STATE WATER RESOURCES CONTROL BOARD
RESOLUTION 2014-0067

ADOPTING AN INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION AND APPROVING AN EXCEPTION TO SURFACE WATER CRITERIA FOR DRINKING WATER SYSTEM DISCHARGES INTO WATERS OF THE UNITED STATES

WHEREAS:

1. The State Water Resources Control Board (State Water Board) is designated as the state water pollution control agency for all purposes stated in the Clean Water Act, including water quality control planning and waste discharge regulation.

2. As a result of planned activities and emergencies, water purveyors have discharges from their drinking water systems. Planned discharges are due to development and maintenance activities mandated by statutory requirements under the federal Safe Drinking Water Act and the California Safe Drinking Water Act (Health and Saf. Code, division 104, part 12, chapter 4.) Planned discharges include scheduled and unscheduled discharges that must take place to comply with statute and regulation. Emergency discharges are due to system leaks, facility failures, and catastrophic events. Drinking water system discharges under the scope of this resolution include both planned and emergency discharges.

3. Primary and secondary Maximum Contaminant Levels (MCLs) are drinking water standards contained in Title 22 of the California Code of Regulations. (Cal. Code Regs., tit. 22, §§ 64431, 64444, and 64449.)

4. Water purveyors discharge from their drinking water systems when draining water supply transmission lines, storage reservoirs, canals, pipelines, groundwater supply wells, and water treatment facilities for cleaning and maintenance. In many cases, these discharges flow into waters of the United States, including inland surface waters, enclosed bays, estuaries, and the ocean.

5. U.S. EPA adopted the National Toxics Rule (NTR) on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. Approximately 40 criteria in the NTR apply in California surface waters. On May 18, 2000, U.S. EPA adopted the California Toxics Rule (CTR). The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that are applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants in California surface waters.

6. To the extent that mandated drinking water system discharges and other planned and emergency discharges are not otherwise exempt, these discharges are subject to National Pollutant Discharge Elimination System (hereinafter “NPDES”) permit requirements that implement priority pollutant criteria and water quality objectives contained in the CTR, the State Water Board Water Quality Control Plan for Ocean Waters (Ocean Plan), and Regional Water Quality Control Board (Regional Water Board) basin plans.

7. The CTR contains criteria for 126 priority pollutants that may be present in the mandated drinking water system discharges. A review of the 126 priority pollutants shows that there are priority pollutant criteria that are more stringent than the MCLs established by the California Department of Public Health. These pollutants are listed in Attachment 1, Table 1 of this Resolution.

8. In 1972, the State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California*, (California Ocean Plan or Ocean Plan). The latest amendment was adopted on October 16, 2012, was approved by OAL on July 3, 2013, and became effective on August 19, 2013. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean waters of the State.

9. The Ocean Plan contains objectives for pollutants, including priority pollutants, which may be present in mandated drinking water system discharges. A review of the Ocean Plan pollutant water quality objectives shows that objectives for some of the pollutants are more stringent than the MCLs for those pollutants. These pollutants are listed in Attachment 1, Table 2 of this Resolution.

10. The State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) in March 2000, and further amended the policy in February 2005. The amended policy became effective on July 13, 2005, and the California Office of Administrative Law (OAL) approved the policy in May 2006.

11. The SIP establishes provisions to implement the CTR criteria for inland surface waters, enclosed bays, and estuaries, including methods for deriving NPDES permit effluent limits for point source discharges to surface waters.

12. The Ocean Plan establishes provisions to implement its established water quality standards for ocean waters, including methods for deriving NPDES permit effluent limits for point source discharges to the Ocean.

State Implementation Policy Categorical Exception

13. Discharges from drinking water systems described above have the potential to exceed applicable CTR priority pollutant criteria for objectives, such as objectives for the protection of aquatic life or objectives for the protection of human health that are based on more stringent carcinogenic human health objectives. The list of pollutants for which these discharges might not meet CTR criteria is shown in Attachment 1, Table 1. In this list, the priority pollutants noted with a “Yes” are the priority pollutants for which a water purveyor may need a categorical exception in order to discharge.

14. An exception to the SIP may be granted by a Water Board if a pollutant is subject to a CTR criterion that is more stringent than its corresponding MCL, or if there is no adopted pollutant-specific MCL, but the pollutant might be present in the discharge at levels in excess of the applicable CTR criteria.

15. Section 5.3 of the SIP allows a Water Board to grant a categorical exception in such circumstances, stating:

    "The [Regional Water Board] may, after compliance with the California Environmental Quality Act (CEQA), allow short-term or seasonal exceptions from meeting priority pollutant criteria/objectives if determined necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. Such categorical exceptions may also be granted for draining water supply reservoirs, canals, and pipelines for maintenance, for draining municipal storm water conveyances for cleaning and maintenance, or for draining water treatment facilities for cleaning or maintenance."

    To the extent applicable, the granting of a categorical exception is also allowed by the State Water Board.

16. When granting this exception, the SIP requires that the applicable Water Board ensures that each discharger: (1) notifies potentially affected public and governmental agencies, (2) describes its proposed action, (3) provides a time schedule and monitoring plan, (4) provides CEQA documentation, contingency plans, residual waste disposal plans, and (5) upon completion of the project and termination of authorized regulatory permit coverage, provides certification by a qualified biologist that the receiving water beneficial uses have been restored. For drinking water system discharges, the project is deemed complete when the water purveyor ceases to discharge from its drinking water system, or when the State and/or Regional Water Board terminate(s) NPDES permit coverage for the discharge(s), whichever occurs first. The certification by a qualified biologist must be submitted after a water purveyor completely and permanently stops discharging from a drinking water system, or when the Water Boards cease permitting the discharge to waters of the United States.

Ocean Plan Exception

17. Discharges from drinking water systems described above have the potential to exceed established Ocean Plan objectives, such as objectives for protection of aquatic life or objectives for protection of human health that are based on more stringent carcinogenic objectives. The list of pollutants that might exceed the Ocean Plan objectives is shown in Attachment 1, Table 2. In this list, the pollutants noted with a "Yes" are the pollutants for which a water purveyor may need an Ocean Plan exception in order to discharge, because these pollutants have an Ocean Plan objective more stringent than the corresponding MCL, or there is no adopted pollutant-specific MCL, but the pollutant might be present in the discharge at levels in excess of the applicable CTR criteria.

18. The Ocean Plan states that the State Water Board may, in compliance with the California Environmental Quality Act, subsequent to a public hearing, and with the concurrence of the Environmental Protection Agency, grant exceptions to the Ocean Plan objectives provided the exceptions: (1) will not compromise protection of the ocean waters for beneficial uses, and (2) will serve the public interest.

CEQA Documentation

19. The State Water Board prepared an Initial Study and Mitigated Negative Declaration dated June 2014 (hereinafter "IS/MND") pursuant to CEQA, therein considering the potential environmental impacts of granting a SIP categorical exception and an Ocean Plan exception to water quality criteria/objectives as listed in Attachment 1 of this Resolution; the IS/MND is included in Attachment 2 of this Resolution.

20. As considered in the IS/MND, the exceptions relate specifically to mandated drinking water system discharges that are of short-term duration or seasonal in nature. The basis for the exceptions is that the protection of public health and safety, per the federal Safe Drinking Water Act and California Safe Drinking Water Act, is held paramount when there is a conflict with compliance with other water quality objectives or criteria.

21. The IS/MND concludes that the granting of such exceptions does not have significant adverse environmental impacts if appropriate site-specific mitigation measures are implemented for these types of discharges. Implementation of appropriate mitigation measures constitutes conditions for the granting of the exceptions. An NPDES permit that regulates planned and emergency discharges from drinking water systems and implements an exception per this Resolution must contain the appropriate requirements (including best management practices), monitoring, and reporting to assure the mitigation measures in the IS/MND are implemented.

    The required mitigation measures include, but are not limited to the following:

    A. Biologist Certification

    Upon completion of the project, the discharger shall provide certification by a qualified biologist that the receiving water beneficial uses have been restored.

    B. Best Management Practices (BMPs)

    The proposed project requires implementation of proven best management practices (BMPs) that include, but are not limited to, the procedures and measures outlined below, or equivalent to protect the beneficial uses of the receiving waters and to prevent erosion or hydromodification caused by a drinking water system discharge. The discharger shall implement BMPs, procedures, and measures for all drinking water system discharges authorized under an NPDES Permit, in accordance with guidance manuals of the American Water Works Association, or other applicable professional associations or equivalent, to protect beneficial uses of the receiving waters. The proposed project requires permittees to maintain documentation of implemented BMPs at their local offices and make the documentation available to State and Regional Water Board staff upon request.

C. Procedures

1. **Treated Drinking Water Discharges**
   All water shall be dechlorinated using dechlorination tablets, or equivalent proven best management practices, at the point of discharge to a chlorine concentration at or below 0.019 mg/L. To date, the handheld field meters cannot detect chlorine at levels at or below 0.019 mg/L and therefore a level of 0.10 mg/L will be deemed equivalent to the 0.019 mg/L level until technology allows measurement at a level of 0.019 mg/L. As deemed applicable by the permittee, filter bags, filter rolls, or equivalent practices shall be used to remove any sand or silt prior to the discharging.

2. **Super-chlorinated Water Discharges**
   All super-chlorinated water shall be dechlorinated at the point of discharge directly into a surface water or the point of discharge into any storm water conveyance system. Filter bags or rolls, or equivalent, shall be used to remove any sand, silt, trash or debris from entering the surface water or storm drain system.

3. **Treated Drinking Water Distribution and Storage Facility Drainage Discharges**
   All discharges from distribution system draining, including storage tank dewatering for cleaning and maintenance, shall be dechlorinated, pH adjusted as appropriate, and filtered to remove sediment, sand, silt, trash or debris prior to discharging to surface waters or storm drain systems.

4. **Groundwater Supply Well Discharges**
   During flushing, maintenance, rehabilitation, or development of water supply wells, practices such as multi-baffled settling tanks, or equivalent, shall be used to remove large particles and to reduce turbidity to 100 Nephelometric Turbidity Units (NTU). After settling, if turbidity is greater than 100 NTU, the Discharger shall filter the water, implementing a 5-micron filter bag filtration system or equivalent practice, before discharging to achieve a turbidity threshold of 100 NTUs on an instantaneous basis, or the turbidity objective in the Regional Water Board Basin Plan, whichever is more stringent.

   Although a required turbidity action level of 10 NTU interpreted as a daily average was originally proposed, the State Water Board has concluded that substituting a numeric action level of 100 NTU on an instantaneous basis is equivalent, if not more effective, in mitigating or avoiding potential significant effects from groundwater supply well discharges. An instantaneous based threshold of 100 NTU can be more effective as it requires an immediate action, while a 10 NTU daily average, because it is based on a longer averaging period, would encourage dischargers to continue discharging water with potential waste until they can satisfy the 10 NTU daily average, and thus could cause other environmental impacts. The numeric action level of 100 NTU as an instantaneous threshold will still ensure the appropriate implementation of BMPs and ensure the discharge does not cause or contribute to an exceedance of a daily average receiving water turbidity threshold of 10 NTU or a site specific Regional Board Basin Plan turbidity water quality objective.

D. Measures (or Equivalent)

1. **Sediment and Erosion Control**
   The BMP shall identify sediment and erosion control BMPs that assess and prevent potential impacts to beneficial uses and hydromodification of downstream receiving waters.

   a. Receiving Waters. The Discharger shall identify and implement appropriate methods for selecting discharge points to receiving waters that minimize impacts due to sediment and erosion.

   b. Sediment Control. Sediment control practices shall be used to filter and trap sediment particles to prevent them from reaching storm drains or receiving waters. The following practices, or equivalent, may be used to control sedimentation transport to receiving waters:

   (1) Straw wattles and gravel bags may be placed in a flow pathway and around storm drain inlets.
   (2) Plastic sheets may be used to line a trench and flow pathway to prevent water contact with soil.
   (3) Check dams or other energy dissipation devices may be constructed to dissipate flow energy and minimize the potential for discharges to dislodge soil.
   (4) A storm water swale, if available nearby to the point of discharge that has sufficient capacity for the discharge.
   (5) Where possible, water that would otherwise be the result of an emergency or planned discharge may be discharged to an open field or turf to remove sand and/or silt or larger particles prior to surface water discharge.

   c. Erosion Control. Erosion control practices shall be used to protect soil surfaces along discharge pathways at discharge points and receiving waters. Erosion control practices shall be used to prevent re-suspension of ambient sediment within a receiving water, and shoreline erosion, hydromodification, and streambed scour. Such controls shall minimize the energy of discharges by managing flow velocities and volumes, and shall be appropriately designed so that the discharge does not exceed the hydraulic capacity of the receiving water at the point of discharge and areas downstream of the discharge point. The following measures, or equivalent, may be used to control erosion, hydromodification and scour in receiving waters:

   (1) Construct check dams to slow down the flow,
   (2) Install flow diffusers at discharge point.
   (3) Direct discharge flow path to have the minimum slope possible; and
   (4) Decrease controllable discharge flow rates and duration.

2. **Dechlorination**
   One of the following types of dechlorination methods, and/or equivalent proven methods, including natural dissipation, will be utilized as appropriate:

a. **Dechlorinating Diffuser** – The dechlorinating diffuser connects to a fire hydrant or fire hose using a standard 2 ½ inch National Pipe Thread coupling and contains a chamber that houses up to 11 dechlorination tablets. Some diffusers feature a siphon for dechlorinating agent tablets or a solution to dechlorinate the water.

b. **Dechlorination Mats** – These mats are used to facilitate effective contact between the flow and dechlorinating agent during dechlorination. For dechlorination of discharges from trenches during main breaks, the tablets are placed inside synthetic mesh fabric pockets sewn together in a grid or line. The dechlorinating mats are laid across the flow path or over the storm water conveyance system. As the discharged water flows over and around the tablets, dechlorinating agent is released, which removes the chlorine.

c. **Broadcast Dechlorination** – Dechlorination granules are spread over an area, such as pavement, where chlorinated water is flowing toward a storm water conveyance system inlet. As the discharge contacts the granules, dechlorinating agent is released and chorine is removed.

d. **Chemical Injection Metering Pump** – Occasionally, a dechlorination agent is injected into a discharge pipe such as a tank drain or directly into the discharge to dechlorinate the water before entering the storm water system.

3. **Copper and Zinc Management**
Dischargers that apply copper-based herbicides and/or zinc-based corrosion inhibitors to their water shall, in the BMP Plan, identify measures to eliminate or reduce copper and zinc concentrations in their discharges to the extent feasible, including but not limited to the following:

a. Measures to maintain records of where, when, and how much zinc-based corrosion inhibitors or copper-based herbicides are used to treat water that could be discharged to a water body.

b. BMPs that eliminate planned discharges to waterbodies and minimize emergency discharges to waterbodies within 48 hours of applying copper-based herbicides or zinc-based corrosion inhibitors.

c. BMPs that eliminate or reduce to the extent feasible the use of copper-based herbicides or zinc-based corrosion inhibitors by using less toxic agents or other methods in place of zinc-based corrosion inhibitors or copper-based herbicides.

The zinc and copper management BMPs above are not required when discharges do not contain zinc or copper concentrations above water quality criteria more frequently than once every three years at any one location or when discharges flow back into the same water body where the water originated. In such cases, the Discharger shall explain the circumstances in the BMP Plan.

4. **Operation and Maintenance**
All facilities and equipment must be operated and maintained to assure the requirements of the proposed project are met. Operational BMPs that avoid and minimize the number of discharges by retaining water within the drinking water system to the maximum extent possible, and inspection and maintenance BMPs that minimize the number of discharges by preventing leaks and breaks from pipelines, valves, tanks, and other drinking water system infrastructure will be required. No discharge of water and/or chemicals will be allowed without proper management, controls and/or dechlorination.

5. **Equipment and Supplies**
All equipment and sampling meters shall be inspected, maintained and calibrated per manufacturer instructions and specifications for proper functioning prior to use.

6. **Training**
The personnel operating under the proposed project shall be properly trained for monitoring and reporting, and for the proper use and installation of all equipment and management practices that minimize frequency of accidental spills.

7. **Notification**
Pre-notification to the State Water Board shall be required three (3) days before initiation of large size discharges to increase the planning and proper implementation of mitigation measures, and allow planned regulatory oversight to assure less-than-significant or no impacts to a surface water body.

E. Compliance Determination

1. **Effluent Limitations**
Compliance with the requirements of the proposed project will be determined as specified below:

a. General.

Compliance with requirements of the proposed project shall be determined using monitoring and reporting protocols defined in the corresponding Monitoring and Reporting Program (MRP), a part of the NPDES permit requirements. For purposes of reporting and enforcement by the Regional and State Water Boards, compliance with water quality requirements and provisions occurs if the constituent concentration or level is lower than the proposed requirements or limitations allow, and lower than or equal to the reporting level of the corresponding sample measurement protocol.

b. Total Residual Chlorine Concentration

Handheld chlorine meters that are U.S. EPA-approved are appropriate to measure residual chlorine in the field for compliance determination. The standard minimum detection level for U.S. EPA-approved handheld chlorine meters for residual chlorine varies with state of the art equipment. Therefore, only a discharge monitoring result with a total residual chlorine concentration less than or equal to a reporting level acceptable to the State Water Board

and/or a Regional Water Board shall be deemed in compliance with effluent limitations and/or provisions of the proposed project.

22. The State Water Board circulated the IS/MND among potentially interested organizations and individuals through the State Clearinghouse for a 30-day review and comment period. (State Clearinghouse No. 2014062017)

23. Following circulation for public comment, the State Water Board identified a substitute mitigation measure that is equivalent to or more effective in mitigating or avoiding potential significant impacts from discharges that would be subject to the exceptions and would itself not cause any potentially significant impact on the environment. As explained more fully in Finding 21 above and in the amended IS/MND, the substitute mitigation measure for turbidity from groundwater supply well discharges will provide equivalent mitigation of potentially significant effects. The State Water Board held a hearing on November 18, 2014 to consider these changes to the Mitigated Negative Declaration.

24. The State Water Board has considered the IS/MND. Based on the whole record and the State Water Board's independent judgment and analysis, there is no substantial evidence that the granting of an exception per this Resolution, with appropriate mitigation required through an NPDES Permit, could have a significant effect on the environment.

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Hereby adopts the Initial Study and Mitigated Negative Declaration (IS/MND).

2. Approves both :

    a. A categorical exception to water purveyors, under the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, for discharges from drinking water systems from complying with priority pollutant objectives included in the California Toxics Rule for the pollutants shown in Attachment 1, Table 1 of this Resolution, and

    b. An Ocean Plan exception to water purveyors for discharges from drinking water systems from complying with the Ocean Plan objectives, for the pollutants shown in Attachment 1, Table 2 of this Resolution.

3. Approves these exceptions only for short term or seasonal discharges from drinking water systems necessary to implement control measures conducted to fulfill statutory requirements under the federal Safe Drinking Water Act and the California Health and Safety Code, and those discharges consistent with the conclusions of the IS/MND.

4. Establishes that NPDES permits issued to a water purveyor and adopted to regulate discharges from drinking water systems to surface waters including the ocean, enclosed bays, estuaries and inland surface waters, shall implement the exceptions per this Resolution.

5. Requires all NPDES permits issued to water purveyors that implement an exception per this Resolution to include the appropriate requirements including implementation of best management practices, monitoring, and reporting to assure proper mitigation of drinking water systems discharges to waters of the United States.

6. May modify or revoke any exception at any time, including but not limited to any such time when evidence suggests an actual or potential significant environmental impact has been caused or may be caused by a discharge.

7. May require further monitoring and data collection necessary to assure appropriate mitigation measures are in place for protection of the receiving water beneficial uses.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on November 18, 2014.

AYE:	Chair Felicia Marcus Vice Chair Frances Spivy-Weber Board Member Tam M. Doduc Board Member Steven Moore Board Member Dorene D'Adamo
NAY:	None
ABSENT:	None
ABSTAIN:	None

Jeanine Townsend

Jeanine Townsend
Clerk to the Board

Attachment 1: List of Pollutants for State Implementation Policy and Ocean Plan Exception
Attachment 2: November 2014 Initial Study/Mitigated Negative Declaration

TABLE 1
LIST OF PRIORITY POLLUTANTS, INCLUDING THOSE WITH GRANTED SIP[1] CATEGORICAL EXCEPTION

CTR[2] No.	Priority Pollutant	CTR Criteria (ug/L)	MCL[3] (ug/L)	SIP[4] Categorical Exception
1	Antimony	14	6	No
2	Arsenic	36	10	No
3	Beryllium	None	4	No
4	Cadmium	2.2	5	Yes
5a	Chromium (total)	180	50	No
5b	Chromium (VI)	11	50	Yes
6	Copper	3.1	None	Yes
7	Lead	8.1	None	Yes
8	Mercury	0.050	2	Yes
9	Nickel	8.2	100	Yes
10	Selenium	5	50	Yes
11	Silver	1.9	50	Yes
12	Thallium	1.7	2	Yes
13	Zinc	81	5000	Yes
14	Cyanide	5.2	200	Yes
15	Asbestos	7 MFL	7MFL	No
16	2,3,7,8-TCDD (Dioxin)	1.30E-08	3.0E-08	Yes
17	Acrolein	320	None	Yes
18	Acrylonitrile	0.059	None	Yes
19	Benzene	1.2	1.0	No
20	Bromoform[5]	4.3	80[5]	Yes
21	Carbon tetrachloride	0.25	0.5	Yes
22	Chlorobenzene (mono chlorobenzene)	680	70	No

[1] State Water Resources Control Board Policy for Implementation of Toxics Standards for Inland Surface Waters Enclosed Bays, and Estuaries of California, as amended on February 24, 2005.

[2] California Toxic Rule promulgated by U.S Environmental Protection Agency on May 18, 2000.

[3] The Primary/Secondary Maximum Contaminant Level.

[4] Priority pollutants noted with a "No" are pollutants for which the State Water Board does not grant a SIP categorical exception because discharges that comply with the MCL also comply with all the applicable CTR criteria, since the MCL is the most stringent of all the applicable criteria. Priority pollutants noted with a "Yes" are the pollutants for which the State Water Board grants a SIP categorical exception because these pollutants have CTR criteria that are more stringent than an MCL, or do not have a current MCL and may be discharged above the applicable criterion.

[5] The MCL of 80 µg/L applies to "total Trihalomethanes," i.e., the sum of bromoform, bromodichloromethane, chloroform, and dibromochloromethane.

CTR[2] No.	Priority Pollutant	CTR Criteria (ug/L)	MCL[3] (ug/L)	SIP[4] Categorical Exception
23	Dibromochloromethane[5]	0.41	80[5]	Yes
24	Chloroethane	None	None	No
25	2- Chloroethyl vinyl ether	None	None	No
26	Chloroform[5]	Reserved	80[5]	Yes
27	Dichlorobromomethane[5]	0.56	80[5]	Yes
28	1,1-Dichloroethane	None	5	No
29	1,2-Dichloroethane	0.38	0.5	Yes
30	1,1-Dichloroethylene	0.057	6	Yes
31	1,2-Dichloropropane	0.52	5	Yes
32	1,3-Dichloropropene	10	0.5	No
33	Ethylbenzene	3100	700	No
34	Bromomethane (methyl chloride)	48	None	Yes
35	Chloromethane (methyl chloride)	None	None	No
36	Dichloromethane	4.7	5	Yes
37	1,1,2,2-Tetrachloroethane	0.17	1	Yes
38	Tetrachloroethene or tetrachloroethylene	0.8	5	Yes
39	Toluene	6800	150	No
40	trans-1,2-Dichloroethylene	700	10	No
41	1,1,1-Trichloroethane	None	200	No
42	1,1,2-Trichloroethane	0.6	5	Yes
43	Trichloroethene or trichlorethylene	2.7	5	Yes
44	Vinyl chloride	2	0.5	No
45	2-Chlorophenol	120	None	Yes
46	2,4-Dichlorophenol	93	None	Yes
47	2,4-Dimethylphenol	540	None	Yes
48	4,6-Dinitro-2-methylphenol	13.4	None	Yes
49	2,4-Dinitrophenol	70	None	Yes
50	2-Nitrophenol	None	None	No
51	4-Nitrophenol	None	None	No
52	4-Chloro-3-methylphenol	None	None	No
53	Pentachlorophenol	0.28	1	Yes
54	Phenol	21000	None	Yes
55	2,4,6-Trichlorophenol	2.1	None	Yes
56	Acenaphthene	1200	None	Yes
57	Acenaphthylene	None	None	No
58	Anthracene	9600	None	Yes

CTR[2] No.	Priority Pollutant	CTR Criteria (ug/L)	MCL[3] (ug/L)	SIP[4] Categorical Exception
59	Benzidine	0.00012	None	Yes
60	1,2-Benzanthracene or benzo(a)anthracene	0.0044	None	Yes
61	Benzo(a)pyrene (3,4-Benzopyrene)	0.0044	0.2	Yes
62	3,4-Benzofluoranthene or benzo(b)fluoranthene	0.0044	None	Yes
63	Benzo(g,h,i)perylene or 1,12-Benzoperylene	None	None	Yes
64	Benzo(k)fluoranthene	0.0044	None	Yes
65	Bis(2-chloroethoxy) methane	None	None	No
66	Bis(2-chloroethyl) ether	0.031	None	Yes
67	Bis(2-chloroisopropyl) ether	1400	None	Yes
68	Bis(2-ethylhexyl) phthalate	1.8	4	Yes
69	4-Bromophenyl phenyl ether	None	None	No
70	Butyl benzyl phthalate	3000	None	Yes
71	2-Chloronaphthalene	1700	None	Yes
72	4-Chlorophenyl phenyl ether	None	None	No
73	Chrysene	0.0044	None	Yes
74	Dibenzo(a,h)-anthracene	0.0044	None	Yes
75	1,2-Dichlorobenzene	2700	600	No
76	1,3-Dichlorobenzene	400	None	Yes
77	1,4-Dichlorobenzene	400	5	No
78	3,3'-Dichlorobenzidine	0.04	None	Yes
79	Diethyl phthalate	23000	None	Yes
80	Dimethyl phthalate	313000	None	Yes
81	Di-n-butylphthalate	2700	None	Yes
82	2,4-Dinitrotoluene	0.11	None	Yes
83	2,6-Dinitrotoluene	None	None	No
84	Di-n-octylphthalate	None	None	No
85	1,2-Diphenylhydrazine	0.040	None	Yes
86	Fluoranthene	300	None	Yes
87	Fluorene	1300	None	Yes
88	Hexachlorobenzene	0.00075	1	Yes
89	Hexachlorobutadiene	0.44	None	Yes
90	Hexachlorocyclopentadiene	240	50	No
91	Hexachloroethane	1.9	None	Yes
92	Indeno(1,2,3-c,d)pyrene	0.0044	None	Yes
93	Isophorone	8.4	None	Yes
94	Naphthalene	None	None	No

CTR[2] No.	Priority Pollutant	CTR Criteria (ug/L)	MCL[3] (ug/L)	SIP[4] Categorical Exception
95	Nitrobenzene	17	None	Yes
96	N-Nitrosodimethylamine	0.00069	None	Yes
97	N-Nitrosodi-n-propylamine	0.005	None	Yes
98	N-Nitrosodiphenylamine	5	None	Yes
99	Phenanthrene	None	None	No
100	Pyrene	960	None	Yes
101	1,2,4-Trichlorobenzene	None	5	No
102	Aldrin	0.00013	None	Yes
103	alpha-Hexachlorocyclohexane (BHC)	0.0039	None	Yes
104	beta-Hexachlorocyclohexane	0.014	None	Yes
105	gamma-Hexachlorocyclohexane (Lindane)	0.019	0.2	Yes
106	delta-Hexachlorocyclohexane	None	None	No
107	Chlordane	0.00057	0.1	Yes
108	4,4'-DDT	0.00059	None	Yes
109	4,4'-DDE	0.00059	None	Yes
110	4,4'-DDD	0.00083	None	Yes
111	Dieldrin	0.00014	None	Yes
112	alpha-Endosulfan	110	None	Yes
113	beta-Endosulfan	110	None	Yes
114	Endosulfan sulfate	110	None	Yes
115	Endrin	0.0023	2	Yes
116	Endrin Aldehyde	0.76	None	Yes
117	Heptachlor	0.00021	0.01	Yes
118	Heptachlor Epoxide	0.00010	0.01	Yes
119	PCB-1016	0.00017	0.5	Yes
120	PCB-1221	0.00017	0.5	Yes
121	PCB-1232	0.00017	0.5	Yes
122	PCB-1242	0.00017	0.5	Yes
123	PCB-1248	0.00017	0.5	Yes
124	PCB-1254	0.00017	0.5	Yes
125	PCB-1260	0.00017	0.5	Yes
126	Toxaphene	0.0002	3	Yes

TABLE 2
LIST OF POLLUTANTS, INCLUDING THOSE WITH GRANTED OCEAN PLAN EXCEPTION

CTR[2] No.	California Ocean Plan Constituent	Ocean Plan Objective (ug/L)	MCL[3] (ug/L)	Ocean[6] Plan Exception
2	Arsenic	32	10	No
4	Cadmium	4	5	Yes
5b	Chromium (VI)	8	50	Yes
6	Copper	12	None	Yes
7	Lead	8	None	Yes
8	Mercury	0.16	2	Yes
9	Nickel	20	100	Yes
10	Selenium	60	50	No
11	Silver	2.8	50	Yes
13	Zinc	80	5000	Yes
14	Cyanide	4	200	Yes
	Ammonia	2400	None	Yes
	Phenolic Compounds (non-chlorinated)	120	None	Yes
	Chlorinated Phenolics	4	1	No
112/113	Endosulfan	0.018	None	Yes
115	Endrin	0.004	2	Yes
103-106	HCH (sum of alpha, beta, gama and delta isomers of hexachlorocyclohexane)	0.008	0.2	Yes
17	Acrolein	220	None	Yes
1	Antimony	1200	6	No
65	Bis(2-chloroethoxy() methane	4.4	None	Yes
67	Bis(2-chloroisopropyl) ether	1200	None	Yes
22	Chlorobenzene (mono chlorobenzene)	570	70	No
5a	Chromium III	190000	50	No
81	di-n-butyl phthalate	3500	None	Yes
75/76	Dichlorobenzenes (sum of 1,2 and 1,3-dichlorobenzes)	5100	600	No
79	Diethyl phthalate	33000	None	Yes

[6] Pollutants noted with a "No" are pollutants for which the State Water Board does not grant an Ocean Plan exception because discharges that comply with the MCL also comply with all the applicable Ocean Plan objectives since the MCL is more stringent than the objectives. Priority pollutants noted with a "Yes" are the pollutants for which the State Water Board grants an Ocean Plan exception because these pollutants have objectives that are more stringent than an MCL, or do not have a current MCL and may be discharged at levels above the objectives.

CTR[2] No.	California Ocean Plan Constituent	Ocean Plan Objective (ug/L)	MCL[3] (ug/L)	Ocean[6] Plan Exception
80	Dimethyl phthalate	820000	None	Yes
48	4,6-dinitro-2-methylphenol	220	None	Yes
49	2,4-dinitrophenol	4.0	None	Yes
33	ethylbenzene	4100	300	No
86	fluoranthene	15	None	Yes
90	hexachlorocyclopentadiene	58	50	No
95	nitrobenzene	4.9	None	Yes
12	thallium	2	2	No
39	toluene	85000	150	No
	tributyltin	0.0014	None	Yes
41	1,1,1-trichloroethane	540000	200	No
18	Acrylonitrile	0.10	None	Yes
102	Aldrin	0.000022	None	Yes
19	Benzene	5.9	1.0	No
59	Benzidine	0.000069	None	Yes
3	Beryllium	0.033	4	Yes
66	Bis(2-chloroethyl) ether	0.045	None	Yes
68	Bis(2-ethylhexyl) phthalate	3.5	4	Yes
21	Carbon tetrachloride	0.90	0.5	No
107	Chlordane	0.000023	0.1	Yes
23	Chlorodibromomethane[7]	8.6	80[7]	Yes
26	Chloroform[7]	130	80[7]	No
108	4,4'-DDT	0.00017	None	Yes
77	1,4-Dichlorobenzene	18	5	No
78	3,3'-Dichlorobenzidine	0.0081	None	Yes
29	1,2-Dichloroethane	28	0.5	No
30	1,1-Dichloroethylene	0.9	6	Yes
27	Dichlorobromomethane[7]	6.2	80[7]	Yes
36	Dichloromethane or Methylene chloride	450	5	No
32	1,3-Dichloropropene or 1,3-Dichloropylene	8.9	0.5	No
111	Dieldrin	0.00004	None	Yes
82	2,4-Dinitrotoluene	2.6	None	Yes
85	1,2-Diphenylhydrazine	0.16	None	Yes
20,34,35	Halomethanes (sum of bromoform, methyl	130	None	No

[7] For the pollutants dibromochloromethane and dichlorobromomethane, the listed MCL of 80 ug/L applies to the sum of these pollutants plus bromoform established as “total trihalomethanes

CTR[2] No.	California Ocean Plan Constituent	Ocean Plan Objective (ug/L)	MCL[3] (ug/L)	Ocean[6] Plan Exception
	bromide, and methyl chloride)			
117	Heptachlor	0.00005	0.01	Yes
118	Heptachlor Epoxide	0.00002	0.01	Yes
88	Hexachlorobenzene	0.00021	1	Yes
89	Hexachlorobutadiene	14	None	Yes
91	Hexachloroethane	2.5	None	Yes
93	Isophorone	730	None	Yes
96	N-Nitrosodimethylamine	7.3	None	Yes
97	N-Nitrosodi-n-propylamine	0.38	None	Yes
98	N-Nitrosodiphenylamine	2.5	None	Yes
57, 58, 60, 61, 62, 63, 64,73, 74, 87, 92, 99, and 100	PAHs (sum of acenaphthylene, anthracene, 1,2-benzanthracene, benzo(a)pyrene , 3,4-benzofluoranthene, 1,12-benzoperylene, benzo(k)fluoranthene, chrysene, dibenzo(ah)anthracene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene	0.0088	None	Yes
119-125	PCBs (sum of PCBs resembling Aroclor-1016,1221,1232,1242,1248,1254,and 1260)	0.000019	0.5	Yes
16+	TCDD Equivalents (sum of 17 Dioxin congeners)	3.9E-09	None	Yes
37	1,1,2,2-Tetrachloroethane	2.3	1	No
38	Tetrachloroethene or tetrachloroethylene	2.0	5	Yes
126	Toxaphene	0.00021	3	Yes
43	Trichloroethene or Trichloroethylene	27	5	No
42	1,1,2-Trichloroethane	9.4	5	No
55	2,4,6-Trichlorophenol	0.29	None	Yes
44	Vinyl chloride	36	0.5	No

FINAL

Initial Study/Proposed Mitigated Negative Declaration
Exception to Surface Water Quality Criteria for Drinking Water System Discharges to Waters of the United States

in accordance with the

California Environmental Quality Act
State Clearinghouse No. 2014062017

State Water Resources Control Board

November 18, 2014

EXECUTIVE SUMMARY

Water purveyors are responsible for developing water supplies and providing safe drinking water to their communities and customers in accordance with statutory requirements of the federal Safe Drinking Water Act and the California Health and Safety Code. Mandatory system-development and system-maintenance activities often result in surface water discharges, either via storm drain systems or directly to a creek, river, lake, or to the ocean. When properly mitigated through implementation of management and monitoring practices, discharges from drinking water systems pose no significant threat, or a less than significant threat, to surface water beneficial uses.

The State Water Resources Control Board (State Water Board) has prepared this Mitigated Negative Declaration, consistent with section 21080(c) of the California Environmental Quality Act (CEQA), for the proposed granting of an exception to water purveyors for specified water quality criteria and objectives required of its Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (State Implementation Policy), and of its Water Quality Control Plan for Ocean Waters of California (Ocean Plan). As provided by section 5.3.2 of the State Implementation Policy and section III.J.1 of the Ocean Plan, the proposed exceptions are for discharges resulting from mandatory system-development and system-maintenance activities conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code, and unplanned emergency discharges due to drinking water system failures and catastrophic events. The proposed exceptions apply to water purveyors only, for drinking water systems that have the primary purpose of delivering drinking water for public health and safety purposes. The exceptions are not to any requirements to implement Total Maximum Daily Loads established pursuant to either state or federal regulations.

The State Water Board's primary intent in granting the exceptions (which is the project for this Mitigated Negative Declaration) is to allow water purveyors to fulfill their responsibilities to protect public health and safety, per the federal Drinking Water Act and California Health and Safety Code, when there is concurrent conflict with compliance with federal and state water quality criteria. The exceptions are for discharges from existing water drinking systems that have been occurring and will continue to occur in order to serve communities with safe drinking water. The exceptions are also for discharges of new future drinking water system projects that result in the same type of discharge.

The subject discharges are both planned and emergency discharges. This document does not analyze the environmental impact of emergency discharges; such discharges fit within the regulatory definition of an emergency and are statutorily exempt from CEQA. Planned routine discharges from existing water supply systems are part of the existing condition that serves as the baseline for the enclosed analysis. As compared to existing conditions, there is no significant effect on the environment due to routinely occurring planned discharges. Also as analyzed in this document, discharges from new or expanded drinking water systems will have 'no effect' or 'no significant effect with mitigation' on the environment. Upon approval of the final draft Mitigated Negative Declaration, the State Water Board will file a Notice of Determination with the State Clearinghouse.

Table of Contents

Section	Page No.
1.0 INTRODUCTION	1
1.1. Introduction	1
1.2. California Environmental Quality Act Authority to Prepare a Mitigated Negative Declaration	3
1.3. Public Review Process	4
2.0 PROJECT LOCATION AND DESCRIPTION	5
2.1. Project Location	5
2.2. Project Background	5
2.3. Project Description	7
2.1.1. Project Objectives	10
2.1.2. Discretionary Actions	10
2.1.3. Scope of Environmental Review	10
3.0 PROPOSED FINDINGS	12
4.0 INITIAL STUDY ENVIRONMENTAL CHECKLIST	13
4.1. Potentially Significant Environmental Factors Affected	14
4.2. Evaluation of Environmental Impacts	16
4.3. Aesthetics	28
4.4. Agricultural and Forestry Resources	29
4.5. Air Quality	30
4.6. Biological Resources	31
4.7. Cultural Resources	36
4.8. Geology and Soils	37
4.9. Greenhouse Gas Emissions	39
4.10. Hazards and Hazardous Materials	39
4.11. Hydrology and Water Quality	40
4.12. Land Use and Planning	42
4.13. Mineral Resources	43
4.14. Noise	43
4.15. Population and Housing	44
4.16. Public Services	45
4.17. Recreation	46
4.18. Transportation and Traffic	46
4.19. Utilities and Service Systems	47
4.20. Mandatory Findings of Significance	49
4.21. Mitigation Measures	50
5.0 MITIGATION, MONITORING AND REPORTING PROGRAM	54
6.0 REFERENCES	54

APPENDICES

Appendix A: *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries in California*, State Implementation Plan (http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf)

Appendix B: *Water Quality Control Plan – Ocean Waters of California* (http://www.waterboards.ca.gov/water_issues/programs/ocean/docs/2009_cop_adoptedeffective_usepa.pdf)

1.0 INTRODUCTION

1.1 Introduction

Water purveyors are responsible for developing water supplies and providing drinking water to their communities and customers in accordance with the federal Safe Drinking Water Act and the California Health and Safety Code. As discussed in Section 2.0 of this document, mandatory system-development and system-maintenance activities (as required by the Safe Drinking Water Act and Health and Safety Code) often result in a discharge of water containing pollutants to surface water, either via storm drain systems or directly to a surface water body.

Clean Water Act section 402 requires that a discharge of any pollutant, or combination of pollutants, to surface waters that are deemed waters of the United States, with certain exceptions, be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. The State Water Resources Control Board (State Water Board) recognizes the availability of exceptions to the standards set in NPDES permits. The State Water Board's *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (also referred to as the *State Implementation Policy* or SIP (http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf), see Appendix A), identifies short-term or seasonal exceptions from meeting priority pollutant criteria/objectives are appropriate if it is determined that the discharge is necessary to implement drinking water control measures (conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code). Section 5.3, Item 2 of the SIP reads as follows:

> *Categorical and case-by-case exceptions to this Policy may be granted pursuant to the provisions below.*
>
> *Categorical Exceptions*
>
> > *The RWQCB [Regional Water Quality Control Board or Regional Water Boards] may, after compliance with the California Environmental Quality Act (CEQA), allow short-term or seasonal exceptions from meeting the priority pollutant criteria/objectives if determined to be necessary to implement control measures…regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. Such categorical exceptions may also be granted for draining water supply reservoirs, canals, and pipelines for maintenance, for draining municipal storm water conveyances for cleaning or maintenance, or for draining water treatment facilities for cleaning or maintenance.*

The State Water Board's *Water Quality Control Plan – Ocean Waters of California* (also referred to as the Ocean Plan (http://www.waterboards.ca.gov/water_issues/programs/ocean/docs/2009_cop_adopted effective_usepa.pdf), see Appendix B) provides for an exception for discharges to the ocean if it is determined that beneficial uses remain protected and it is in the public interest. Section III.J.1 of the Ocean Plan reads as follows:

The State Water Board may, in compliance with the California Environmental Quality Act, subsequent to a public hearing, and with the concurrence of the Environmental Protection Agency, grant exceptions where the Board determines:

a. *The exception will not compromise protection of ocean waters for beneficial uses, and*
b. *The public interest will be served.*

Discharges from drinking water systems consist of either raw water supply or treated drinking water from surface and ground water sources, treated to standards set forth in California Department of Public Health regulations. The State Water Board and nine Regional Water Boards regulate drinking water system discharges to inland surface waters, bays, estuaries and the ocean pursuant to State policies and plans, per their own individual Board discretion. The State and Regional Water Boards will regulate these discharges with NPDES permits or through municipal separate storm sewer system (MS4) permits since the water quality of the discharges are deemed a low threat to surface water quality when properly managed through implementation of best management practices and controls.

Some, but not all, municipalities have NPDES permits for discharge of storm water to waters of the United States via MS4s. Some municipalities with MS4 permits allow drinking water system discharges to enter their storm water system as authorized non-storm water discharges, typically through local agreements. Other MS4 NPDES permit holders do not allow such discharges to enter their storm water system unless that discharge is regulated under a separate NPDES permit issued by the State Water Board or a Regional Water Board prior to entering the system. In some cases, the State Water Board or a Regional Water Board requires drinking water system owners/operators to obtain an NPDES permit for discharges through an MS4. It is known from proper management practices currently being implemented that these existing discharges pose no threat, or a very low threat, to the surface water body and the environment.

As discussed above, after compliance with CEQA, the Water Boards may grant “exceptions” from certain SIP requirements for point source discharges into inland surface waters, enclosed bays and estuaries for discharges resulting from implementation of control measures to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code for drinking water. Such exceptions may also be granted for discharges of draining water supply reservoirs, canals, and pipelines for maintenance, for draining municipal storm water conveyances for cleaning or maintenance, or for draining water treatment facilities for cleaning or maintenance to inland surface waters, bays and estuaries.[1] Consistent with the finding that these types of activities are in the public interest and would not compromise the protection of ocean waters for beneficial uses, the State Water Board may grant “exceptions”

[1] Section 5.3 of Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California, adopted by the State Water Resources Control Board in March 2000 and amended in February 2005.

from the Ocean Plan requirements including complying with specified ocean plan water quality objectives for dischargers to coastal waters.[2]

The proposed project (described in detail in Section 2) is the State Water Board's proposal to grant an exception as provided by section 5.3.2 of the SIP and by section III.J.1 of the Ocean Plan. The exceptions are for planned and emergency discharges related to mandatory system-development and system-maintenance activities conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. The exceptions are for discharges from existing drinking water systems that have been occurring and will continue to occur in order to serve communities with safe drinking water. The exceptions are also for discharges from expanded existing systems and new systems that result in the same type of discharge. The exceptions apply to priority pollutant criteria as implemented through the SIP, and to water quality objectives set forth in Table 1 of the California Ocean Plan; the exceptions apply to discharges into all waters of the United States statewide. The exceptions do not modify specific waste load allocations in Total Maximum Daily Loads adopted to address impaired water bodies.

Most of the drinking water system discharges that would be subject to the proposed exceptions are from existing water systems that have been in place and will continue to be in place. The discharges from these systems are existing discharges that will continue to take place, and serve as the baseline for determining the significance of any impacts that could result from the project. The proposed project will be implemented through issuance of NPDES permits to water purveyors by the State Water Board or a Regional Water Board, including future permitting actions that authorize the discharges from drinking water systems to surface water bodies under section 5.3.2 of the SIP and per State Policy section III.J.1 of the Ocean Plan. This document serves as the CEQA analysis required by the SIP and the Ocean Plan prior to granting the exceptions for planned discharges. This document provides the initial study and investigation of the potential for the proposed project to cause significant impacts on the environment and necessary mitigation to avoid or substantially reduce those impacts in support of this Proposed Mitigated Negative Declaration (MND), consistent with the requirements of CEQA. Emergency discharges were not analyzed in this MND because those discharges fit under the definition of an "Emergency" found in section 15359 of the CEQA Guidelines. Therefore, instances of emergency discharges are Statutorily Exempt under section 15269 of the CEQA Guidelines.

1.2 California Environmental Quality Act Authority to Prepare a Mitigated Negative Declaration

The State Water Board is the lead agency for preparation of this Initial Study and proposed Mitigated Negative Declaration in conformance with CEQA and the CEQA Guidelines. The purpose of the proposed MND, including the Initial Study Checklist, is to determine the potential for the planned discharges from the proposed project to cause any significant impacts, and to

[2] Section III.J.1 of the California Ocean Plan, as amended on October 16, 2012 and effective August 19, 2013.

incorporate mitigation measures and mandated operation and maintenance procedures in order to avoid or minimize all potentially significant impacts on water quality and the environment.

As provided for by CEQA (Public Resources Code section 21064.5), an MND may be prepared for a project subject to CEQA when an Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the project proponent (the State Water Board) before the proposed MND and Initial Study are released for public review would avoid the effects or mitigate the potentially significant effects of the proposed project to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment. Based on the findings of the Initial Study, and after appropriate consideration of comments submitted in response to the notice of intent to adopt the proposed MND, it is the intention of the State Water Board to adopt the proposed MND in compliance with CEQA if appropriate findings can be made, consistent with CEQA Guidelines section 15074, on the basis of the whole record before it, that there is no substantial evidence that the proposed project will have a significant effect on the environment and that the MND reflects the State Water Board's independent judgment and analysis.

1.3 Public Review Process

In accordance with CEQA, a good-faith effort at full disclosure has been made during the preparation of this Initial Study and proposed MND to study and address all potentially significant impacts of the proposed project. The State Water Board has informed the State Clearinghouse of all known agencies that may have interest in this project. The State Water Board has also made this draft document available to companies, organizations and persons known to have an interest in this project by making the document available on the State Water Board website.

In reviewing the proposed MND, including the Initial Study, the public and agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment due to the planned discharges, and ways in which the significant effects of the proposed project, as described in section 2.0 of this document, will be avoided or mitigated.

All public comments to this proposed MND must be submitted in writing prior to the public comment due date. Following the close of the public comment period, the State Water Board will consider the comments on the proposed MND prior to determining whether to adopt the MND and approve the proposed project.

Written comments on the proposed MND must be sent to the following address by 12:00 noon, August 19, 2014:

State Water Resources Control Board
Attention: Jeanine Townsend
1001 I Street, 24th Floor
Sacramento, CA 95814

The State Water Board will consider adoption of this CEQA document, tentatively scheduled for November 18, 2014. Date and time of the board meeting in which this document will be considered will be publicly noticed in accordance with the Bagley-Keene Open Meeting Act, Government Code section 11120 et seq.

2.0 PROJECT LOCATION AND DESCRIPTION

2.1 Project Location

Since initiation of operation of each individual existing drinking water system statewide, discharges, including planned discharges from drinking ground water supply wells and drinking water distribution systems, have been taking place statewide. All discharges from drinking water systems within the scope of the proposed project are of a consistent quality throughout the state – water that is within the California Department of Public Health maximum contaminant levels, and/or is treated by a water treatment plant in accordance with the requirements established under title 22 of the California Code of Regulations and chlorinated to maintain a required minimum chlorine residual concentration. Surface water discharges from these drinking water systems currently take place to any surface water within the state, including ocean waters.

Typically, drinking water systems receive water pumped or diverted from a drinking water supply source, and treat it as required for delivery to the public; the water is then conveyed, after public use, to publicly (or sometimes privately) owned treatment works. Discharges from drinking water systems can occur through mandatory system development or maintenance activities and typically enter large, medium and small municipal storm water drainage systems, which ultimately discharge to waters of the United States, including coastal and inland surface waters, and ocean waters. Many of these surface water discharges take place at the location of the municipal storm water conveyance system discharge to surface water. However, there are discharges from drinking water systems that also enter surface waters directly at an individual point of discharge.

2.2 Project Background

Planned discharges from water districts and water purveyors are part of a water district/purveyor's mandatory system-development and system-maintenance activities and are essential operations to comply with the federal Safe Drinking Water Act and the California Health and Safety Code for providing reliable and safe drinking water.

The SIP was adopted by the State Water Board on March 2, 2000 and amended in February 2005. The SIP:

- Establishes a standardized approach for permitting discharges of priority toxic pollutants to non-ocean surface waters in a manner that promotes statewide consistency,
- Applies to discharges of priority toxic pollutants into the inland surface waters, enclosed bays, and estuaries of California subject to regulation under the State's Porter-Cologne Water Quality Control Act (Wat. Code division 7) and the federal Clean Water Act,
- Implements priority pollutant criteria (federally established through the California Toxic Rule) through National Pollutant Discharge Elimination System (NPDES) permits as required by the Clean Water Act, section 402 for point source discharges to surface waters, and
- Does not apply to regulation of storm water discharges.

The requirements in the SIP are implemented through State or Regional Water Board activities, such as the issuance of NPDES permits, or other relevant regulatory approaches to ensure achievement of water quality standards (i.e., water quality criteria or objectives, the beneficial uses being protected, and corresponding State and federal antidegradation policies).

As stated previously, exceptions to the SIP may be granted to address certain discharges and factors that conflict with other existing federal and state regulations and/or policies. The Water Boards may grant an exception from complying with a SIP requirement if it is determined that the discharge is necessary to implement control measures regarding drinking water conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code for protection of public health and safety. Such exceptions may also be granted for draining water supply reservoirs, canals, and pipelines for maintenance, for draining municipal storm water conveyances for cleaning or maintenance, or for draining water treatment facilities for cleaning or maintenance.

The Ocean Plan was originally adopted in 1978 by the State Water Board, and amended last on October 16, 2012, effective August 19, 2013. The Ocean Plan:

- Sets forth limits or levels of water quality characteristics for ocean waters to ensure the reasonable protection of beneficial uses and the prevention of nuisance,

- Applies in its entirety to point source discharges and in part to non-point source discharges of pollutants into the ocean waters of California pursuant to the Porter-Cologne Water Quality Control Act and the federal Clean Water Act,
- Applies to regulation of storm water discharges.

The Ocean Plan establishes water quality objectives for protection of marine aquatic life, human health-non carcinogens, and human health-carcinogens. These objectives are listed in Table 1 of the Ocean Plan. The requirements in the Ocean Plan are implemented through State or Regional Water Board activities, such as the issuance of NPDES permits, or other relevant regulatory approaches to ensure achievement of water quality standards (i.e., water quality criteria or objectives, the beneficial uses being protected, and corresponding state and federal antidegradation policies).

As previously stated, the Ocean Plan allows for an exception to comply with the ocean plan water quality objectives (listed in Tables 1 of the Ocean Plan), provided that the State Water Board determines that the granting of the exception is in the public interest and does not compromise the protection of ocean waters for beneficial uses.

2.3 Project Description

The proposed project is the State Water Board's proposal to grant an exception as provided by section 5.3.2 of the SIP and section III.J.1 of the Ocean Plan for discharges related to mandatory system-development and system-maintenance activities conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Drinking Water Act or the California Health and Safety Code. The exceptions are for discharges from existing drinking water systems that have been occurring and will continue to occur, and for discharges of expanded existing systems and new systems that result in the same type of discharge. The exceptions are to requirements contained in the SIP and the Ocean Plan, and apply to all planned and emergency discharges into all waters of the United States statewide, including discharges into municipal separate storm sewer systems. The exceptions are not to Total Maximum Daily Loads (TMDL)-related requirements and thus do not modify any waste load allocations or other TMDL-related requirements. The project does not apply to discharges from new systems into an impaired water body that is impaired for a constituent that exists in the new discharge at a concentration greater than the criteria the impairment is based on. The project also does not apply to direct discharges into Areas of Special Biological Significance (ASBS).

The NPDES permitting, by the State Water Board or by a Regional Water Boards, will regulate surface water discharges from drinking water systems associated with mandatory system-development and system-maintenance activities conducted to fulfill statutory requirements under the federal Safe Drinking Water Act or the California Health and Safety Code. This exception will cover discharges associated with draining water supply reservoirs, canals, and pipelines for maintenance, draining municipal storm water conveyances for cleaning or maintenance, or draining water treatment facilities for cleaning or maintenance.

The project will provide an exception from the SIP and Ocean Plan for discharges to surface water that do not otherwise cause or contribute to an exceedance of water quality objectives, including the California Department of Public Health Maximum Contaminant Levels,[3] including but not limited to drinking water system discharges from:

- Water transmission, treatment, storage and distribution facility operation and maintenance
- Trench dewatering
- Storage tanks and/or reservoir dewatering
- Distribution system tank dewatering
- Distribution system flushing
- Distribution system pipeline dewatering, disinfection, and pressure testing
- Fire flow testing
- Meter testing
- Automated water quality analyzers
- Groundwater well flushing and pump to waste operations
- Groundwater well development, rehabilitation and maintenance
- Groundwater monitoring for purpose of well development, rehabilitation, or testing

The project per section III.J of the Ocean Plan will also provide an exception to the water districts/purveyors from complying with specified Ocean Plan water quality objectives (found in tables 1 of the Ocean plan) in their required discharges**.**

A review of the Ocean Plan objectives and comparison with the respective drinking water Maximum Contaminant Levels (MCLs) show that compliance with the MCLs is protective of most of the Ocean Plan objectives since the MCLs are more stringent than the Ocean plan objectives. There are only a few constituents where the MCLs are not as protective as the Ocean Plan objectives and other constituents which the water purveyors do not monitor since there are no established MCLs for these constituents. It is not expected that treated water discharges contain pollutants at levels that threaten beneficial uses since drinking water supply sources are required to comply with MCLs and go through treatment including filtration to remove/reduce regulated pathogens. There is no expected water quality impact from these intermittent discharges, especially into the ocean where further dilution results in a *de minimis* impact.

[3] The Primary and Secondary MCLs are drinking water standards contained in title 22 of the California Code of Regulations. Title 22 requires compliance with these standards on an annual average basis (except for nitrate and nitrite), when sampling at least quarterly.

Table 3 of the Ocean Plan (Appendix B) includes background seawater concentrations for all the pollutants with established water quality objectives. The drinking water system discharges are not expected to have an effect on the background seawater concentrations contained in Table 3 of the Ocean Plan as the discharges are intermittent and are insignificant compared to the amount of dilution provided by the ocean. In addition, as demonstrated by existing discharges that are properly managed, these discharges are not expected to have an impact on water quality because they comply with MCLs and through the appropriate implementation of BMPs reduce the chlorine concentration, control the pH, and minimize sediment transport, erosion and hydromodification. Since these discharges are potable, with the main objective to provide safe water for drinking water purposes and public safety, it is not expected for these discharges to have an impact on Ocean Plan water quality objectives for protection of human health.

Drinking Water System discharges to Enclosed Bays, Estuaries and Inland Surface Waters

For discharges to enclosed bays, estuaries or inland surface waters, the applicable water quality criteria for all 126 priority pollutants can be found in the California Toxic Rule and National Toxics Rule, and Regional Boards' Basin Plans. These water quality criteria are established for the protection of beneficial uses including aquatic life and human health for consumption of water and organisms or consumption of organisms only. Water Purveyors are required to comply with MCLs established by the California Department of Public Health; therefore discharges of drinking water systems comply with MCLs when appropriately managed. A review of all 126 priority pollutants and applicable criteria found that 33 out of 126 priority pollutants have MCLs that are more stringent than any other applicable criteria, and for those pollutants there is no need for an exception. For the remaining pollutants, it was found that for some there are criteria more stringent than MCLs and for others there are no MCLs currently adopted; in this case, the more stringent applicable water quality criteria would apply. It is for these remaining priority pollutants that a categorical SIP exception is needed since these discharges would not be in compliance with the applicable criteria, yet must take place for protection for public health and safety. The primary basis for the exception to these criteria is to allow the mandated protection of public health and safety, per the federal Drinking Water Act and California Health and Safety Code. The surface water discharges are necessary and there are no other feasible alternatives to these surface water discharges. Not allowing surface water discharges for such systems is technically infeasible and impractical.

Drinking Water System discharges to Ocean Waters

The Ocean Plan has established water quality objectives for protection of marine aquatic life, human health-noncarcinogens, and human health-carcinogens. These objectives are listed in Table 1 of the Ocean Plan (See Appendix B). A review of these objectives and comparison with the respective drinking water MCLs found that 24 of the listed 80 pollutants would already be in compliance with the Ocean Plan objectives since the MCLs are more stringent than the Ocean plan objectives, and for these pollutants there is no need for an Ocean Plan exception. For the remaining 56 pollutants, however, it was found that for some the MCLs are not more protective than the established Ocean Plan objectives and for others there are no current MCLs adopted. If there is no MCL adopted then water purveyors would not have monitored for these constituents so it would be unknown if the levels of these pollutants would or would not be in compliance with the Ocean Plan objectives. Therefore, it is for these remaining 56 pollutants that an Ocean Plan exception is needed. As with the SIP exception, the intention of the State Water Board to grant an Ocean Plan exception is to avoid preventing water purveyors from fulfilling their responsibility to protect public health and safety as a result of state water quality requirements that conflict with the mandates of the Safe Drinking Water Act and Health and Safety Code. This proposed MND serves to fulfill compliance with CEQA for the State Water Board approval of the exception that allows for the discharges as described above and for future issuance of necessary NPDES permits issued to water purveyors. This proposed MND also serves to fulfill compliance with CEQA for the State Water Board approval of an Ocean Plan exception that excepts these types of drinking water system discharges from Ocean Plan requirements.

2.3.1 Project Objectives

Mandatory system-development and system-maintenance activities often result in surface water discharges, either via storm drain systems or directly to a creek, river, lake or ocean. The objective of issuing the exception to the SIP and the Ocean Plan is to address requirements placed on discharges due to mandated activities that conflict with statutory requirements of the federal Safe Drinking Water Act and the California Health and Safety Code.

The intended benefits of regulating these discharges with an NPDES permit is the required mitigation and increased regulatory certainty from implementation of effluent limits, best management practices and monitoring to specifically address potentially significant impacts from drinking water system discharges. Implementation of NPDES permit requirements for existing discharges will result in implementation of management practices and controls that will decrease existing pollutant loading into surface waters and mitigate any impacts that could otherwise result.

2.3.2 Discretionary Actions

The proposed project consists of the following discretionary action for discharges from drinking water systems due to activities mandated by the federal Safe Drinking Water Act and the California Health and Safety Code:

> The State Water Board granting of an exception to the SIP and Ocean Plan for State and Regional Water Board NPDES permits issued to water purveyors.

The State Water Board will consider public comments received on the notice of intent to adopt the Proposed Mitigated Negative Declaration.

2.3.3 Scope of Environmental Review

The proposed project will allow mandated discharges from drinking water systems that would otherwise violate certain applicable water quality objectives as described in Section 2.3 of this document, while protecting beneficial uses of surface waters. The proposed exception from the SIP and the Ocean Plan would be granted only for short-term or seasonal discharges associated with the specified activities enumerated in Section 2.3. Operation and maintenance of drinking water system facilities may result in planned discharges. Such discharges include water resulting from mandatory operation, maintenance and development activities. In determining potential impacts, the baseline for this environmental review includes the currently occurring mandatory discharges from drinking water systems in accordance with the Safe Drinking Water Act and Health and Safety Code, which occur regardless of whether the discharges are regulated by the State Water Board or Regional Water Boards.

The pollutant concentrations in the discharges permitted by the proposed project will comply with MCLs for drinking water, in accordance with state regulations. Such discharges are not of long duration and are intermittent in nature. Even though the discharge water may contain concentrations of pollutants above federal criteria for protection of aquatic life and human health (CTR and NTR), with appropriate mitigations and controls (implementation of treatment and best management practices), it is not expected that the discharges will cause or contribute to a receiving water exceeding federal receiving water body criteria. Such discharges may flow into impaired water bodies. However, the impairment listings are not due to the subject discharges since the discharges are short-term and intermittent nature.

Planned discharges from water purveyors are part of a purveyor's mandatory system-development and system-maintenance activities. They are essential operations to comply with the federal Safe Drinking Water Act and the California Health and Safety Code for providing reliable and safe drinking water. Therefore, the planned discharges are currently happening, which increases the importance of the proposed project being implemented. The project is to ensure that the discharges are protective of the beneficial uses of the State's waters. For the purposes of this MND, baseline for the environmental analysis is the physical environmental conditions reflecting all discharges that are currently occurring. Impacts discussed below are for

planned discharges and expanded systems that fall within the scope of the categorical exception discussed in the SIP. Emergency discharges were not analyzed in this MND because those discharges fit under the definition of an "Emergency" found in section 15359 of the CEQA Guidelines. Therefore, instances of emergency discharges are Statutorily Exempt under section 15269 of the CEQA Guidelines. A site-specific analysis of the proposed project's potential impact of priority pollutants on every receiving water body from each drinking water system throughout the entire state of California is not feasible. Therefore this Initial Study and proposed MND utilizes the analysis for copper, performed by the San Francisco Bay Regional Water Quality Control Board, as discussed in Section 4.6 of this document as a surrogate for all priority pollutants that are discharged on the same intermittent or seasonal basis.

Copper is a priority pollutant and toxic at very low concentrations under critical water quality conditions. For the scope of this environmental review, the copper analysis is considered a critical representative of an analysis for all priority pollutants that are less toxic than copper at low concentrations. This analysis considers the following:

- The *California Toxics Rule* and the *National Toxics Rule* contain water quality criteria for seven metals that vary as a function of hardness.
- The lower the hardness, the lower the water quality criteria. The metals with hardness-dependent criteria include cadmium, copper, chromium III, lead, nickel, silver, and zinc.
- Toxicity of metals that is dependent on the ambient hardness.
- At the same hardness value (as expected for discharges from each system), copper is the most toxic compared to other metals at the same hardness level and under the same discharge conditions.
- An analysis that concludes a level of copper is protective of beneficial uses concurrently concludes that other constituents at that same level are also protective of beneficial uses.

3.0 FINDINGS

The State Water Board finds that the project will not have a significant adverse effect on the environment based on the results of the Initial Study (see Section 4.0). Some potentially significant effects have been identified and mitigation measures are incorporated into the project to ensure that these effects remain at less-than-significant levels. An MND is therefore adopted to satisfy the requirements of the CEQA (California Public Resources Code, section 21000 et seq.) and the CEQA Guidelines (Cal. Code Regs, tit. 14 § 14 CCR 15000 et seq.). This conclusion is supported by the following:

1. ***Aesthetics***: The project would not have a significant effect on the scenic vista or substantially degrade the existing visual quality of the site. (See Section 4.3, Aesthetics, for additional information.)
2. ***Agricultural and Forestry Resources***: The project would not result in impacts to prime, unique, or farmland of statewide importance. (See Section 4.4, Agriculture and Forestry Resources, for additional information.)

3. ***Air Quality***: The project would not result in significant impacts to air quality. (See Section 4.5, Air Quality for additional information.)
4. ***Biological Resources***: The project could potentially cause significant impacts to biological resources but mitigation measures would reduce the impacts to less-than-significant levels. (See Section 4.6, Biological Resources, for additional information.)
5. ***Cultural Resources***: The project would not result in impacts to any historical resource as defined in Section 15064.5 of the CEQA Guidelines. (See Section 4.7, Cultural Resources, for additional information.)
6. ***Geology and Soils***: The project could potentially cause significant impacts to Geology and Soils but migration measures would reduce the impacts to less-than-significant levels. (See Section 4.8, Geology and Soils, for additional information.)
7. ***Greenhouse Gas Emissions***: The project would not result in significant impacts to greenhouse gas emissions. (See Section 4.9, Greenhouse Gas Emissions, for additional information.)
8. ***Hazards and Hazardous Materials***: The project would not introduce significant hazardous material to people or the environment and would not result in impacts in relation to hazards or hazardous materials. (See Section 4.10, Hazards and Hazardous Materials, for additional information.)
9. ***Hydrology and Water Quality***: The project could potentially cause significant impacts to hydrology and water quality but mitigation measures would reduce the impacts to less-than-significant levels. (See Section 4.11, Hydrology and Water Quality, for additional information.)
10. ***Land Use and Planning***: The project would not impact land use and planning issues. (See Section 4.12, Land Use and Planning, for more information.)
11. ***Mineral Resources***: The project would not result in impacts to mineral resources. (See Section 4.13, Mineral Resources, for more information.)
12. ***Noise***: The project would not result in impacts to noise. (See Section 4.14, Noise, for more information.)
13. ***Population and Housing***: The project would not result in impacts to population and housing. (See Section 4.15, Population and Housing, for more information.)
14. ***Public Services***: The project would not result in significant impacts to public services. (See Section 4.16, Public Services, for more information.)
15. ***Recreation***: The project would not result in impacts to recreation. (See Section 4.17, Recreation, for more information.)
16. ***Transportation and Traffic***: The project would not result in impacts to transportation and traffic. (See Section 4.18, Transportation and Traffic, for additional information.)
17. ***Utilities and Service Systems***: The project would not have an impact on utilities and service systems. In addition, the project would not generate the need for additional utilities and service systems. (See Section 4.19, Utilities and Service Systems, for additional information.)
18. ***Mandatory Findings of Significance***: The project could potentially have impacts to the Mandatory Findings of Significance but mitigation measures would reduce the impacts to

less-than-significant. (See Section 4.20, Mandatory Findings of Significance, for additional information.)

4.0 INITIAL STUDY ENVIRONMENTAL CHECKLIST

1. **Project Title: Exception to Surface Water Quality Criteria for Drinking Water System Discharges to Waters of the United States**

2. **Lead agency name and address:**
   State Water Resources Control Board
   1001 I Street
   Sacramento, CA 95814

3. **Contact person and phone number:**
   Diana Messina
   (916) 341–5523

4. **Project location:**
   Drinking water systems discharges statewide, to waters of the United States within the state of California that are regulated by an NPDES permit issued by the State Water Board and/or Regional Water Boards.

5. **Project Sponsor's name and address:**
   (Same as Lead Agency)
   State Water Resources Control Board
   1001 I Street
   Sacramento, CA 95814

6. **General plan designation:**
   Not applicable.

7. **Zoning:**
   Not Applicable.

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)**
   See Section 2.0, Project Description, of this MND.

9. **Surrounding land uses and setting (Briefly describe the project's surroundings):**
   Multiple land uses. Urban and rural settings. With a land use range from high density urban to rural settings and include most types of land uses.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):
None.

4.1 POTENTIALLY SIGNIFICANT ENVIRONMENTAL FACTORS AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology and Soils
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☐ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☐ Transportation and Traffic	☐ Utilities and Service Systems	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Thomas Howard

Thomas Howard
Executive Director
State Water Resources Control Board

11/25/14

Date

4.2 EVALUATION OF ENVIRONMENTAL IMPACTS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including: (1) the Forest and Range Assessment project and the Forest Legacy Assessment project, and (2) the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. – Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contact?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by the Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use of conversion of forest land to non-forest use?	☐	☐	☐	☒

III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a 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)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

IV. BIOLOGICAL RESOURCES – Would the project:

a) Have a substantial adverse effect, either directly or through habitat modification, 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 Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act or Porter Cologne Water Quality Control Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) 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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area of based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) 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?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

VII. GREENHOUSE GAS EMISSIONS – Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) 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 create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport of public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

IX. HYDROLOGY AND WATER QUALITY – Would the project:

a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) 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)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d) 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?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structure which would impede or redirect flood flows?	☐	☐	☐	☒
i) 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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

X. LAND USE AND PLANNING – Would the project:

a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
XI. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
XXI. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity about levels existing without the project?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

XII. POPULATION AND HOUSING – Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

XIV. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Other public facilities?	☐	☐	☐	☒
XV. RECREATION –				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreation facilities or require the construction of expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
XVI. TRANSPORTATION/TRAFFIC – Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measure 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?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statues and regulations related to solid waste?	☐	☐	☐	☒

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE –

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" mean that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

4.3 Aesthetic

a) Have a substantial adverse effect on a scenic vista?

No Impact. The proposed project does not include any kind of construction activity and only includes the regular maintenance of drinking water systems. Therefore, no impacts are anticipated.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed project would not affect any trees, rock outcroppings, and historic buildings within a state scenic highway or any other scenic resources. Thus, no impacts would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less-than-Significant Impact. Implementing the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings but could potentially improve some sites by reducing erosion and sedimentation. Thus, the impacts would be less-than-significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The project does not involve the use of any additional light source that could have significant effect on day or nighttime views in the project area. Therefore, the project would not result in a new source of lighting or glare, and there would be no impact.

4.4 Agriculture and Forestry Resources

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project would not convert any Prime, Unique or Farmland of Statewide Importance shown on any maps. Therefore, there would be no impact.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project would not conflict with any existing zoning for agricultural use or a Williamson Act contract because the project does not include the rezoning of any agricultural lands. Therefore, there would be no impacts to lands zoned for agricultural use.

c) Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by the Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The project would not conflict with any existing zoning of forest land because the project does not include the rezoning of any forested lands. Therefore, there would be no impact to lands zoned as forest land.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. No forest land would be lost or converted to non-forest use as a result of the project and there would be no impact.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use of conversion of forest land to non-forest use?

No Impact. This project involves the permitting of drinking water system discharges for mandatory development, rehabilitation and maintenance purposes. While the proposed project has potential to occur on farmland or forest lands it would not result in the conversion of additional farmland to non-agricultural use or the conversion of forest land to non-forest use. Thus, there would be no impact to farm or forest lands.

4.5 Air Quality

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. Implementing the proposed project would not cause any change in population, employment or involve construction of any temporary or permanent emissions sources. For these reasons, the proposed project would not conflict with applicable air quality plans. There would be no impact.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

No Impact. The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. There would be no impact.

c) Result in a 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)?

Less-than-Significant Impact. The proposed project would not generate traffic-related emissions but maintenance that is related to the issuance of the permit could potentially be done with a limited number of vehicles within a very short construction window (approximately 3 days). While there could be an increase of a criteria pollutant for a region that is in non-attainment under an applicable federal or state ambient air quality standard, the emissions would be for a limited duration of time, and would be negligible and therefore, the impacts would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

No Impact. The proposed project would not expose sensitive receptors to substantial pollutant concentrations. There would be no impact.

e) Create objectionable odors affecting a substantial number of people?

No Impact. The water discharged due to the proposed project would be drinking water. Therefore, no objectionable odors are anticipated from the proposed project and there would be no impact.

4.6 Biological Resources

a) Have a substantial adverse effect, either directly or through habitat modification, 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 Wildlife or U.S. Fish and Wildlife Service?

Less-than-Significant Impact with Mitigation Incorporated. The proposed project would not affect any candidate, sensitive or special status species through habitat modification because it would not involve earthmoving or new construction. However, there is potential for soil erosion, loss of topsoil, or water body scouring to occur due to water pressure associated with the required maintenance that the proposed project will allow and a proposed permit will regulate. Mitigation measures incorporated into the project description and described in 4.21 would lower any impacts to less-than-significant levels.

The proposed project would provide an exception to the SIP and Ocean Plan discharge limitations and could potentially affect aquatic and amphibious species that are candidate, sensitive or special status species due to exposure to higher concentrations of copper, chlorine and other pollutants for which an exception is granted. (Impacts evaluated on concentration basis only due to small volume of intermittent discharges.) However, mitigation measures incorporated into the project description and described in 4.21 would minimize concentrations of pollutants in the discharges, and the frequency and duration of the discharges, thus mitigating this potentially significant impact to a less-than-significant level.

This exception applies to SIP and Ocean Plan requirements. Examples of California Toxic Rule criteria that may be exceeded due to mandatory discharges from drinking water systems) are listed in Tables 1 and 2 below. THMs occur in drinking water as disinfection byproducts. Although amounts of copper occur naturally in water; it is added to drinking water through copper-based herbicides to control algal blooms in reservoirs and transmission canals. Only a small subset of discharges due to mandated activities will contain copper above the established federal criteria. There are other criteria, such as criteria for arsenic, which may be exceeded. However, since copper is a priority pollutant and toxic at very low concentrations under critical water quality conditions, for the scope of this environmental review, the copper analysis is considered a critical representative of an analysis for all priority pollutants that are less toxic than copper at low concentrations. This analysis considers the following:

- The *California Toxics Rule* and the *National Toxics Rule* contain water quality criteria for seven metals that toxicity levels vary as a function of hardness.
- The lower the hardness the lower the water quality criteria. The metals with hardness-dependent criteria include cadmium, copper, chromium III, lead, nickel, silver, and zinc.
- Toxicity of metals for hardness-dependent based on the ambient hardness.

- At the same hardness level (as expected for discharges from each system), copper is not necessarily the most toxic compared to other metals and under the same discharge conditions. Cadmium and lead are the most toxic. However, along with zinc, copper is the most common metal that tends to be added into drinking water source reservoirs or distribution systems. Copper is an additive for algae control while zinc is used as a corrosion inhibitor. Both would be most likely present in certain drinking water system discharges.
- An analysis that concludes a level of copper is protective of beneficial uses concurrently concludes that other constituents at that same level are also protective of beneficial uses.

Table 1: CTR Trihalomethane Water Quality Objectives

Trihalomethane	Human Health Objective (µg/L) (Consumption of Water and Organisms)
Bromoform	4.3
Chlorodibromomethane	0.41
Chloroform	NA
Dichlorobromomethane	0.56

Notes:
µg/L Micrograms per liter, NA Not available

Table 2: Copper Water Quality Objectives

	Aquatic Life Objective (µg/L)	
Water Body	Acute (1-Hour Average)	Chronic (4-Day Average)
Freshwater[1]	14	9.3
Salt Water[2]	5.8	3.7

Notes:
µg/L Micrograms per liter

[1] The freshwater objectives for copper are based on hardness. The table values assume a hardness of 100 milligrams per liter of calcium carbonate ($CaCO_3$). At other hardness levels, the objectives must be calculated using the following formulas where H = ln (hardness). The 4-day average objective for copper is $e^{(0.8545H-1.702)}$. The 1-hour average for copper is $e^{(0.9422H-1.700)}$.

[2] Unless site-specific objectives have been adopted, these objectives apply to all marine waters.

Trihalomethanes (THM). THMs do not pose substantial risks to aquatic organisms at the concentrations anticipated in drinking water discharges. In drinking water, THM concentrations are generally less than 80 micrograms per liter (µg/L) (California Integrated Water Quality System [CIWQS] 2008; SFPUC 2008). Based on the analysis in the Initial Study/Mitigated Negative Declaration adopted by the San Francisco Bay Regional Water Quality Control Board in 2008 from the "Categorical Exception to the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries in California* (SIP) for Discharges from Drinking Water Systems," and the State Water Board's conclusion that all discharges from drinking water systems that contain THMs and/or copper, are of similar quality and have similar water quality impacts throughout the state, the available information indicates that aquatic toxicity from THMs and copper occurs at much higher concentrations than are likely in discharges from drinking water systems occurring during mandatory maintenance.

Copper and Zinc. Copper is a naturally occurring trace element generally present in surface waters throughout the state. Studies of naturally occurring copper concentrations in the state's surface waters are limited, but copper concentrations measured for the Surface Water Ambient Monitoring Program and NPDES permits from areas that are not impacted ranged from 0.29 to 2.5 µg/L (Hanson Aggregates 2006; Regional Water Board 2007a,b; Yin 2008). These concentrations were primarily measured during the dry season and are probably lower than maximum concentrations during the wet season, when copper attached to sediment is picked up and carried when rain increases stream flows.

Although copper occurs naturally, the primary anthropogenic source of copper in drinking water is application of copper-based herbicides to control algal blooms that cause taste and odor problems. Copper application is done by both wholesale suppliers, such as the California Department of Water Resources, and local water agencies. In general, application of copper-based herbicides is greatest in the summer, when algal blooms are most prevalent. Copper is applied at concentrations of up to 1,000 µg/L or more.

Copper concentrations in drinking water discharges are expected to range from less than 1 µg/L up to about 380 µg/L. Potential effects of copper on aquatic species, including juvenile salmonids, include mortality, avoidance behavior, condensed growth, decreased sensory perception, and altered metabolism (Eisler 1998; Baldwin and others 2003). The CTR criteria are intended to protect all aquatic life, including special status species, from these adverse effects. Therefore, allowing an exception to meeting the WQOs for copper could harm aquatic life.

Many of the treatment facility discharges and most of the transmission and distribution system discharges occur less than once every three (3) years. In addition, only 21 percent of samples from drinking water facilities exceeded freshwater chronic criteria

(assuming a hardness of 100 mg/L) (CIWQS 2008; EBMUD and others 2008; SFPUC 2008). Therefore, criteria are not exceeded every time there is a discharge; criteria are exceeded less often than the frequency of discharges. According to the 1984 and 2007 copper water quality criteria documents for acute and chronic exposures (USEPA 1985, 2007), aquatic organisms and their uses are not expected to be unacceptably affected from discharges exceeding criteria less than once every 3 years on average. Therefore, the environmental impact would be less-than-significant for discharges that do not exceed copper criteria more than once every 3 years on average.

Some drinking water systems may treat their drinking water with zinc orthophosphate for corrosion control. These waters may contain zinc concentrations of about 200 to 600 µg/L, much higher than the CTR acute water quality criteria for the protection of aquatic life (120 µg/L at 100 mg/l hardness for freshwater and 90 µg/L for saltwater). The CTR criteria are intended to protect all aquatic life, including special status species, from these adverse effects. Therefore, allowing an exception to meeting the WQOs for zinc could harm aquatic life. However, since the addition of the zinc corrosion inhibitors such as zinc orthophosphate is planned and controlled, the discharge can be minimized through operational practices.

In addition to the measures discussed in 4.21, operational practices can also be modified to reduce the use of copper-based herbicides and zinc-based corrosion inhibitors. With regard to copper, impacts from copper in the discharges can be reduced by minimizing the use of copper-based herbicides through integrated pest management that combine less toxic and non-toxic algal control methods with application of copper-based herbicides only when necessary and at the lowest effective dose. With regard to zinc, similarly impacts from zinc in the discharges can be reduced by minimizing the use of zinc-based corrosion inhibitors or use at times when there is no intention of discharging the water to surface waters.

Impacts from copper and zinc in discharges can be further reduced by modifying operational practices to reduce the frequency and duration of discharges, thereby avoiding and minimizing discharges. For instance, instead of discharging transmission system water that exceeds Safe Drinking Water Act standards, the water can sometimes be sent to a treatment facility for treatment and then returned to the transmission system.

Therefore, unless a discharge (a) contains copper or zinc concentrations above water quality criteria no more frequently than once every three years on average or (b) flows back into the same water body where the water originated, the proposed exception for copper in drinking water discharges could pose risks to special status fish and amphibian species in the state. Mitigation measures incorporated into the project description and described in 4.21 would ensure that zinc and copper-related risks to aquatic organisms, including special status species, would be less-than-significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less-than-Significant Impact with Mitigation Incorporated. The proposed project could potentially have significant effects on riparian habitats or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service from erosion and sedimentation. However, mitigation measures incorporated into the project description and described in 4.21 would lower impacts to less-than significant levels.

c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act or Porter Cologne Water Quality Control Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less-than-Significant Impact with Mitigation Incorporated. Although the proposed project would not remove, directly fill, hydrologically alter, or otherwise degrade state and federally protected wetlands it could potentially have significant effects on wetlands protected under the Porter Cologne Act and the Clean Water Act from erosion and sedimentation. However, mitigation measures incorporated into the project description and described in 4.21 would be implemented to lower impacts to less-than significant levels.

d) 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 Impact with Mitigation Incorporated. The proposed project would not involve landscape modifications. However, due to hydromodification and potential disturbance due to sediment there is potential for the proposed project to alter wildlife corridors, remove habitat, or interfere with the movement of any native resident or migratory fish or wildlife species. However, with the implementation of the mitigation measures described in 4.21 the potential for sedimentation is reduced to less-than-significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The proposed project would not be expected to conflict with any local policies or ordinances protecting biological resources. There would be no impact.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The proposed project would not be expected to conflict with any provisions of an adopted Habitat Conservation Plan, Natural Community Conservations Plan, or other approved local, regional, or state habitat conservation plan. There would be no impact.

4.7 Cultural Resources

a) Cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5?

No Impact. The proposed project would not involve any earthmoving, demolition, or construction; therefore, it would not have potential impact on any historical resources as defined in section 15064.5.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?

No Impact. The proposed project would not involve any earthmoving, demolition, or construction; therefore, it would not cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5 and there would be no impacts.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. The proposed project would not involve any earthmoving, demolition, or construction; therefore, it would not destroy a unique paleontological resource or site or unique geologic feature, either directly or indirectly. Therefore, there would be no impact.

d) Disturb any human remains, including those interred outside of formal cemeteries?

No Impact. The proposed project would not involve any earthmoving, demolition, or construction; therefore, it would not result in disruption of any human remains, including those interred outside of formal cemeteries. Therefore, there would be no impact.

4.8 Geology and Soils

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologies for the area of based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The proposed project would not involve the construction of habitable structures. Therefore, there would be no impacts in the exposure of people or structures to the rupture of a known earthquake fault.

ii. Strong seismic ground shaking?

No Impact. The proposed project would not involve the construction of habitable structures. Therefore, there would be no impacts to human safety risks in relation to strong seismic ground shaking.

iii. Seismic-related ground failure, including liquefaction?

No Impact. The proposed project would not involve the construction of habitable structures. Therefore, there would be no impacts to human safety risks in relation to seismic-related ground failure, including liquefaction.

iv. Landslides?

No Impact. The proposed project would not involve the construction of habitable structures. Therefore, there would be no impacts to human safety risks in relation to landslides.

b) Result in substantial soil erosion or the loss of topsoil?

Less-than-Significant with Mitigation Incorporated. The proposed project would not involve any earthmoving, demolition, or construction; therefore, it would not result in soil erosion directly related to earthmoving, demolition, or construction. However, there is potential for soil erosion or loss of topsoil to occur due to water pressure associated with the required maintenance. Mitigations measures incorporated into the project description and described in 4.21 would be implemented to lower any impacts to less-than-significant levels.

c) 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?

No Impact. The proposed project would not create safety or property risks due to 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. Therefore, there would be no impacts.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating a substantial risks to life or property?

No Impact. The proposed project would not create safety or property risks due to expansive soil. Therefore, there would be no impacts.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed project would not require wastewater disposal systems. Therefore, it would not require soils capable of supporting the use of septic tanks or alternative wastewater disposal systems and there would be no impact.

4.9 Greenhouse Gas Emissions

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less-than-significant Impact. The implementation of the proposed project could potentially require the use of a limited number of vehicles within a very short construction window (approximately 3 days) in order to carry out the maintenance activities. While there could be an increase of greenhouse gas emissions, the emissions would be for a limited duration of time, and would be negligible and therefore, the impacts would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The proposed project would have no effect on any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases and therefore, there would be no impact.

4.10 Hazards and Hazardous Materials

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact. The proposed project would not result in any increased transport, use, or disposal of hazardous materials or hazardous wastes. There would be no impact.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident condition involving the release of hazardous materials into the environment?

No Impact. The proposed project would not result in an increase in potential for accidental releases of hazardous materials or hazardous wastes. There would be no impact.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The proposed project would not result in hazardous materials being handled within one-quarter mile of an existing or proposed school. There would be no impact.

d) Be located on a site which is included in a list of hazardous materials site compiled pursuant to Government Code section 65362.5 and, as a result, would create a significant hazard to the public or the environment?

No Impact. The proposed project would not be located on a site which is included on a list of hazardous materials site compiled pursuant to Government Code section 65362.5 and would therefore not create a significant hazard to the public or the environment. There would be no impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport of public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed project would not be located near an airport. No impacts would occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. Refer to response Hazards and Hazardous Materials (e). No impact would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed project would not interfere with any emergency response plans or emergency evacuation plans. There would be no impacts.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The proposed project would not affect the potential for wildland fires. There would be no impact.

4.11 Hydrology and Water Quality

a) Violate any water quality standards or waste discharge requirements?

Less-than-Significant with Mitigation Incorporated. Although the proposed project would not violate waste discharge requirements because the action would create an exception for meeting the SIP and Ocean Plan, discharges from drinking and drinking water facilities could exceed CTR criteria. Through the regulatory mechanism of an NPDES permit, the mitigation measures, described in 4.21, will be required to reduce this impact to less-than-significant levels.

b) 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)?

No Impact. The proposed project would not decrease groundwater supplies or interfere with groundwater recharge. There would be no impacts.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less-than-Significant with Mitigations Incorporated. The proposed project would allow the required maintenance of drinking water systems which would include flushing of high water pressure systems. Mitigation measures incorporated into the project description and described in 4.21 would be implemented to lower impacts to less-than-significant levels.

d) 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?

Less-than-Significant. The proposed project would not affect existing drainage patterns or increase the amount of impervious surfaces in any watershed. Therefore, the proposed project would not increase the rate or amount of runoff that could result in flooding on- or off-site. There would be no impact.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less-than-Significant Impact with Mitigation Incorporated. The proposed project would not result in exceeding the capacity of storm water drainage systems. There would be no impact to the storm water drainage systems. There is a potential for the purposed project to provide substantial additional sources of polluted runoff. However, with the implementation of the mitigations described in 4.21 the runoff will be cleaned of a majority of the pollutants and the impacts will be reduced to less-than-significant.

f) Otherwise substantially degrade water quality?

Less-than-Significant. The proposed project would not substantially degrade water quality because it would be granted for existing discharges and would not create a new source of polluted runoff. Furthermore, the discharges are intermittent and are not expected to cause a long-term exceedance of chronic criteria due to mixing with other flows that are within the criteria. Although some of the subject discharges have been previously chlorinated, the potential for concentrations of trihalomethanes to degrade water quality would be less-than-significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project would not result in housing or structures that would be placed within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. There would be no impact.

h) Place within a 100-year flood hazard area structure which would impede or redirect flood flows?

No Impact. Refer to response Hydrology and Water Quality (g). There would be no impact.

i) 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?

No Impact. The proposed project would not 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 because there will be no construction of habitable structures or the construction of a levee or dam. There would be no impact.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The proposed project would not result in housing or structures subject to risks due to inundation by seiche, tsunami, or mudflow. There would be no impact.

4.12 Land Use and Planning

a) Physically divide an established community?

No Impact. The proposed project includes the permitting of water discharges from drinking water systems for development, rehabilitation and maintenance purposes, and does not include new construction activities. Therefore, no physical divide to an established community would occur due to the proposed project and there would be no impacts.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed project would not involve construction and would not conflict with any land use plan, policy, or regulation of an agency with jurisdiction over the project. Therefore, there would be no impacts.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. Refer to response Land Use and Planning (b). The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. Therefore, there would be no impacts.

4.13 Mineral Resources

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The proposed project will not involve excavation or new construction. Therefore, there would be no loss of available mineral resources that would be of value to the region and the residents of the state. There would be no impact.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. Refer to response Mineral Resources (a). There would be no loss of availability of a locally important mineral resource. There would be no impact.

4.14 Noise

a) Exposure of persons to or generation of noise levels in excess of standards established in local general plan or noise ordinance, or applicable standards of other agencies?

No Impact. The proposed project would not generate noise so cannot expose people to noise levels in excess of standards established in local general plan or noise ordinance. There would be no impact.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

No Impact. The proposed project would not generate noise or groundborne vibrations. There would be no impact.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. The proposed project would not generate noise so there would be no substantial permanent increase in ambient noise levels. There would be no impact.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity about levels existing without the project?

No Impact. The proposed project would not general noise so there would be no substantial temporary increase in ambient noise levels. There would be no impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project would not generate aircraft noise. Therefore, it would not expose people living within an area subject to an airport land use plan to noise. There would be no impact.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. Refer to response Noise (a). The proposed project will not expose people in the vicinity of a private airstrip to noise. There would be no impact.

4.15 Population and Housing

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extensions of roads or other infrastructure)?

No Impact. The proposed project addresses maintenance of discharges from existing and planned drinking water systems and would not create additional capacity for drinking water systems or otherwise remove an obstacle for growth. Therefore, there would be no impact to population trends.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project will not require the demolition or alteration of existing housing. Therefore, housing would not be displaced and there would be no impact.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project will not require the demolition or alteration of existing housing so would not displace people or require replacement housing. No impact would occur.

4.16 Public Services

a) Would the project result in substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause

significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

No Impact. The proposed project would not affect populations or involve construction. There would be no impacts to response times in relation to fire protection.

Police protection?

No Impact. The proposed project would not affect response times in relation to police protection. There would be no impact.

Schools?

No Impact. The proposed project would not affect schools in any capacity. There would be no impact.

Parks?

No Impact. The proposed project would not affect parks in any capacity. There would be no impact.

Other public facilities?

No Impact. Safety measures to prevent hazards or harm to the public are in place to address less than significant impact to surrounding public facilities (streets, sidewalks, etc.) if any were to occur. There are no impacts to other public facilities.

4.17 Recreation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project will not involve a housing component or substantially increase employment opportunities within the area; therefore, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities and there would be no impact.

b) Does the project include recreation facilities or require the construction of expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project would not affect existing recreational resources or require the need for new or expanded recreation facilities. Therefore, there would be no impact associated with recreational facilities.

4.18 Transportation and Traffic

a) Conflict with an applicable plan, ordinance or policy establishing measure 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?

Less-than-Significant Impact. The proposed project would not generate additional motor vehicle trips because it would not increase population or provide employment. Therefore, the proposed project would not increase traffic in relation to existing conditions. There would have a less-than-significant impact.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

No Impact. The proposed project would not conflict with an applicable congestion management program. Levels of service would be unchanged. There would be no impact.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

No Impact. The proposed project will not affect air traffic. There would be no impact.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersection) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed project would not result in hazardous design features or incompatible uses because it would not affect any roads or the uses of any roads. There would be no impact.

e) Result in inadequate emergency access?

No Impact. The proposed project would not affect emergency access. There would be no impact.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation because it would not generate motor vehicle trips. There would be no impact.

4.19 Utilities and Services Systems

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The permit would only regulate the discharges of drinking water to surface waters, either directly or through storm water conveyance systems. As a result, the permit would not relate to discharges into a sanitary sewer system and/or Regional Water Board wastewater treatment requirements. Therefore there would be no impact.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project would not increase water demands or diminish supplies, and would not require the construction of new or expanded water or wastewater treatment facilities. There would be no impact.

c) Require or result in the construction of new storm water drainage facilities of expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. Urban runoff management agencies are not expected to construct any new or expanded storm water drainage facilities as a result of granting the categorical exception. The types of discharges regulated by the proposed project occur statewide. Additional storm water facilities to accommodate the addition of drinking water system discharges are unnecessary. There would be no impact.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. The proposed project would not increase population or provide employment and would not adversely affect existing water supplies or require an ongoing water supply. There would be no impacts.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The proposed project would not increase population or provide employment and would not adversely affect existing wastewater treatment or require ongoing wastewater treatment services. There would be no impacts.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

No Impact. The proposed project would not generate municipal solid wastes and would not affect municipal solid waste generation or landfill capacities. There would be no impacts.

g) Comply with federal, state, and local statues and regulations related to solid waste?

No Impact. The proposed project would not generate municipal solid wastes and would, therefore not affect any regulations related to solid wastes. There would be no impacts.

4.20 Mandatory Findings of Significance

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less-than-Significant with Mitigation Incorporated. The proposed project would not degrade the quality of the environment. Potential biological impacts are discussed on Section 4.6, and as explained there, they would be less-than-significant with mitigation (Section 4.21). In addition, the proposed project would not involve earthmoving, demolition, or new construction, so it would have no impact on important examples of the major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less-than-Significant with Mitigation Incorporated. Cumulative impacts are the combined impacts of similar projects outside the scope of this project. Since the

proposed project encompasses the entire state of California, there is no method to compile a list or rely on a summary of projections of the relevant past, present, and reasonably foreseeable probable future projects that could cause impacts that when combined with the impacts of the proposed project would create a potentially significant cumulative impact. The types of projects that could occur within the geographic and temporal scope of proposed project's impacts would be limited to those actions in or near waterways affected by public drinking water facility discharges. The impacts of the project are fully considered in Section 4.3 through 4.20 and mitigations discussed in Section 4.21. These mitigations would minimize the residual effect of the proposed project. Although it is possible that past, present, and reasonably foreseeable probable future projects could cause significant impacts, due to the minor nature and limited timeframe of activities related to the proposed project, it is not expected that the proposed exceptions to the SIP or Ocean Plan would create a considerable contribution to significant cumulative impacts.

c) Does the project have environmental effect which will cause substantial adverse effects on human beings, either directly or indirectly?

No Impact. The proposed project would not cause any substantial adverse effects to human beings, either directly or indirectly. The discharges consist of: (1) source ground water that is in compliance with Department of Public Health maximum contaminant levels, or (2) treated drinking water that is for human consumption per human health regulations and therefore there would be no impact to human health.

4.21 Mitigation Measures

1. Biologist Certification

Upon completion of the project, the discharger shall provide certification by a qualified biologist that the receiving water beneficial uses have been restored.

2. Best Management Practices

The proposed project requires implementation of proven best management practices (BMPs) that include, but are not limited to, the procedures and measures outlined below, or equivalent, to protect the beneficial uses of the receiving waters and to prevent erosion or hydromodification caused by a drinking water system discharge. The discharger shall implement BMPs, procedures and measures for all drinking water system discharges authorized under an NPDES Permit, in accordance with guidance manuals of the American Water Works Association, or other applicable professional associations, or equivalent, to protect beneficial uses of the receiving waters. The proposed project requires permittees to maintain documentation of implemented BMPs at their local offices and make the documentation available to State and Regional Water Board staff upon request.

a. Procedures

i. Treated Drinking Water Discharges

All water shall be dechlorinated using dechlorination tablets, or equivalent proven best management practices, at the point of discharge to a chlorine concentration at or below 0.019 mg/L. To date, technology cannot read chlorine levels at or below 0.019 mg/L and therefore a level of 0.10 mg/L will be deemed as equivalent to the 0.019 mg/L level until technology can measure a level of 0.019 mg/L. As deemed applicable by the permittee, filter bags, filter rolls, or equivalent practices shall be used to remove any sand or silt prior to the discharging.

ii. Super-chlorinated Water Discharges

All super-chlorinated water shall be dechlorinated at the point of discharge directly into a surface water or the point of discharge into any storm water conveyance system. Filter bags or rolls, or equivalent, shall be used to remove any sand, silt, trash or debris from entering the surface water or storm drain system.

iii. Treated Drinking Water Distribution and Storage Tank/Reservoir Dewatering

All discharges from distribution system draining, including storage tank dewatering for cleaning and maintenance, shall be dechlorinated, pH adjusted as appropriate, and filtered to remove sediment, sand, silt, trash or debris prior to discharging to surface waters or storm drain systems.

iv. Groundwater Supply Well Discharges

During flushing, maintenance, rehabilitation, or development of water supply wells, practices, such as multi-baffled settling tanks or equivalent shall be used to remove large particles and to reduce turbidity to 100 Nephelometric Turbidity Units (NTU), After settling, if turbidity is greater than 100 NTU, the Discharger shall filter the water, implementing a 5-micron filter bag filtration system or equivalent practice, before discharging to achieve a turbidity threshold of 100 NTUs on an instantaneous basis, or the turbidity objective in the Regional Water Board Basin Plan, whichever is more stringent.

Although a required turbidity action level of 10 NTU interpreted as a daily average was originally proposed, the State Water Board has concluded that substituting a numeric action level of 100 NTU on an instantaneous basis is equivalent if not more effective in mitigating or avoiding potential significant effects from groundwater supply well discharges. An instantaneous based threshold of 100 NTU can be more effective as it requires an immediate action while a 10 NTU daily average, because it is based on a longer averaging period, would encourage dischargers to continue discharging water with potential waste until they can satisfy the 10 NTU daily average, and thus could cause other environmental impacts. The numeric action level of 100 NTU as an instantaneous threshold will still ensure the appropriate implementation of BMPs and ensure the discharge does not cause or contribute to an exceedance of a daily average receiving water

turbidity threshold of 10 NTU or a site specific Regional Board Basin Plan turbidity water quality objective.

b. Measures (or Equivalent)

i. Sediment and Erosion Control

The BMP Plan shall identify sediment and erosion control BMPs that assess and prevent potential impacts to beneficial uses and hydromodification of downstream receiving waters.

1. **Receiving Waters**. The Discharger shall identify and implement appropriate methods for selecting discharge points to receiving waters that minimize impacts due to sediment and erosion.

2. **Sediment Control**. Sediment control practices shall be used to filter and trap sediment particles to prevent them from reaching storm drains or receiving waters. The following practices, or equivalent, may be used to control sedimentation transport to receiving waters:

   - Straw wattles and gravel bags may be placed in a flow pathway and around storm drain inlets;
   - Plastic sheets may be used to line a trench and flow pathway to prevent water contact with soil;
   - Check dams or other energy dissipation devices may be constructed to dissipate flow energy and minimize the potential for discharges to dislodge soil;
   - A storm water swale, if available nearby to the point of discharge that has sufficient capacity for the discharge.
   - Where possible, water that would otherwise be the result of an emergency or planned discharge may be discharged to an open field or turf to remove sand and/or silt or larger particles prior to surface water discharge.

3. **Erosion Control**. Erosion control practices shall be used to protect soil surfaces along discharge pathways at discharge points and receiving waters. Erosion control practices shall be used to prevent re-suspension of ambient sediment within a receiving water, and shoreline erosion, hydromodification, and streambed scour. Such controls shall minimize the energy of discharges by managing flow velocities and volumes, and shall be appropriately designed so that the discharge does not exceed the hydraulic capacity of the receiving water at the point of discharge and areas downstream of the discharge point. The following measures, or equivalent, may be used to control erosion, hydromodification, and scour in receiving waters:

   - Construct check dams to slow down the flow;
   - Install flow diffusers at discharge point;

- Direct discharge flow path to have the minimum slope possible; and
- Decrease controllable discharge flow rates and duration.

ii. Dechlorination

One of the following types of dechlorination methods, and/or equivalent proven methods, including natural dissipation, will be utilized as appropriate:

1. Dechlorinating Diffuser – The dechlorinating diffuser connects to a fire hydrant or fire hose using a standard 2 ½ inch National Pipe Thread coupling and contains a chamber that houses up to 11 dechlorination tablets. Some diffusers feature a siphon for dechlorinating agent tablets or a solution to dechlorinate the water.
2. Dechlorination Mats – These mats are used to facilitate effective contact between the flow and dechlorinating agent during dechlorination. For dechlorination of discharges from trenches during main breaks, the tablets are placed inside synthetic mesh fabric pockets sewn together in a grid or line. The dechlorinating mats are laid across the flow path or over the storm water conveyance system. As the discharged water flows over and around the tablets, dechlorinating agent is released, which removes the chlorine.
3. Broadcast Dechlorination – Dechlorination granules are spread over an area, such as pavement, where chlorinated water is flowing toward a storm water conveyance system inlet. As the discharge contacts the granules, dechlorinating agent is released and chorine is removed.
4. Chemical Injection Metering Pump – Occasionally, a dechlorination agent is injected into a discharge pipe, such as a tank drain or directly into the discharge to dechlorinate the water before discharging.

iii. Copper and Zinc Management

Dischargers that apply copper-based herbicides and/or zinc-based corrosion inhibitors to their water shall, in the BMP Plan, identify measures to eliminate or reduce copper and zinc concentrations in their discharges to the extent feasible, including but not limited to the following:

1. Measures to maintain records of where, when and how much zinc-based corrosion inhibitors or copper-based herbicides are used to treat water that could be discharged to a water body.
2. BMPs that eliminate planned discharges to waterbodies and minimize unplanned and emergency discharges to waterbodies within 48 hours of applying copper-based herbicides or zinc-based corrosion inhibitors.
3. BMPs that eliminate or reduce to the extent feasible the use of copper-based herbicides or zinc-based corrosion inhibitors by using less toxic agents or other methods in place of zinc-based corrosion inhibitors or copper-based herbicides;

The zinc and copper management BMPs above are not required when discharges do not contain zinc or copper concentrations above water

quality criteria more frequently than once every three years at any one location or when discharges flow back into the same water body where the water originated. In such cases, the Discharger shall explain the circumstances in the BMP Plan.

iv. Operation and Maintenance

All facilities and equipment are maintained and operated to assure the requirements of the proposed project are met. Operational BMPs that avoid and minimize the number of discharges by retaining water within the drinking water system to the maximum extent possible, and inspection and maintenance BMPs that minimize the number of discharges by preventing leaks and breaks from pipelines, valves, tanks, and other drinking water system infrastructure will be required. No discharge of water and/or chemicals will be allowed without proper management, controls and/or dechlorination.

v. Equipment and Supplies

All equipment and sampling meters shall be inspected, maintained and calibrated per manufacturer instructions and specifications for proper functioning prior to use.

vi. Training

The personnel operating under the proposed project shall be properly trained for monitoring and reporting, and for the proper use and installation of all equipment and management practices that minimize the frequency of accidental spills.

vii. Notification

Pre-notification to the State Water Board shall be required three (3) days before initiation of large size discharges to increase the planning and proper implementation of mitigation measures, and allow planned regulatory oversight to assure less-than-significant or no impacts to a surface water body.

3. Compliance Determination

a. Effluent Limitations

Compliance with the requirements of the proposed project will be determined as specified below:

1. **General**

   Compliance with requirements of the proposed project shall be determined using monitoring and reporting protocols defined in the corresponding Monitoring and Reporting Program (MRP), a part of the NPDES permit requirements. For purposes of reporting and enforcement by the Regional and State Water Boards, compliance with water quality requirements and provisions occurs if the constituent concentration or level is lower than the proposed requirements or limitations allow, and lower than or equal to the reporting level of the corresponding sample measurement protocol.

2. **Total Residual Chlorine Concentration**

   Handheld chlorine meters that are U.S. EPA-approved are appropriate to measure residual chlorine in the field for compliance determination. The standard minimum detection level for U.S. EPA-approved handheld chlorine meters for residual chlorine varies with state of the art equipment. Therefore, only a discharge monitoring result with a total residual chlorine concentration less than or equal to a reporting level acceptable to the State Water Board and/or a Regional Water Board shall be deemed in compliance with effluent limitations and/or provisions of the proposed project.

5.0 MITIGATION, MONITORING AND REPORTING PROGRAM

Mitigation Reporting and Monitoring Program			
Mitigation Measure	Time of Implementation	Responsible Entity	Compliance Verification
Biologist Certification	After completion of Project	Discharger	State Water Board
Best Management Practices • Procedures for discharges of Treated Drinking Water, Super-chlorinated Water, Distribution and Storage Facility Drainage and groundwater supply well water. • Measures or Equivalent for Sediment and Erosion Control, Dechlorination, Copper and Zinc Management, Operation and Maintenance, Equipment and Supplies, Training, and Notification	Development of plans during Issuance and Reissuance of National Pollutant Discharge Elimination System (NPDES) Permits and implementation of measures when discharging to waters of the U.S., as required.	Discharger	State Water Board and Regional Water Boards
Compliance Determination for Effluent Limitations	During coverage under an NPDES Permit	Discharger	State Water Board and Regional Water Boards

6.0 REFERENCES

Baldwin, D.H., J.F. Sandahl, J.S. Labenia, and N.L. Scholz. 2003. Sublethal Effects of Copper on Coho Salmon: Impacts on Nonoverlapping Receptor Pathways in the Peripheral Olfactory Nervous System. *Environmental Toxicology and Chemistry*, Vol. 22:10.

California Integrated Water Quality System (CIWQS). 2008. Data from self-monitoring reports submitted by East Bay Municipal Utilities District, California Water Service Company, City of Vallejo, San Francisco Public Utilities Commission, North Marin Water District, and Alameda County Water District.

EBMUD, Santa Clara Valley Water District, Coastside Water District, California Water Sevice Company, Alameda County Water District, San Jose Water Company, San Francisco Public Utilities Commission, Zone 7 Water Agency, City of Benicia, City of Pittsburg, City of Fairfield, City of Vallejo, City of Napa, and City of Calistoga. 2008. Unpublished data submitted in support of their Notices of Intent for coverage under the General National Pollutant Discharge Elimination System (NPDES) Permit for Surface Water Treatment Facilities.

Eisler, R. 1998. *Copper Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review*. U.S. Geological Survey, Biological Resources Division, Biological Science Report USGS/BRD/BSR—1997-0002, Contaminant Hazards Reviews Report No. 33.

Hanson Aggregates. 2006. Priority Pollutant Monitoring Program, Final Report. December 27.

San Francisco Public Utilities Commission (SFPUC). 2008. Unpublished data submitted in support of their application for an individual NPDES permit to cover discharges from their Drinking Water Transmission System.

San Francisco Bay Regional Water Quality Control Board (Regional Water Board). December 2008. "Categorical Exception to the *Policy for Implementation of Toxics Standards for Inland Surface Water, Enclosed Bays, and Estuaries in California* (SIP) for Discharges from Drinking Water Systems.

San Francisco Regional Water Quality Control Board (Regional Water Board). 2007a. *Water quality monitoring and bioassessment in nine San Francisco Bay Region watersheds: Walker Creek, Lagunitas Creek, San Leandro Creek, Wildcat Creek/San Pablo Creek, Suisun Creek, Arroyo Las Positas, Pescadero Creek/Butano Creek, San Gregorio Creek, and Stevens Creek/Permanente Creek*. Oakland, CA: Surface Water Ambient Monitoring Program, San Francisco Bay Regional Water Quality Control Board.

Regional Water Board. 2007b. *Water Quality Monitoring and Bioassessment in Four San Francisco Bay Region Watersheds in 2003-2004: Kirker Creek, Mt. Diablo Creek, Petaluma River, and San Mateo Creek*. Surface Water Ambient Monitoring Program, San Francisco Bay Regional Water Quality Control Board, Oakland, CA.

U.S. Environmental Protection Agency (USEPA). 1980. Ambient Water Quality Criteria for Halomethanes. Office of Water Regulations and Standards, Criteria and Standards Division, Washington, D.C.

USEPA. 1985. Ambient Water Quality Criteria for Copper – 1984. Office of Water Regulations and Standards, Criteria and Standards Division, Washington, D.C.

USEPA. 2007. Aquatic Life Ambient Freshwater Quality Criteria – Copper, 2007 Revision. Office of Water, Office of Science and Technology, Washington, D.C.

Yin, Tong. 2008. Regional Water Board Case Handler for NPDES permits covering discharges to the Napa River, email communication providing data from the Collaborative Napa River Receiving Water Study