CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESOLUTION No. R2-2014-0028

AMENDING THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY BASIN TO INCORPORATE NEW ONSITE WASTEWATER TREATMENT SYSTEM POLICY; AMEND WET WEATHER OVERFLOW POLICY; UPDATE GRAYWATER INFORMATION; AND UPDATE TABLE OF MUNICIPAL WASTEWATER DISCHARGE LOCATIONS

WHEREAS, the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board) finds that:

1. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Water Board and approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL), and the United States Environmental Protection Agency (U.S. EPA), where required.

2. The Basin Plan may be amended in accordance with California Water Code (Water Code) section 13240 *et seq*. The proposed Basin Plan amendment complies with these sections.

3. The Basin Plan amendment (amendment), including specifications on its physical placement in the Basin Plan, is set forth in Exhibit A hereto.

4. In 2007, the State Water Board reviewed the East Bay Municipal Utility District's wet weather facility NPDES permit. The State Water Board concluded that the conceptual approach outlined in section 4.9.2 of the Basin Plan is in conflict with the federal Clean Water Act (33 U.S.C. § 1251 et seq.), which unequivocally requires that publicly-owned treatment works achieve secondary treatment. The State Water Board directed the Water Board to amend the Basin Plan to delete language that conflicts with the Clean Water Act.

5. On June 19, 2012, the State Water Board adopted the "Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems" (OWTS Policy). The OWTS Policy includes a conditional waiver of the requirements to submit a report of waste discharge, obtain waste discharge requirements, and pay fees for discharges from onsite wastewater treatment systems (OWTS) covered by the OWTS Policy. The OWTS Policy was approved by OAL on November 13, 2012, and became effective on May 13, 2013.

6. The two policies that inform current Water Board regulation of OWTS are fully expressed in Resolution Nos. 78-14, "Policy on Discrete Sewerage Facilities," and 79-5, which contains the guidance document "Minimum Guidelines for the Control of Individual Wastewater Treatment and Disposal Systems."

7. The Basin Plan amendment consists of the following non-regulatory changes: (1) Update Wet Weather Overflow Policy: revise sections 4.9.1 and 4.11.1 to improve clarity and consistency

with the federal Combined Sewer Overflow Control Policy and delete section 4.9.2 due to conflicts with the Clean Water Act; (2) Revise sections of the Basin Plan to be consistent with the OWTS Policy adopted by the State Water Board; (3) Update graywater language in the Basin Plan to be consistent with California Building Standards Commission standards adopted in 2009; (4) Update information for permitted discharge locations for Municipal Wastewater Discharge Permittees in Table 4-8; and (5) Remove reference to Resolution No. 77-1 that was rescinded by the Water Board in 1994.

8. This Resolution rescinds the entirety of Resolution Nos. 512, 583, 596, 598, 599, 600, 75-12, 78-14, 79-5, 80-9, 81-9, 83-2, 84-12, and 87-155, which are either in conflict with or rendered unnecessary by the OWTS Policy.

9. Area of Applicability - The effect of this amendment will be throughout the San Francisco Bay Region.

10. CEQA - The Water Board's discretionary decisions are subject to the requirements of California Environmental Quality Act (CEQA). The State's Secretary for Natural Resources has certified the basin planning process as an exempt regulatory program, and therefore the Water Boards are exempt from the specific CEQA requirement to prepare an environmental impact report or negative declaration when the Water Board is complying with the procedures identified in the certified regulatory program (Pub. Res. Code § 21080.5; Cal. Code Regs., tit. 23, §§ 3775-3781; Cal. Code Regs., tit. 14, § 15251-15253 and 15378).

11. A Substitute Environmental Document (SED) was prepared by the State Water Board for the OWTS Policy in accordance with the Water Board's certified regulatory program (Cal. Code Regs., tit. 23, §§ 3775-3781). The State Water Board approved the OWTS Policy and the SED on June 19, 2012. The proposed amendment removes existing Basin Plan provisions regulating OWTS and incorporates the OWTS Policy. The portion of the subject amendment concerning OWTS is completely within the scope of the OWTS Policy as analyzed by the State Water Board in the SED. No substantive changes or modifications to the previously approved OWTS Policy are proposed, no substantial changes with respect to circumstances under which the project will be undertaken have occurred, and no new information triggers the need for supplemental or subsequent CEQA analysis (Pub. Res. Code § 21166; Cal. Code Regs., tit. 14, §§ 15162 and 15163). The rescission of Water Board policies described herein is not a project as defined in CEQA. There is no possibility that the activity in question may have a significant effect on the environment (Cal. Code Regs., tit. 14, §§ 15378 and 15061, subd. (b)(3) and Cal. Code Regs., tit. 23, § 3720) .

12. The portions of the subject amendment updating non-regulatory Basin Plan language concerning wet weather overflow implementation, graywater systems, Table 4-8, and Resolution No. 77-1 is entirely informational and contains no regulatory provisions. Therefore, it is not subject to CEQA because it will not result in a direct or reasonably foreseeable indirect physical change in the environment (Pub. Res. Code § 21065; Cal. Code Regs., tit. 14, §§ 15061, subd. (b)(3) and 15378).

13. The State Water Board, in adopting the OWTS Policy, considered a wide range of factors affecting water quality and the availability of treatment measures to protect beneficial uses and public health, consistent with the goals and requirements set forth in State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. The State Water Board analyzed the potential environmental impacts of reasonably foreseeable methods of compliance with the OWTS Policy, concluding that

alternatives to the OWTS Policy do not accomplish the objectives of adopting consistent standards that will ensure public health and protection of beneficial uses of the State's waters while establishing an effective implementation process that considers cost and technological capabilities.

14. The State Water Board found that the OWTS Policy sets standards that could allow potentially significant direct water quality impacts from pathogen or nitrogen contamination, as well as cumulative water quality and public health impacts. The State Water Board also found that available mitigation measures would not meet the goals of the OWTS Policy, and that specific overriding economic, legal, social, technological, or other benefits outweigh any adverse environmental impacts resulting from new or continuing discharges in compliance with the OWTS Policy. With respect to local agency management programs, the State Water Board rejected mitigation measures that would remove too much local agency flexibility, render too many sites unsuitable for new and replaced OWTS, and/or impose significant costs without corresponding environmental benefit. The State Water Board concluded that effective implementation of protections to allow continued use of OWTS for wastewater disposal in areas not suitable for centralized treatment systems is an important public benefit, and the protections afforded by the OWTS Policy provide the best practicable treatment to ensure the highest water quality consistent with the maximum benefit to the people of the State. The State Water Board concluded that the OWTS Policy establishes a statewide, risk-based, tiered approach for the regulation and management of OWTS installations and replacements and sets the level of performance and protection required of these systems in each tier.
15. The criteria for regulation of OWTS in the OWTS Policy do not differ significantly from the criteria previously imposed by the Basin Plan and general waste discharge requirements adopted by the Water Board. Incorporation and implementation of the OWTS Policy is therefore not expected to impact the volume or concentration of waste discharged to high quality waters.
16. The OWTS Policy requires local agencies implementing management programs to monitor and assess water quality to ensure that beneficial uses are protected. The monitoring and assessments must evaluate the impact of OWTS discharges and assess the extent to which groundwater and local surface water quality may be adversely impacted. Local agencies must report the results to the applicable Regional Water Board and identify any changes in the local agency management program that will be undertaken to address impacts from OWTS. The Water Board may also require modifications to an approved local agency management program as appropriate.
17. Consistent with the State Water Board's findings and the requirements of the OWTS Policy, this amendment is: consistent with maximum benefit to the people of the State; will not unreasonably affect present and anticipated beneficial uses; will not result in water quality less than that prescribed in applicable State policies, including the OWTS Policy; and requires OWTS dischargers to use the best practicable treatment or control of the discharge necessary to avoid creating a condition of pollution or nuisance and to maintain the highest water quality consistent with the maximum benefit to the people of the State.
18. The amendment to the Basin Plan will result in no potential for adverse effect, either individually or cumulatively, on wildlife and is therefore exempt from fee payments to the Department of Fish and Wildlife under the California Fish and Game Code.

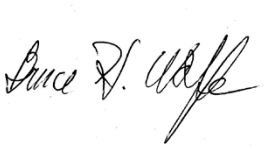
19. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Resolution promotes that policy by enacting policies designed to protect human health and ensure that water is safe for domestic use.
20. Health and Safety Code section 57004 requires an external peer review for work products that constitute the scientific basis for a rule "…establishing a regulatory level, standard, or other requirement for the protection of public health or the environment." The "scientific basis" is defined in this code as "the foundations of a rule that are premised upon, or derived from empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard or other requirement for the protection of public health or the environment." External peer review is not required for this amendment because it contains no new regulatory requirements. The OWTS Policy was subjected to independent, external peer review prior to its adoption by the State Water Board.
21. Water Board staff prepared and distributed the Basin Plan amendment and a staff report dated March 28, 2014, in accordance with applicable State and federal environmental regulations (Cal. Code Regs, tit. 23, § 3775, and 40 C.F.R. § 25).
22. On June 11, 2014, the Water Board held a public hearing and considered the Basin Plan amendment. Notice of the public hearing was given to all interested persons in accordance with Water Code section 13244. The Water Board has carefully considered all comments and testimony received, including responses thereto, on the Basin Plan amendment, as well as all of the evidence in the administrative record.
23. The Basin Plan amendment must be submitted for review and approval by the State Water Board. It must also be submitted to OAL. The Basin Plan amendment will become effective upon approval by OAL. This Resolution will become effective upon adoption.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. Pursuant to Water Code section 13240, the Water Board, after considering the record, including oral testimony at the hearing, hereby adopts the Basin Plan amendment set forth in the Attachment to this Resolution.
2. Pursuant to Water Code section 13240, the Water Board, after considering the record, including oral testimony at the hearing, hereby rescinds Resolution Nos. 512, 583, 596, 598, 599, 600, 75-12, 78-14, 79-5, 80-9, 81-9, 83-2, 84-12, and 87-155, which were all previously adopted by this Board.
3. The Water Board's Executive Officer is directed to forward copies of the Basin Plan amendment to the State Water Board in accordance with the requirements of Water Code section 13245.
4. The Water Board requests the State Water Board approve the Basin Plan amendment in accordance with requirements of Water Code section 13246 and forward it to OAL for approval. The Executive Officer shall request that the State Water Board, on behalf of the Water Board, file a Notice of Decision with the Secretary of Natural Resources and the Governor's Office of Planning and Research (State Clearinghouse) after approval by OAL.
5. If during the approval process, the State Water Board or OAL determines that minor, nonsubstantive corrections to the language of the amendment are needed for clarity or

consistency, the Executive Officer may make such changes and shall inform the Water Board of any such changes.

I, Bruce H. Wolfe, Executive Officer of the California Regional Water Quality Control Board, San Francisco Bay Region, do hereby certify that the foregoing is a full, true and correct copy of a resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 11, 2014.



Digitally signed by Bruce H. Wolfe
DN: cn=Bruce H. Wolfe, o=SWRCB, ou=Region 2, email=bwolfe@waterboards.ca.gov, c=US
Date: 2014.06.13 12:12:33 -07'00'

Bruce H. Wolfe
Executive Officer

Attachment: Exhibit A – Revised Proposed Basin Plan Amendment

Exhibit A – Revised Proposed Basin Plan Amendment

Language that was proposed for deletion is shown in ~~strikeout~~. Added language is underlined.

CHAPTER 4 IMPLEMENTATION PLANS

4.9.1 FEDERAL COMBINED SEWER OVERFLOW CONTROL POLICY

On April 11, 1994, the U.S. EPA adopted the Combined Sewer Overflow (CSO) Control Policy (50 FR 18688)[1]. This policy establishes a consistent national approach for controlling wet weather discharges from ~~CSOs~~ CSS to the nation's water. The policy requires implementation of nine minimum controls that serve as minimum technology-based requirements pursuant to the Clean Water Act. The policy also requires implementation of a long-term control plan that serves as the water quality-based requirements of the Clean Water Act. The long-term control plan must consider the permittee's financial capability and provide for the attainment of water quality standards.

The Water Board applies the policy to the City and County of San Francisco's CSS. San Francisco substantially constructed wet weather control facilities prior to adoption of the CSO Control Policy. Accordingly, since construction was completed in 1997, the Water Board has issued permits to the City and County of San Francisco that require compliance with the provisions of the CSO Control Policy that apply to CSO controls: maintenance of the wet weather facilities to ensure continued maximization of storage and treatment; continued implementation of the nine minimum controls, which constitute the technology-based requirements of the CSO Control Policy; post-construction monitoring to confirm the system's performance; and re-evaluation of the feasibility of reducing or eliminating discharges to sensitive areas.

~~Using the NPDES permit program, the policy initiates a two-phased process with higher priority given to more environmentally sensitive areas. During the first phase, the permittee is required to implement the following 9 Minimum Controls. These constitute the technology-based requirements of the Clean Water Act as applied to combined sewer facilities (best conventional treatment (BCT) and best available treatment (BAT)). These minimum controls can reduce CSOs and their effects on receiving water quality:~~

~~(1) Conduct proper operation and regular maintenance programs for the CSS and the CSO outfalls;~~

~~(2) Maximize use of the collection system for storage;~~

~~(3) Review and modify pretreatment programs to ensure that CSO impacts are minimized;~~

~~(4) Maximize flow to the POTW for treatment;~~

~~(5) Prohibit CSOs during dry weather;~~

~~(6) Control solids and floatable materials in CSOs;~~

~~(7) Develop and implement pollution prevention programs that focus on contaminant reduction activities;~~

[1] A hyperlink to the CSO Control Policy (http://cfpub.epa.gov/npdes/cso/cpolicy.cfm) will be added to the online version of the Basin Plan.

(8) Notify the public; and

(9) Monitor to effectively characterize CSO impacts and the efficacy of CSO controls.

Compliance with the minimum controls shall be as soon as practicable, but no later than January 1, 1997. The permittee is also required to initiate development of a long-term control plan to select CSO controls, based on consideration of the permittee's financial capability.

The second phase of the process involves implementation of the long-term control plan developed in the first phase. Such implementation must provide for the attainment of water quality objectives and may result in additional site-specific technology-based controls, as well as water quality-based performance standards that are established based on best professional judgement. While numeric water quality-based effluent limits are not readily established due to unpredictability of a storm event and the general lack of data, the CSO Control Policy requires immediate compliance with water quality standards expressed in the form of a narrative limitation.

The Water Board intends to implement the federal CSO Control Policy for the combined sewer overflows from the City and County of San Francisco. The City and County of San Francisco has substantially completed implementation of the long-term CSO control plan (and is thereby exempted requirements to prepare a long-term control plan).

Additionally, the following is the Water Board's recommended approach to control the seasonal degradation of water quality that results from all wet weather overflows of wastewater, including POTWs with either combined and separate sewer systems, and industrial wastewater facilities. The overflow from San Francisco's combined sewer system is addressed by the CSO Control Policy described above.

4.9.2 CONCEPTUAL APPROACH

The recommended approach to controlling wet weather overflows of wastewater that contains particular characteristics of concern to beneficial uses is a combination of designated alternative levels of maintenance (i.e., combination of treatment levels and beneficial use protection categories) and guidance for the design of overflow discharge structures. The Water Board is not endorsing any specific control measures, but is presenting a conceptual framework that allows for the evaluation of costs and benefits. This framework can be used as guidance in adopting specific control measures. As with all of its programs, the Water Board will implement this conceptual approach consistent with the national goal of "...water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water."

Maintenance and associated treatment and overflow requirements are detailed in Table 4-7. The following requirements should be met for all overflows:

(a) Outfalls achieve an initial dilution of 10:1;

(b) Overflows receive treatment to remove large visible floatable material and to protect the outfall system; and

(c) Overflow locations be removed from dead-end sloughs and channels, and from close proximity to beaches and marinas.

Exceptions to (a) and (c) will be considered where an inordinate burden would be placed on the discharger relative to beneficial uses protected, and when an equivalent level of environmental

~~protection can be achieved by alternative means, such as an alternative discharge site, a higher level of treatment, and/or improved treatment reliability.~~

~~The conceptual approach described above will be used by the Water Board in evaluating wet weather discharge conditions where polluted stormwater or process wastewater bypasses any treatment unit or units that are used in the normal treatment of the waste stream. Evaluation of such discharges must include identification of:~~

- ~~Actual capacities of the collection system, each treatment unit, and the disposal system;~~
- ~~Flow return period probabilities for the specific facility location;~~
- ~~Cost of providing complete storage or treatment capacity and disposal capacity for flow return periods of 1, 5, and 20 years;~~
- ~~Quality of the polluted stormwater and process wastewater for flow return periods of 1, 5, and 20, years; and~~
- ~~Beneficial uses that may be affected by such discharges.~~

4.9.3~~3~~2 SURFACE IMPOUNDMENT OVERFLOW PROTECTION

Note: Section 4.9.3 would be renumbered to Section 4.9.2 because of the proposed deletion of Section 4.9.2. The text in Section 4.9.3 would be retained unchanged. Table 4.7 will be deleted as part of this amendment

~~Table 4-7: Controlling Wet-weather Overflows~~

~~Levels of Water Quality Protection~~	~~Appropriate Level of Treatment~~
~~Complete protection for areas where the aquatic environment should be free of any identifiable risk from the discharge of untreated waste (i.e., shellfish beds for year-round harvesting)~~	~~Maintenance Level A:~~ ~~Secondary treatment up to 20-year recurrence interval; above 20-year overflows allowed~~
~~Areas that do not need complete year round protection, such as shellfish beds for dry-weather harvesting, public beaches, and other water contact areas~~	~~Maintenance Level B:~~ ~~Secondary treatment for all flows up to two-year recurrence interval; primary treatment up to 20-year recurrence interval; above 20-year overflows allowed~~
~~Areas where water quality or aquatic productivity may be limited due to the pollution effects of a dense human population or other urban activities that are largely uncontrollable. Such areas may include some shipyards and harbors~~	~~Maintenance Level C:~~ ~~Secondary treatment to half-year recurrence interval; primary treatment to five-year recurrence interval; above five-year overflows allowed~~

4.11.1 CITY AND COUNTY OF SAN FRANCISCO

The City and County of San Francisco owns and operates the only combined sewer system in the San Francisco Bay Region. ~~collects the wastewater i~~In ~~a~~ San Francisco's combined sewer system~~.~~

~~That is, the,~~ domestic sewage, industrial wastewater, and stormwater runoff are ~~all~~ collected in the same pipes and treated at one of two all-weather secondary treatment plants – the Southeast Water Pollution Control Plant and the Oceanside Water Pollution Control Plant – or at the North Point Wet Weather Facility. ~~(combined sewer). Such system is subject to overloading during severe storms. Most other communities in California have a separated sewer system: one set of pipes for domestic sewage and industrial wastes and another set for stormwater.~~ The system was designed and constructed with several features intended to minimize combined sewer overflows. First, the system has a peak wet weather treatment capacity significantly in excess of dry weather flows. Second, the system design includes more than 200 million gallons of wet weather storage in large transport/storage (T/S) structures that surround San Francisco. These T/S structures hold back the wet weather flows generated by most storms until they can be routed to the treatment plants. During large storms, wet weather flows consisting mostly of stormwater are discharged through one of thirty-six permitted combined sewer discharge (CSD) outfalls. The T/S structures also include baffles and weirs to hold back solids and floating debris prior to discharge through a CSD outfall.

San Francisco was one of the first municipalities in the nation to complete construction of comprehensive combined sewer overflow controls ~~is near completion of the primary components of its wastewater facilities master plan~~. This construction program began in 1974 with the publication of the Master Plan Environmental Impact Statement and Report, jointly issued by San Francisco and the U.S. EPA, which described an~~. The~~ integrated wastewater control system ~~established by the master plan has been~~ designed to provide control and treatment for both dry weather sewage and wet weather storm flows, and to achieve long-term average CSD frequencies mandated by the Water Board to protect beneficial uses. ~~All dry weather flows currently receive secondary level treatment. At program completion in 1996, all wet weather flows including stormwater runoff will be captured and will receive a specified level of treatment depending on the size of the storm. Pollutant removal from stormwater will be approximately 60 percent system-wide (measured as reduction in total suspended solids). San Francisco is one of the first municipalities in the nation to complete a comprehensive control program for a combined sewer system~~ The program was fully implemented in 1997 at a cost of approximately $2 billion. ~~The expenditures for completing the wastewater master plan is about $1.45 billion.~~

~~The Southeast Water Pollution Control Plant is a major component of San Francisco's wastewater treatment system. The plant provides secondary level treatment for all dry weather domestic and industrial wastewater from the Bayside drainage area in San Francisco (approximately 75 percent of the total citywide flow). The Oceanside plant provides similar treatment on the Westside. The storage/transports around the periphery of the city store combined sewage for treatment after the storms subside. Additionally, northeast zone storm flows receive treatment at the Northpoint wet weather treatment plant.~~

4.18 ONSITE WASTEWATER TREATMENT AND DISPERSAL SYSTEMS

As the population of the Region increases, demand for new development increases. In many cases, new development is within areas served by municipal sewer systems. However, development is also occurring in outlying areas not served by existing sewerage agencies. In those instances, new discrete sewerage systems are being proposed. These are primarily onsite wastewater treatment and dispersal systems (onsite systems or septic systems) serving individual homes, but include community systems serving multiple residences. Today there more than 110,000 onsite systems throughout the Region, and approximately 1,000 new systems are approved each year.

In response to these development pressures, the Water Board adopted a Policy on Discrete Sewerage Facilities in 1978 (Board Resolution No. 78-14). The Policy set forth guiding regulatory principles and the actions that the Water Board ~~will~~ would take with respect to proposals for individual or community sewerage systems serving new development. The 1978 Policy was rescinded in 2014 when the State Water Board's statewide Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy) was incorporated by reference into the Basin Plan (section 4.18.2) but relevant guiding principles and requirements from the 1978 Policy have been retained in section 4.18.1 to complement the OWTS Policy. ~~An important provision of the policy required the development of guidelines for acceptable onsite system practices. The Water Board's policy and guidelines are presented below.~~

4.18.1 POLICY ON DISCRETE SEWERAGE FACILITIES

~~This~~ The Water Board will apply ~~policy enumerates~~ the following guiding principles~~, which apply~~ to all wastewater discharges from discrete sewerage systems:

- The system must be designed and constructed so as to be capable of preventing pollution or contamination of the waters of the state or creating nuisance ~~for the life of the development~~;
- The system must be operated, maintained, and monitored so as to continually prevent pollution or contamination of the waters of the state and the creation of a nuisance~~;~~.
- ~~The responsibility for both of the above must be clearly and legally assumed by a public entity with the financial and legal capability to assure that the system provides protection to the quality of the waters of the state for the life of the development.~~

~~The policy also makes the following requests of city and county governments:~~

- ~~That the use of new discrete sewerage systems be prohibited where existing community sewerage systems are reasonably available;~~
- ~~That the use of individual onsite systems for any subdivision of land be prohibited unless the governing body having jurisdiction determines that the use of the systems is in the best public interest and that the existing quality of the waters of the state is maintained consistent with the State Water Board's Resolution 68-16; and~~
- ~~That the cumulative impacts of individual system discharges be considered as part of the approval process for development.~~

~~Finally, the policy also requires that a public entity assume legal authority and responsibility for new community wastewater treatment and dispersal systems.~~

The Water Board requires an assessment of the cumulative impact of discharges from individual wastewater treatment and disposal systems on water quality and public health where the density of systems or geologic conditions are such that adverse impacts may occur. This assessment shall be included in the application submitted to local agencies for systems covered by the OWTS Policy conditional waiver or, if not covered by the conditional waiver, in the Report of Waste Discharge submitted to the Water Board.

The Water Board also requires that a public entity must assume legal authority and responsibility for the planning, design, financing, construction, operation, and maintenance of any new community wastewater treatment and dispersal system. Community systems are defined as collection sewers plus treatment facilities serving multiple discharges under separate ownership, such as small, pre-engineered, and prefabricated packaged wastewater treatment plants or common septic tanks plus dispersal facilities. The responsible public entity must prepare acceptable operation, maintenance, revenue, and contingency plans for the wastewater treatment and dispersal facility. These plans shall be included in the application submitted to local agencies for systems covered by the OWTS Policy conditional waiver or, if not covered by the conditional waiver, in the Report of Waste Discharge submitted to the Water Board. In the absence of acceptable plans, the discharge will be prohibited.

~~The policy requires local governments, during the development approval process, to consider either the formation of a new government entity or an existing public entity to assume this responsibility.~~

4.18.2 ONSITE WASTEWATER SYSTEM REQUIREMENTS

The Water Board prohibits the discharge of wastes which threaten to cause water pollution, water quality degradation, or the creation of health hazards or nuisance condition. Requirements for siting, design, operation, maintenance, and management of onsite wastewater treatment systems are specified in the State Water Board's OWTS Policy. The OWTS Policy, including future revisions, is incorporated into this Basin Plan and shall be implemented according to the policy's provisions.

The OWTS Policy sets forth a tiered implementation program with requirements based upon levels (tiers) of potential threat to water quality. The OWTS Policy applies to: individual treatment and dispersal systems; community collection, treatment, and dispersal systems; and alternative collection, treatment, and dispersal systems that use subsurface dispersal. The OWTS Policy only applies to such systems with a projected flow of 10,000 gallons per day or less of domestic wastewater and, in some cases, high strength wastewater (not exceeding 900 mg/L BOD) from commercial food service buildings equipped with a properly sized and functioning oil/grease interceptor.

The OWTS Policy includes a conditional waiver of waste discharge requirements for onsite systems that are in conformance with the policy. Onsite wastewater treatment systems that do not meet the applicability criteria of the OWTS Policy or whose wastewater does not meet the quantity and quality specifications of the policy cannot receive coverage under the conditional waiver so these systems will be regulated by the Water Board through other regulatory means.

~~**4.18.2 ONSITE SYSTEM GUIDELINES**~~

Since the early 1960s, the Water Board, pursuant to Section 13296 of the Water Code, adopted waivers for reporting certain septic system discharges in all the Region's counties except San Francisco. In its policy, the Water Board required the development of individual system guidelines concentrating mainly on septic systems. These guidelines provided information on system design and construction, operation and maintenance, and the conduct of cumulative impact studies.

In 1979, the Water Board adopted Resolution No. 79-5: Minimum Guidelines for the Control of Individual Wastewater Treatment and Disposal Systems (Minimum Guidelines). These guidelines include recommended practices for onsite system design, construction, operation and maintenance, and cumulative impact assessments, along with supporting rationale. The guidelines focus on the most common and conventional type of onsite systems, a septic tank followed by gravity-flow discharges into a subsurface soil absorption system, but underlying principles remain applicable to all types of onsite systems.

4.18.3 ALTERNATIVE ON-SITE SYSTEMS

The conventional onsite system, when properly constructed and operated, has long been a reliable and acceptable method of providing onsite sewage management. However, there are widespread conditions throughout the Region that preclude the use of conventional systems, including high groundwater, shallow or poor quality soil, or steep slopes. In recent years, there has been active interest and research in the development of alternative methods of onsite wastewater management to accommodate these limiting conditions. Alternative methods currently in use include additional treatment prior to soil discharge such as by a sand filter, or improved methods of dispersal into native soil such as by pressurized distribution throughout the soil absorption system, or via an engineered above-grade mound unit.

While alternative methods can afford improved practices, the use of alternative systems is not without limitations. The site and soil conditions that preclude conventional practices remain and must be appropriately addressed, since all onsite systems ultimately rely on soil absorption of all or most of the wastewater generated. Most alternative systems require a high degree of design expertise, which increases the danger of faulty design or installation and complicates the review of various proposals. Furthermore, given that alternative systems are primarily used in areas of existing site or soil limitations, in the event of failure, options for replacement will be few, and corrections difficult to achieve. Finally, most alternative systems require a far more intensive and sophisticated level of management than conventional systems, including inspection, monitoring and maintenance by qualified service providers, and increased regulatory oversight, as well as careful use and operation by the homeowner.

Recognizing the need for a position on alternative systems, the Water Board adopted the following statement in the 1979 Minimum Guidelines:

"The Water Board Executive Officer may authorize the Health Officer to approve alternative systems when all of the following conditions are met:

a. Where the Health Officer has approved the system pursuant to criteria approved by the Water Board Executive Officer;

b. Where the Health Officer has informed the Water Board Executive Officer of the proposal to use the alternative system and the finding made in (a) above; and

c. Where a public entity assumes responsibility of the inspection, monitoring and enforcing the maintenance of the system through:

i. Provision of the commitment and the necessary legal powers to inspect, monitor, and when necessary to abate/repair the system; and

ii. Provision of a program for funding to accomplish (i) above."

The fundamental point is that the Water Board will allow the use of alternative systems only if adequate design review, system management, and means for failure correction are assured, and a county or some other public agency assumes ultimate responsibility for these actions.

The Water Board may authorize local agencies to approve and permit alternative on-site systems, provided the local regulatory program is found to be acceptable and in accordance with the Water Board's position on alternative systems discussed above. An acceptable program should include a) siting and design criteria for the types of alternative systems being approved, b) procedures for on-going inspection, monitoring, and evaluation of these systems, and c) appropriate local regulations for implementation and enforcement of the program. Authorization may be granted through a conditional waiver adopted by the Water Board and will typically include a Memorandum of Understanding (MOU) between the Water Board and the local agency. Typically, that agency will be the county environmental health department. The MOU provides a means for identifying the responsibilities of both the Water Board and the local agency, applicable criteria for siting, design, construction, operation, maintenance and monitoring, and procedures for implementing the program.

Alternative onsite system designs proposed for approval in a local agency program should be substantiated by suitable reference materials demonstrating successful performance under site and soil conditions similar to the local conditions, including previous field or research facility testing and documentation of applicable design, installation and use criteria. System designs that have not been fully proven under proposed conditions will be considered experimental and treated with caution. In general, experimental systems will require more careful siting and design review and, if approved, intensive monitoring and inspection to ensure adequate system operation and performance. Experimental systems are generally approved only for limited use, until successful performance has been demonstrated and documented, and acceptable design, installation and use criteria determined.

4.18.4 GRAYWATER SYSTEMS

Graywater systems are a special group type of onsite systems that are used to manage only isolated domestic wastewaters that have not come in contact with toilet wastes. In 1997 2009, the California Building Standards Commission approved revised California Graywater Standards (Graywater Standards). These standards developed by the California Department of Housing and Community DevelopmentWater Resources (DWR), are codified at Title 24, CCR, Part 5, Chapter 16A, part I Appendix G, and apply to all graywater systems statewide.

Pursuant to Health and Safety Code section 17922.12, “graywater” means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. “Graywater” includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs but does not include wastewater from kitchen sinks or dishwashers.

The Graywater Sstandards specify the means by which graywater ~~certain non-toilet wastewaters~~ may be collected, filtered, and used either in irrigation systems or, if treated, certain indoor uses. ~~discharged into onsite subsurface irrigation systems~~. ~~Allowable sources of graywater include showers, tubs, bathroom sinks and laundry water.~~ ~~Discharged graywater may only be used for subsurface landscape irrigation.~~ The standards apply to both residential and commercial buildings. The Graywater Standards promote water conservation by facilitating re-use of laundry, shower, lavatory, and similar sources of discharge for irrigation and/or indoor use. These revised standards allow certain types of systems to be installed without a building permit.

Cities and counties have authority to develop policies and procedures for the implementation of graywater programs. In developing these, consultation with the Water Board and local water districts can ensure that potential impacts on local water quality are taken into consideration.

CHAPTER 5: PLANS AND POLICIES

5.1 STATE WATER BOARD PLANS AND POLICIES

Add the following language at the end of section 5.1, right before section 5.2

WATER QUALITY CONTROL POLICY FOR SITING, DESIGN, OPERATION, AND MAINTENANCE OF ONSITE WASTEWATER TREATMENT SYSTEMS (OWTS POLICY)

The *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy), Resolution No. 2012-0032, was adopted by the State Water Resources Control Board on June 19, 2012. This Policy implements California Water Code, Chapter 4.5, Division 7, sections 13290-13291.7, and establishes statewide regulations and standards for permitting and operation of onsite wastewater systems. The OWTS Policy specifies criteria for existing and new onsite systems and establishes a conditional waiver of waste discharge requirements for onsite systems that comply with the policy.

5.2.7 ONSITE WASTE DISPERSAL AND WASTE DISCHARGE

The Water Board's policy on small waste discharge systems has evolved considerably as the Bay Area has become more developed. The following section summarizes a series of resolutions regarding conditions under which the Water Board would either object to or prohibit specific activities involving small waste discharge systems. ~~would waive waste discharge reporting requirements. Generally, this waiver is only granted when a county or other government entity has an active permitting and monitoring program comparable to the Water Board's.~~

SEPTIC, LEACHING, AND SMALL COMMUNITY SYSTEMS—RESOLUTION NO. 81 (1951)

This resolution stated the Water Board's objection to the construction and use of wells for septic effluent disposal or street runoff, except when such wells discharge into geologic formations that at no time contained water suitable for domestic, agricultural, or industrial use.

~~**WAIVER OF REQUIREMENT TO REPORT WASTE DISCHARGE FOR SYSTEMS REGULATED BY COUNTY AND LOCAL AGENCIES**~~

In 1963 and 1964, the Water Board waived its regulatory authority over waste discharge reporting for family dwellings using discrete systems, as long as they were already regulated by local health departments and met certain conditions. In the same resolutions, the Water Board also urged local planning and legislative bodies to require connection to sewer systems for all new development whenever feasible. Resolutions were adopted for Alameda County (No. 512; 1963), Contra Costa County (No. 583; 1964), Napa County (No. 596; 1964), San Mateo County (No. 597; 1964), Solano County (No. 598; 1964), Sonoma County (No. 599; 1964), and Santa Clara County (No. 600; 1964). The Solano County waiver (Res. 598) was later amended by Resolution No. 75-12 in 1975, which indicated that the waiver would not apply to planned unit development with minimum lot sizes smaller than 2.5 acres and by Resolution 83-1 (1983).

The Water Board's general policy on discrete sewerage facilities was later amended by Resolution Nos. 78-14 (1978) and 79-5 (1979). The first described specific actions that would be taken by the Water Board when it was presented with a proposal for new discrete sewerage systems and what specific requests it would make of local governments. In 79-5, the Water Board set minimum guidelines for determining the adequacy of local ordinances for controlling individual wastewater treatment and disposal systems.

In 1980, the Water Board (Resolution No. 80-9) requested that the County of Alameda correct deficiencies in its individual waste treatment and disposal systems program, acting under policies adopted in the Alameda County waiver (Res. 512) and discrete sewerage policies (Res. 78-14 and 79-5). In 1981, the Water Board rescinded Resolution No. 597 and reissued a policy (Resolution No. 81-9) on waiving reporting of discharges from individual wastewater treatment and disposal systems in San Mateo County. The Contra Costa County Waiver was amended in 1983 (Res. 83-2), and the Marin County Waiver in 1984 (Res. 84-12).

CITY OF NOVATO — RESOLUTION NO. 87-155

In this resolution, the Water Board stated its policy regarding a waiver of waste discharge reporting requirements from individual wastewater treatment systems in the City of Novato.

In Chapter 5, in the ***Section 5.2.11 Wetlands***

USE OF WASTEWATER TO CREATE, RESTORE, AND ENHANCE MARSHLANDS — RESOLUTION NOS. 77-1 AND 94-086

UPDATES TO TABLE 4-8

Table 4-8: Publicly-Owned Treatment Works (POTWs)

POTW ~~Facility~~ Discharger Name	POTW Outfall Location[a]	Number of Outfalls	Flow[b] (MGD)	Treatment Level[c]	Discharge Point Latitude	Discharge Point Longitude	Comment
City of American Canyon	1	2	2.5	Advanced Secondary	~~38 11 11~~ 38.1879 38.1849	~~122 16 27~~ 122.2771 122.2791	
City of Benicia	2	1	4.5	Secondary	~~38 02 30~~ 38.0417	~~122 09 03~~ 122.1508	
City of Burlingame	3	1	5.5	Secondary	~~37 39 55~~ 37.6653	~~122 21 41~~ 122.3614	Discharges through North Bayside System Unit outfall
City of Calistoga	4	2	0.84	Advanced Secondary	~~38 33 34~~ 38.5594 38.5703	~~122 33 28~~ 122.5578 122.5611	~~With dry weather reclamation~~ seasonal discharge restrictions apply
Central Contra Costa Sanitary District	5	1	53.8	Secondary	~~38 02 44~~ 38.0456	~~122 05 55~~ 122.0986	
Central Marin Sanitation Agency	6	1	10	Secondary	~~37 56 54~~ 37.9483	~~122 27 23~~ 122.4564	
Contra Costa Co. Sanitary District No. 5	7	1	~~0.025~~ 0.033	Secondary	~~38 02 55~~ 38.0486	~~122 10 56~~ 122.1822	
Delta Diablo ~~Sanitary District~~	8	1	16.5	Secondary	~~38 01 40~~ 38.0278	~~121 50 14~~ 121.8372	
Dublin San Ramon Services District	9	1	17	Secondary			Discharges to EBDA outfall
East Bay Dischargers Authority (EBDA)[d]	9	1	~~77.1~~ 79.1	Secondary	~~37 41 40~~ 37.6944	~~122 17 42~~ 122.2950	~~Common outfall for EBDA and LAVWMA~~
• City of Hayward			18.5	Secondary			EBDA member ~~(16.5 mgd)~~
• Oro Loma Sanitary District			20	Secondary			EBDA member ~~(20 mgd)~~
• City of San Leandro			7.6	Secondary			EBDA member ~~(7.6 mgd)~~
• Union Sanitary District			33	Secondary			EBDA member ~~(33 mgd)~~
East Bay Municipal Utility District	10	1	120	Secondary	~~37 49 02~~ 37.81722	~~122 20 55~~ 122.3486	

POTW ~~Facility~~ Discharger Name	POTW Outfall Location[a]	Number of Outfalls	Flow[b] (MGD)	Treatment Level[c]	Discharge Point Latitude	Discharge Point Longitude	Comment
Fairfield Suisun Sewer District	11	4	~~17.5~~ 23.7	Advanced Secondary	~~38 12 33~~ 38.2092 38.2144 38.2097 38.2333	~~122 03 24~~ 122.0567 122.0656 122.0581 122.0589	~~With dry weather reclamation~~ seasonal discharge restrictions apply
Las Gallinas Valley Sanitary District	12	2	2.92	Secondary	~~38 01 32~~ 38.0253 38.0269	~~122 30 58~~ 122.5169 122.5133	seasonal discharge restrictions apply
~~Livermore-Amador Valley Waste Management Agency (LAVWMA)~~	~~9~~		~~20~~	~~Secondary~~	~~37 41 40~~	~~122 17 42~~	~~Discharge to EBDA outfall~~
~~• Dublin/San Ramon Sanitary District~~			~~17~~	~~Secondary~~			~~LAVWMA member (11.5 mgd)~~
City of Livermore	9	1	8.5	Secondary			~~LAVWMA member (5.25 mgd)~~ Discharges to EBDA outfall
Marin County Sanitary District No. 5 (Tiburon Wastewater Treatment Plant)	13	1	0.98	Secondary	~~37 52 12~~ 37.8700	~~112 27 05~~ 122.4514	Shares outfall with the Sewerage Agency of Southern Marin
Marin County Sanitary District No. 5 (Paradise Cove Wastewater Treatment Plant)	Not shown on Figure 4-1	1	0.04	Secondary	37.8972	122.4611	
City of Millbrae	3	1	3.0	Secondary	~~37 39 55~~ 37.6653	~~122 21 41~~ 122.3614	Discharges ~~thru~~ through North Bayside System Unit outfall
Mt.~~ountain~~ View Sanitary District	14	1	~~2.4~~ 3.2	Advanced Secondary	~~38 01 12~~ 38.0211	~~122 05 47~~ 122.1036	
Napa ~~Sanitary~~ Sanitation District	15	1	15.4	~~Advanced~~ Secondary (filtration for reclamation)	~~38 14 09~~ 38.2358	~~122 17 10~~ 122.2861	~~With dry weather reclamation~~ seasonal discharge restrictions apply
North San Mateo County Sanitation District	16	1	8.0	Secondary	~~37 42 48~~ 37.7133	~~122 30 50~~ 122.5139	
Novato Sanitary District	17	1	~~6.55~~ 7.05	Secondary	~~39 04 00~~ 38.0600	~~122 29 00~~ 122.4900	seasonal discharge restrictions apply

POTW ~~Facility~~ Discharger Name	POTW Outfall Location[a]	Number of Outfalls	Flow[b] (MGD)	Treatment Level[c]	Discharge Point Latitude	Discharge Point Longitude	Comment
City of Pacifica	18	1	~~3.3~~ 4	Advanced Secondary	~~37 36 53~~ 37.6147	~~122 29 16~~ 122.4878	
City of Palo Alto	19	2	39	Advanced Secondary	~~37 27 11~~ 37.4583 37.4417	~~122 06 36~~ 122.1103 122.1125	
City of Petaluma	20	1	~~5.2~~ 6.7	Secondary	~~38 12 33~~ 38.2092	~~122 34 22~~ 122.5728	~~With dry weather reclamation~~ seasonal discharge restrictions apply
~~Cities~~ City of Pinole ~~& Hercules~~	21	1	~~4.06~~ 3.52	Secondary	~~38 03 06~~ 38.0517	~~122 15 55~~ 122.2700	Share outfall w~~/~~ith Rodeo Sanitary District
Rodeo Sanitary District	21	1	1.14	Secondary	~~38 03 06~~ 38.0517	~~122 15 55~~ 122.2700	Shares outfall w~~/~~ith City of Pinole~~/Hercules~~
City & County of San Francisco, Southeast	22	4	~~85.4~~ 84.5	Secondary	~~37 44 58~~ 37.7494 37.7472 37.8069 37.8100	~~122 22 22~~ 122.3728 122.3869 122.4031 122.4056	
City & County of San Francisco, Oceanside	23	1	43	Secondary	~~37 42 18~~ 37.7050	~~122 34 39~~ 122.5775	
City & County of San Francisco, International Airport	3	1	2.2	Secondary	~~37 39 55~~ 37.6653	~~122 21 41~~ 122.3614	Discharges through North Bayside System Unit outfall
San Jose/Santa Clara Water Pollution Control Plant	24	1	167	Advanced Secondary	~~37 26 06~~ 37.4398	~~121 57 08~~ 121.9581	
City of San Mateo and City of Foster City Estero Municipal Improvement District	25	1	~~13.6~~ 15.7	Advanced Secondary	~~37 34 50~~ 37.5806	~~122 14 45~~ 122.2458	
Sausalito-Marin City Sanitary District	26	1	1.8	Secondary	~~37 50 37~~ 37.8433	~~122 28 03~~ 122.4761	
Sewer Authority Mid-Coastside	27	1	4.0	Secondary	~~37 28 23~~ 37.4731	~~122 27 00~~ 122.4500	
Sewerage Agency of Southern Marin	13	1	3.6	Secondary	~~37 52 12~~ 37.8700	~~121 27 05~~ 121.4514	Shares outfall with Marin County Sanitary District No. 5 (Tiburon Wastewater Treatment Plant)

POTW ~~Facility~~ Discharger Name	POTW Outfall Location[a]	Number of Outfalls	Flow[b] (MGD)	Treatment Level[c]	Discharge Point Latitude	Discharge Point Longitude	Comment
~~South Bayside System Authority~~ Silicon Valley Clean Water	29	1	29	Advanced Secondary	~~37 33 48~~ ~~37.5611~~	~~122 12 55~~ ~~122.2172~~	
Sonoma Valley County Sanitary District	28	5	3.0	Secondary	~~38 14 14~~ 38.2372 38.2183 38.2189 38.2036 38.2052	~~122 25 51~~ 122.4319 122.3833 122.3904 122.3314 122.3320	~~With dry weather reclamation~~ seasonal discharge restrictions apply
Cities of South San Francisco~~/~~ and San Bruno ~~Water Quality Control Plant~~	3	1	13	Secondary	~~37 39 55~~ 37.6653	~~122 21 41~~ 122.3614	Discharges through North Bayside System Unit outfall
City of St. Helena	30	1	0.5	Secondary	~~38 30 10~~ 38.5028	~~122 26 15~~ 122.4375	~~With dry weather reclamation~~ seasonal discharge restrictions apply
City of Sunnyvale	31	1	29.5	Advanced Secondary	~~37 26 00~~ 37.4203	~~122 02 00~~ 122.0167	
~~U.S. Navy~~ Treasure Island	32	1	2.0	Secondary	~~37 49 50~~ 37.8306	~~122 21 25~~ 122.3569	As part of base closure will be transferred to City & Co. of S.F.
Vallejo Sanitation & Flood Control District	33	2	15.5	Secondary	~~38 03 53~~ 38.0897 38.0647	~~122 13 42~~ 122.2533 122.2283	~~W/dry weather reclamation~~
West County Agency (WCA)	34	1	28.5	Secondary	~~37 54 47~~ 37.9631	~~122 25 06~~ 122.4183	WCA common outfall
• City of Richmond			16	Secondary			WCA member ~~(16 mgd)~~
• West County Wastewater District			12.5	Secondary			WCA member ~~(12.5 mgd)~~
Town of Yountville	35	1	0.55	Secondary	~~38 24 30~~ 38.4061	~~122 20 25~~ 122.4922	~~With dry weather reclamation~~ seasonal discharge restrictions apply

NOTES:

a. Figure 4-1 shows corresponding outfall locations. For facilities with multiple discharge points, the main outfall is listed first.
b. Dry weather average design flow as identified in ~~current~~ permits. MGD = million gallons per day.
c. This column indicates the level of treatment. Advanced secondary treatment includes, at a minimum, filtration.
d. The combined dry weather average design flow discharged from the EBDA outfall is 107.8 MGD. This flow is a combination of flows from EBDA member agencies and flows from the Livermore Amador Valley Water Management Agency pipeline, which carries flows from the City of Livermore and the Dublin/San Ramon Services District.