCHARGER shall mean municipal NPDES facilities with $\leq$ i million gallons per day design flow and non-municipal NPDES facilities with $\leq$ 80 points.

MIXING ZONE is a limited volume of receiving water that is allocated for mixing with a

wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

MUTAGENIC pollutants are substances that are known to cause a mutation (i.e., change in a gene or chromosome) in living organisms.

OBJECTIONABLE BOTTOM DEPOSITS are an accumulation of materials or substances on or near the bottom of a water body which create conditions that adversely impact aquatic life, human health, beneficial uses, or aesthetics. These conditions include, but are not limited to, the accumulation of pollutants in the sediments and other conditions which result in harm to benthic organisms, production of food chain organisms, or fish egg development. The presence of such deposits shall be determined by RWQCB(s) on a case-by-case basis.

PERSISTENT pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

QUALITY ASSURANCE (QA) shall mean an integrated system of management activities involving planning, implementation, assessment, reporting, and quality improvement to ensure that a process, item, or service is of the type and quality needed and expected by the client.

QUALITY CONTROL (QC) shall mean the overall system of technical activities that measure the attributes and performance of a process, item, or service against defined standards to verify that they meet the stated requirements established by the client.

SOURCE OF DRINKING WATER is any water designated as municipal or domestic supply (MUN) in a Basin Plan.

STEADY-STATE permit limits are based on a single receiving water condition, usually a statistically based, low-flow condition such as 7Q10 (7Q10 is the average low flow that occurs for seven consecutive days with a statistical frequency of once every 10 years).

TECHNOLOGY-BASED permit limits are effluent limitations that are based on the treatment requirements under Section 301 (b) of the Federal Clean Water Act (CWA) that are the minimum level of control that must be imposed in a permit issued under Section 402 of the CWA, such as secondary treatment or best available technology economically achievable. (See 40 CFR Section 125.3 for a more detailed discussion of technology-based treatment requirements.)

TERATOGENIC pollutants are substances that are known to cause structural abnormalities or birth defects in living organisms.

WATER QUALITY-BASED permit limits are effluent limitations that are based on any requirements in addition to, or more stringent than, technology-based permit limits and which are necessary to achieve water quality standards established under Section 303 of the Federal Clean Water Act, including State narrative criteria for water quality.

1Q10 is the lowest flow that occurs for one day with a statistical frequency of once every 10 years.

7Q10 is the average low flow that occurs for seven consecutive days with a statistical frequency of once every 10 years

30Q5 is the lowest average flow that occurs for 30 consecutive days with a statistical frequency of once every 5 years.

95th PERCENTILE is the concentration that 95 percent of the observed concentrations would fall below. It can be found by ranking the observed concentrations or can be calculated as follows:

a. Assuming a normal distribution of data:

95th Percentile $= \mu + 1.645 * \sigma$
where:
μ is the arithmetic mean of the observed values; and
σ is the estimated standard deviation.

b. Assuming a log-normal distribution of data (the natural logarithms of the observed values should first be calculated):

95th Percentile $= \exp[\mu_y + 1.645 * \sigma_y^2]$
where:
μ_y is the arithmetic mean of the natural logarithms of the observed values; and
σ_y^2 is the standard deviation of the natural logarithms of the observed values.

99th PERCENTILE is the concentration that 99 percent of the observed concentrations would fall below. It can be found by ranking the observed concentrations or can be calculated as follows:

a. Assuming a normal distribution of data:

99th Percentile $= \mu + 2.326 * \sigma$
where:
μ is the arithmetic mean of the observed values; and
σ is the estimated standard deviation.

b. Assuming a log-normal distribution of data (the natural logarithms of the observed values should first be calculated):

99th Percentile $= \exp[\mu_y + 2.326 * \sigma_y^2]$
where:
μ_y is the arithmetic mean of the natural logarithms of the observed values ; and
σ_y^2 is the standard deviation of the natural logarithms of the observed values.

APPENDIX C

STATE-ADOPTED PRIORITY POLLUTANT OBJECTIVES

Regional Board 2's Basin Plan Objectives for Priority Pollutants						
	Aquatic Life				Human Health	
	Freshwater		Saltwater		Freshwater	Saltwater
Chemical	1 hr ave	4 d ave	1 hr ave	4 d ave	10^{-6} cancer risk level	
			EPA 1984			
arsenic	360mg/L	190µg/L	69µg/L	36µg/L		
cadium	3.9µg/L[b]	1.1µg/L[b]	43µg/L	9.3µg/L		
chromium	16µg/L	11µg/L	1100µg/L	50µg/L		
copper	9.2µg/L[c]	6.5µg/L[c]	4.9µg/L reg. brd. site spec.study			
cyanide	22µg/L	5.2µg/L	5µg/L			
lead	81µg/L[d]	3.2µg/L[d]	140µg/L	5.6µg/L		
mercury	2.4µg/L	0.025µg/L[a]	2.1µg/L	0.025µg/L		
nickel	1419µg/L[e]	158µg/L[e]		8.3µg/l		
zinc	21µg/[Lg]	23µg/L[g]				
	24 hr ave	inst max	24 hr ave	inst max		
		EPA 1980		EPA 1980		
nickel	56µg/L	1100µg/L	7.1µg/L	140µg/L		
silver		1.2µg/L[f]		2.3µg/L		
zinc	58µg/L	170µg/L	58µg/L	170µg/L		
PAHs			15µg/L		0.031µg/L	
	[a] EPA 0.012 <detectable limit of 0.025µg/L.					
	[b,c,d,e,f,g] Expressed in hardness H = ln (hardness) of $CaCO_3$ in mg/L.					
		equation	$CaCO_3$			
	[b] 4 d	$e^{(0.7852H-3.49)}$	100mg/L			
	[b] 1 hr	$e^{(1.128H-3.828)}$	100mg/L			
	[c] 4 d	$e^{(0.8545H-1.465)}$	50mg/L			
	[c] 1 h4	$e^{(0.9422H-1.464)}$	50mg/L			
	[d] 4 d	$e^{(1.273H-4.705)}$	100mg/L			
	[d] 1 hr	$e^{(1.273H-1.46)}$	100/mg/L			
	[e] 4 d	$e^{(0.846H+1.1645)}$	100mg/L			
	[e] 1 hr	$e^{(0.846H+3.3612)}$	100/mg/L			
	[f] inst	$e^{(1.72H-6.52)}$	50mg/L			
	[g] 4 d	$e^{(0.87473H-0.7614)}$	100mg/L			
	[g] 1 hr	$e^{(0.8473H-0.8604)}$	100/mg/L			

Regional Board 3's Basin Plan Objectives for Priority Pollutants			
	Aquatic Life		
Chemical	Freshwater		Saltwater
	Water Quality	Criteria 1972	
	Soft Water	Hard Water	mg/L
	<100mg/L $CaCO_3$	>100mg/L $CaCO_3$	
	(mg/L)	(mg/L)	
cadmium	0.004 or 0.0004	0.03 or 0.003	0.0002
chromium	0.05	0.05	0.05
copper	0.01	0.03	0.01
lead	0.03	0.03 fm/L	0.01
mercury	0.0002 or 0.05	0.0002 or 0.05	0.0001
nickel	0.1	0.4	0.002
selenium	0.004	0.2	
zinc	0.004	0.2	0.02

Regional Board 5's Basin Plan Objectives for Priority Pollutants

Sacramento and San Joaquin River Basins; Delta included

Chemical	Aquatic Life Maximum Concentration [a] (mg/L)		Applicable Water Bodies
Arsenic	0.01		Sacramento River from Keswick Dam to the I Street Bridge at City of Sacramento (13,30); American River from Folsom Dam to the Sacramento River (51); Folsom Lake (50); and the Sacramento-San Joaquin Delta.
Cadmium	0.00022 [b]	$Cd = e^{(1.16)(\ln \text{hardness})-5.777} \times 10^{-3}$	Sacramento River and its tributaries above State Hwy. 32 bridge at Hamilton City.
Copper	0.0056 [b]	$Cu = e^{(0.905)(\ln \text{hardness})-1.612} \times 10^{-3}$	As noted above for Cadmium.
	0.01 [c]		As noted above for Arsenic. [C]
Cyanide	0.01		As noted above for Arsenic.
Selenium	0.012		San Joaquin River, mouth of the Merced River to Vernalis.
	0.005	(4-day average) [d]	
	0.020 [d]	(monthly mean)	~~Salt Slough,~~ Mud Slough (north), San Joaquin River from Sack Dam to the mouth of Merced River.
	0.005	(4-day average) [d]	
	0.020		~~Any water supplies used for waterfowl habitat in the Grassland Water District, San Luis National Wildlife Refuge, and Los Banos State Wildlife Area.~~
	0.002	(monthly mean)	Salt Slough and contructed and reconstructed water supply channels in the Grassland watershed
Silver	0.01		As noted above for Arsenic.
Zinc	0.1 [c]		As noted above for Arsenic. [C]
	0.016 [b]	($Zn = e^{(0.83)(\ln \text{hardness})-0.289} \times 10^{-3}$, 40mg hardness)	As noted above for Cadmium.

[a/] Metal objectives in this table are dissolved concentrations. Selenium, molybdenum, and boron objectives are total concentrations.

[b/] The effects of these concentrations were measured by exposing test organisms to dissolved aqueous solutions of 40 mg/l hardness that had been filtered through a 0.45 micron membrane filter. Where deviations from 40 mg/l of water hardness occur, the objectives, in mg/l, shall be determined using the following formulas:

$Cu = e^{(0.905)(\ln \text{hardness})-1.612} \times 10^{-3}$

$Zn = e^{(0.83)(\ln \text{hardness})-0.289} \times 10^{-3}$, 40mg hardness

$Cd = e^{(1.16)(\ln \text{hardness})-5.777} \times 10^{-3}$

[c/] Does not apply to Sacramento River above State Hwy. 32 bridge at Hamilton City. See relevant objectives (*) above.

[d/] The Regional Water Board has not adopted these selenium concentrations. These selenium concentrations were promulgated by USEPA on 22 December 1992 after USEPA disapproved the Regional Water Board's selenium concentrations. (See 57 Fed.Reg. 60848, 60920.) The selenium concentrations promulgated by USEPA are currently in effect, and are provided in this table solely for reference.

Regional Board 8's Basin Plan Objectives for Priority Pollutants						
	Aquatic Life					
	Freshwater		Saltwater			
Chemical	1 hr ave	4 d ave	1 hr ave	4 d ave		
	Site specific: Santa Ana River					
Cadmium	1.7mg/L	Cd SSO = 0.85($e^{(0.7852*\ln(TH)-3.490)}$)				
Copper	18.2mg/L	Cu SSO = 0.85($e^{(0.8545*\ln(TH)-1.465)}$)				
Lead	4.1mg/L	Pb SSO = 0.25($e^{(1.273*\ln(TH)-3.958)}$)				
		200mg/L total hardness (as $CaCO_3$)				

APPENDIX D

TYPES OF NONPOINT SOURCE DISCHARGES

TYPES OF NONPOINT SOURCE DISCHARGES

Acid precipitation
Agriculture, confined animals, except dairy
Agriculture, confined animals, dairy
Agriculture, direct application of pesticide or herbicide to water body for aquatic pest control
Agriculture, drift for aerial application of agricultural chemicals
Agriculture, erosion control
Agriculture, grazing impacts, including overgrazing, land disturbance, and direct impacts by livestock on waterbodies
Agriculture, irrigation tailwater (return flows)
Agriculture, nutrient management
Agriculture, storm runoff
Agriculture, subsurface drainage, natural or engineered
Atmospheric deposition, except acid precipitation

Channel erosion
Construction, active land disturbance phase

Discharges from vessels
Dredging, resuspension of pollutants

Geothermal development

Habitat alteration, including filling, rip-rapping, physical effects of dredging
Hydrologic modification, including diversion, impoundment, hydrologic effects of discharges

Mineral extraction, surface and subsurface, including oil and gas, and including abandoned mines

Natural sources, e.g., natural erosion of mercury deposits resulting in contamination of fish tissue

Seawater intrusion
Septic systems/onsite disposal
Silviculture, including road building and other associated activities

Waste disposal site, land or marine

APPENDIX E

SWRCB WATER QUALITY CONTROL

POLICIES AND PLANS

STATEWIDE WATER QUALITY CONTROL POLICIES:

1. Statement of Policy with Respect to Maintaining High Quality of Waters in California, October 1968, Resolution No. 68-16.

2. State Policy for Water Quality Control, adopted by motion July 6, 1972

3. Water Quality Control Policy for Enclosed Bays and Estuaries of California, May 1974, Resolution No. 74-43

4. Water Quality Control Policy on the Use and Disposal of Inland Waters Used for Powerplant Cooling, June 1975, Resolution No. 75-58.

5. Policy and Action Plan for Water Reclamation in California, January 1977, Resolution No. 77-1.

6. Policy Statement on Wastewater Discharge to Watercourses in Water Deficient Areas, May 1979, Resolution No. 79-45.

7. Sources of Drinking Water Policy, May 1988, Resolution No. 88-63.

8. Pollutant Policy Document for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, June 1990, Resolution No. 90-67.

9. Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304, June 1992, Resolution No. 92-49 (amended April 1994, October 1996)

10. Water Quality Enforcement Policy, April 1996, Resolution No. 96-030.

STATE WATER QUALITY CONTROL PLANS

1. Water Quality Control Plan for the Control of Temperature in Coastal and Interstate Waters and Enclosed Bays and Estuaries of California, September 1975, Resolution No. 75-89.

2. Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, May 1995, Resolution No. 95-1WR.

3. Water Quality Control Plan for Ocean Waters of California, March 1990, Resolution No. 90-27.

OTHER STATE PLANS - NOT REGULATORY

1. Nonpoint Source Management Plan, November 1988, resolution No. 88-123.

APPENDIX F

DEFERRED ISSUES

The recommendations of the eight public advisory task forces were synthesized into a set of issues relevant to the development of the ISWP/EBEP. Those issues not addressed in the Policy, that is, those issues deferred until later in the ISWP/EBEP process, are listed below.

Chemical specific objectives

1. Identify potential methods for developing water quality objectives
2. Develop statewide water quality objectives for priority pollutants
3. Develop water quality objectives for the following pesticides: diazinon, carbofuran, malathion, and chlorpyrifos.
4. Update U.S. EPA "Gold Book" criteria for human health using current federal and State reference doses and cancer potency values.
5. Have a science advisory committee review the scientific rationale behind statewide human exposure factors (e.g., fish and drinking water consumption, body weight, reference doses, etc.).
6. Use statistical models to calculate distributions for statewide human exposure factors.
7. Recalculate U.S. EPA "Gold Book" criteria for aquatic life by screening suspect data, and adding new data.
8. Examine issues concerning dissolved vs. total recoverable metals in development of aquatic life objectives.
9. Develop a Memorandum of Understanding with CA Department of Fish and Game regarding protected species and water quality planning.

Site-specific objectives

1. Describe development of site-specific objectives.
2. Develop detailed guidance on the process for conducting studies for site-specific objectives.

Toxicity objectives

1. Address toxicity test variability.
2. Develop additional test acceptability criteria.
3. Evaluate alternative approaches to monitoring and controlling chlorine and ammonia toxicity.

Agricultural waters

1. Develop guidance on what constitutes various features of an agricultural system (e.g., on-farm ancillary structure, individual farm, agricultural field, and closed re-circulating system) for exemption from standards.
2. Identify the features of actual agricultural systems (e.g., agricultural production areas,

ancillary structures, and individual closed re-circulating systems) for the purpose of determining exemptions.
3. Define types or categories of "water bodies dominated by agricultural drainage."
4. Develop technical criteria (guidance) for qualification as type/category of water body dominated by agricultural drainage.
5. Identify the water bodies dominated by agricultural drainage, by type or category based on qualifying criteria, in consultation with water management agencies.
6. Define new beneficial use(s) for water bodies dominated by agricultural drainage.
7. Clarify definition of "existing" uses.
8. Designate appropriate beneficial use(s) for water bodies dominated by agricultural drainage.
9. Develop water quality objectives for protection of new beneficial use(s).
10. Develop implementation provisions for water bodies dominated by agricultural drainage.
11. Describe relationship between water quality and water conservation.

Effluent dependent water bodies

1. Define "effluent-dependent water bodies".
2. Develop technical criteria (guidance) for qualification as effluent-dependent waters.
3. Identify effluent-dependent water bodies based on qualifying criteria.
4. Define new beneficial use(s) for effluent-dependent water bodies.
5. Designate appropriate beneficial use(s) for effluent-dependent water bodies.
6. Develop water quality objectives for protection of new beneficial use(s).
7. Develop implementation provisions for effluent-dependent water bodies.

Permitting and compliance issues

1. Describe the process used for identifying and prioritizing water bodies that are unable to meet a water quality objective(s) solely with technology-based controls (these impaired waters are considered for total maximum daily load [TMDL] development).
2. Develop guidance on data collection for impairment determination of water bodies.
3. Develop procedural guidance on TMDLs.
4. Develop technical guidance on TMDLs.
5. Establish procedures for deriving effluent limits for narrative water quality objectives other than the toxicity objective.
6. Describe implementation of anti-backsliding provisions.
7. Describe implementation of anti-degradation policies.
8. Develop a policy to promote integrated regional/watershed monitoring programs.
9. Develop guidance on design and implementation of monitoring programs.
10. Evaluate need for more pathogenic monitoring.
11. Develop a standardized format for monitoring data reporting.
12. Develop guidance on compliance determination.
13. Establish an enforcement policy which specifies the type of enforcement action to be taken

in response to various degrees of exceedance of an effluent limit caused by analytical and reporting variability.

14. Establish compliance determination policy for permits without quantified limits.

Watershed issues

1. Document case studies on watershed management.
2. Promote regulatory flexibility through legal research and negotiation with U.S. EPA and other groups with a focus on permitting issues.
3. Provide support services, including: technical support, education, legislative support, and agency coordination (may be done in concert with the Nonpoint Source Program and Watershed Management Initiative).
4. Describe relationship between watershed management plans and other SWRCB and RWQCB programs, plans and policies (may be done in concert with the Watershed Management Initiative).
5. Describe relationship between watershed management and site-specific objectives.
6. Address "net environmental gain/benefit" and describe its relationship with TMDLs, agriculture, and watershed management.