Appendix B
Comment Letters

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July 1, 2013

BY US MAIL AND EMAIL
Mr. Derek Whitworth
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street
Oakland, CA 94612
Derek.Whitworth@waterboards.ca.gov

RE: National Pollutant Discharge Elimination System Permit for the City and County of San Francisco Southeast Water Pollution Control Plant (CA 0037664)

Dear Mr. Whitworth:

The City and County of San Francisco's Public Utilities Commission (San Francisco) thanks you for the opportunity to comment on the Tentative Order reissuing of the National Pollutant Discharge Elimination System (NPDES) permit for the Southeast Water Pollution Control Plant (SEP), the North Point Wet Weather Facility, and the Bayside Wet Weather Facilities. We greatly appreciate the substantial time and thought that staff dedicated to understanding our system, and believe that the resulting permit is significantly improved over previous ones in many respects. Despite these improvements, though, there remain several outstanding issues, each of which is discussed in the attached document. One of these issues, the Receiving Water Limitation's failure to distinguish between dry and wet weather discharges, is of particular concern to San Francisco and is discussed in more detail below.

San Francisco's combined system provides tremendous protection to San Francisco Bay.

The current configuration of San Francisco's combined sewer system is the result of a nearly $2 billion investment in capital improvements which was completed in the mid-1990s. These improvements, which were undertaken in close coordination with this Regional Water Board and the US Environmental Protection Agency (USEPA), created almost 200 million gallons (MG) of wet weather storage in the form of large transport/storage (T/S) structures that surround San Francisco. Construction of these T/S structures dramatically reduced both the volume and frequency of combined flows discharged during storms. For example, North Shore discharges decreased from 44 events per year to 4, and Central Bayside discharges decreased from 46 events per year to 10. The T/S structures also improved the quality of the remaining combined sewer discharges (CSDs) because they remove solids and floating debris. These

improvements made San Francisco one of the first cities in the country to come into compliance with USEPA's 1994 Combined Sewer Overflow Control Policy.

Like all well-designed and operated combined sewer systems, San Francisco's system provides substantial water quality protection as compared to separate systems because it treats stormwater runoff. For example, in a typical year, San Francisco's Bayside system treats approximately 7 billion gallons of stormwater (in addition to 20 billion gallons of sanitary waste). On an annual basis, 95 percent of these flows receive secondary treatment and disinfection, and 85 percent of the stormwater captured receives at least primary treatment and disinfection. Any remaining flows are discharged through CSD outfalls after receiving the equivalent of wet weather primary treatment in the T/S structures. As we reported to the Regional Water Board in a June 29, 2012 report, the combined system prevents millions of pounds of solids from reaching the Bay and Ocean every year (even accounting for the small volume of sanitary waste discharged in CSDs). In contrast, the stormwater in separate storm sewer systems flows almost entirely untreated into the Bay and Ocean.

The combined system also provides water quality protection in dry weather. In the event that an emergency, such as the Loma Prieta earthquake, affects operations at SEP, the system is capable of storing up to three days of dry weather flow. All dry weather flows that enter street drains – including accidental spills, illegal discharges, and dry weather flows from activities such as irrigation and car washing – never reach receiving waters, but are conveyed to and treated at SEP. This past year, we provided the Regional Water Board and USEPA with reports illustrating how the combined sewer system captures and treats discharges of wastewater that, in a separate system, would reach receiving waters. These "excursions," which primarily result from homeowners' inadequate maintenance of private sewer laterals, receive the same level of treatment as all dry weather sanitary flows because the system is combined.

San Francisco is committed to improving wet weather performance through the implementation of Green Infrastructure.

Opportunities for creating large volumes of underground wet weather storage in the country's second most densely urbanized city were realized as part of San Francisco's last large capital program, which included construction of the T/S structures. San Francisco is now looking towards growing its green infrastructure programs for future improvements in stormwater management. These programs include requirements that new developments meet stringent post-construction runoff performance standards, a community challenge grant program to encourage residents to reduce pervious surface area and harvest rainwater, and a program that has provided more than $500,000 to public schools for similar activities. In addition to these programs, San Francisco is engaged in a comprehensive watershed assessment process to identify opportunities to

achieve greater wet weather controls using green infrastructure. Finally, we are poised to complete construction of eight large green infrastructure projects over the next few years at a total estimated construction cost of $58 million.

These green infrastructure programs and projects are central features of the process for developing capital infrastructure and other management strategies, the Sewer System Improvement Program. Under this multi-billion dollar program, projects and policies will be developed to repair and replace aging infrastructure and to use innovative, sustainable, multiple benefit alternatives to maintain and enhance the operations and management of San Francisco's system. This program will not only address aging treatment and pumping facilities, but also will include collection system improvements designed to both minimize the risk of physical damage and enhance the livability of neighborhoods.

The Receiving Water Limitation language is inappropriately applied to wet weather discharges.

Our gravest concern with the Tentative Order is that it unnecessarily and inappropriately exposes San Francisco to potential permit violations for its combined sewer discharges (CSDs). In 1979, the Regional Water Board issued an order finding that beneficial uses would be protected if San Francisco designed, built and operated a system that reduced the frequency of combined sewer discharges by maximizing the new system's storage and treatment capacity, and equipped all overflow points with baffles or equivalent means to reduce floatables. The Regional Water Board's findings were based on an evaluation of the location and intensity of existing beneficial uses in the proximity of the discharges, the costs of constructing facilities to achieve different specific overflow frequencies, and the water quality benefits derived from construction of those facilities. San Francisco built that system, as agreed.

Since 1979, pursuant to the 1979 Order, San Francisco's discharge permits have required that the system's storage and treatment capacity be fully utilized before CSDs are allowed to occur and that all CSDs occur from structures that have baffles. These and related requirements are the water quality based effluent limitations with which San Francisco must comply during wet weather, consistent with the CSO Control Policy. This approach was also codified in Section 4.9.1 of the current San Francisco Bay Basin Plan, which recognizes that numeric limits are not readily established due to the ulpnpredictability of storm events, that compliance will be expressed in the form of a narrative limitation, and that wet weather overflows from San Francisco will be controlled using "guidance for the design of overflow discharge structures."

Section V.C. of the Tentative Order, however, broadly prohibits all discharges that cause a violation of any water quality standard for receiving waters, without

distinguishing between dry and wet weather discharges. This sweeping prohibition is unnecessary and inconsistent with the CSO Control Policy and the Basin Plan as described above. The cornerstone of federal NPDES regulations is that NPDES permits must contain conditions and requirements sufficient to ensure compliance with all applicable water quality standards. Water quality standards consist of designated beneficial uses, numeric or narrative criteria that protect those uses, and requirements to prevent anti-degradation. The Regional Water Board's previous findings and the current Basin Plan's language make it clear that San Francisco's system is protecting beneficial uses if operated to maximize storage and treatment. The requirements to maximize storage and treatment included in the current permit and this Tentative Order are, therefore, water quality based effluent limitations sufficient to protect beneficial uses.

The permit's proposed prohibition could be interpreted to prohibit any exceedance of any numeric water quality criteria, regardless of the duration or spatial extent of the exceedance. Compliance with such a requirement is impossible for San Francisco (and, indeed any combined sewer system) because of the variable characteristics of stormwater flows and the impossibility of constructing sufficient storage or treatment capacity to manage all storms of all sizes. Studies conducted by San Francisco and routine, year-round beach monitoring, demonstrate that CSDs have little impact on water quality and recreational use. Regardless of the actual impacts, however, the broad nature of this prohibition could be the basis of allegations that San Francisco is in violation of the Clean Water Act whenever a CSD occurs. Accordingly, the prohibition should be removed, or modified as suggested in the attached comments.

Thank you for consideration of these comments. We are proud of the environmental protection our combined sewer system provides, and hope these comments contribute to an efficient and effective permit. Please do not hesitate to contact Laura Pagano at lpagano@sfwater.org or (415) 554-3109 if you have any questions or require additional information.

Sincerely,

for Tommy T. Moala
Assistant General Manager
Wastewater Enterprise

San Francisco Public Utilities Commission Comments Regarding Tentative Order for Renewal of the NPDES Permit for the Southeast Water Pollution Control Plant, North Point Wet Weather Facility, Bayside Wet Weather Facilities, and Wastewater Collection System

The San Francisco Public Utilities Commission (San Francisco) appreciates the opportunity to submit the following comments on the Tentative Order reissuing the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of treated wastewater to San Francisco Bay. San Francisco would like to commend your staff for their diligence and care in preparing this document – they did outstanding work.

In order to assist Regional Water Board staff in locating the sections of the Tentative Order being commented on, the page numbers are provided prior to the comment and requested permit language change. Due to variations in formatting, page numbers listed are approximate. The sequence of issues raised in this Comment Letter follows the organization of the Tentative Order and does not reflect an order of importance.

1. **The specific and limited *new* language regarding enforcement with the previous permit should be removed.**

New language in this tentative order stipulates that if a stay is obtained for certain conditions in the permit (and the stay would be granted by the State Water Board), the permittee must still comply with the analogous portions of the previous permit. This language has never before been placed in Region 2 permits for municipal wastewater treatment plants, and the justification for inserting it now into this permit is unclear. The provision does not take into account that there could be changed conditions that could render compliance infeasible, regardless of when the requirement was promulgated. The new permit and the previous permit are also likely to be different, especially given the new format used in this permit, such that matching up analogous language between the two may be difficult, subject to different interpretations, or simply not possible. Furthermore, this requirement is being mandated under State initiative only as there is no similar federal requirement. Requirements that implement State law only must conform to California Water Code Section 13241 which, among other things, requires an analysis of economic considerations which has not been done for this provision. Accordingly, San Francisco requests that the problematic language be deleted as shown below.

Proposed change (Page 6):

> **THEREFORE, IT IS HEREBY ORDERED** that Order R2-2008-0007 (previous order) is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions of Water Code division 7 (commencing with § 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for past violations of the previous order. ~~If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified, the Discharger shall comply with the analogous portions of the previous order, which shall remain in effect for all purposes during the pendency of the stay.~~

2. It appears there was an oversight in that silver is shown as having effluent limits in Table 4.

As indicated by the reasonable potential analysis included in the Fact Sheet Table F-9 (page F-26), silver does not have reasonable potential to cause or contribute to the exceedance of a water quality objective. Thus, the water quality-based effluent limitation (WQBEL) for silver should be removed from Table 4, as shown below.

Proposed change (Page 7, Table 4):

Table 4. Effluent Limitations—Dry Weather

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand, 5-day @ 20°C (BOD_5)	mg/L	30	45	---	---	---
Total Suspended Solids (TSS)	mg/L	30	45	---	---	---
Oil and Grease	mg/L	10	---	20	---	---
pH [1]	s.u.	---	---	---	6.0	9.0
Total Residual Chlorine	mg/L	---	---	---	---	0.0 [2]
Copper, Total Recoverable	µg/L	53	---	76	---	---
~~Silver, Total Recoverable~~	~~µg/L~~	~~7.3~~	~~—~~	~~22~~	~~—~~	~~—~~
Cyanide, Total	µg/L	20	---	43	---	---
Dioxin-TEQ	µg/L	1.4×10^{-8}	---	2.8×10^{-8}	---	---
1,2-Diphenylhydrazine	µg/L	5.4	---	11	---	---
Total Ammonia, as N	mg/L	190	---	290	---	---

3. The continuous chlorine residual monitoring provision should specify use of reliable data

Footnote 2 to Table 4 (pages 7 - 8), and the identically worded footnote 1 to Table 5 (page 9 - 10), describe monitoring for chlorine residual. Although it is advantageous to use continuous chlorine monitoring as a protective measure for preventing chlorine from entering the receiving water, continuous on-line monitoring is not always reliable for official use. For example, from time to time a wet chemistry analysis, which is more reliable, does not match the continuous chlorine analyzer, so the result from the wet chemistry sample is used instead. For these reasons, San Francisco requests that the word "reliable" be added to the permit as indicated below.

Proposed change (Page 8, Table 4):

[2] Effluent residual chlorine concentrations shall be monitored continuously or, at a minimum, every hour. The Discharger shall report for each day the maximum residual chlorine concentration observed following dechlorination using all values measured during that day. However, if monitoring continuously, for the purpose of mandatory minimum penalties required by Water Code section 13385(i), compliance shall be based only on discrete readings from the continuous monitoring every hour on the hour. The Discharger shall retain continuous monitoring readings for at least three years. The Regional Water Board reserves the right to use all reliable continuous monitoring data for discretionary enforcement.

The Discharger may elect to use a continuous on-line monitoring system for measuring or determining that residual dechlorinating agent is present. This monitoring system may be used to prove that anomalous residual chlorine exceedances measured by on-line chlorine analyzers are false positives and are not violations of this total residual chlorine limit because it is chemically improbable to have chlorine present in the presence of sodium bisulfite.

Proposed change (Page 10, Table 5):

[1] Effluent residual chlorine concentrations shall be monitored continuously or, at a minimum, every hour. The Discharger shall report for each day the maximum residual chlorine concentration observed following dechlorination using all values measured during that day. However, if monitoring continuously, for the purpose of mandatory minimum penalties required by Water Code section 13385(i), compliance shall be based only on discrete readings from the continuous monitoring every hour on the hour. The Discharger shall retain continuous monitoring readings for at least three years. The Regional Water Board reserves the right to use all reliable continuous monitoring data for discretionary enforcement.

The Discharger may elect to use a continuous on-line monitoring system for measuring or determining that residual dechlorinating agent is present. This monitoring system may be used to prove that anomalous residual chlorine exceedances measured by on-line chlorine analyzers are false positives and are not violations of this total residual chlorine limit because it is chemically improbable to have chlorine present in the presence of sodium bisulfite

4. Language in the Receiving Water Limitations should be changed to clarify that the dry weather discharge will not alter certain conditions *outside the zone of dilution.*

Within the zone of dilution, it would be unusual if the effluent and receiving water had the same temperature, turbidity, and apparent color, so some alteration is expected to occur, albeit in a very small area. The requested change is shown below.

Proposed change (Page 10):

3. Alteration of temperature, turbidity, or apparent color beyond present natural background levels outside the zone of dilution at Discharge Point 001;

5. The Receiving Water Limitations language should be modified to provide consistency between those provisions and the specific water quality based limitations in the draft permit.

Receiving Water Limitations section C should be clarified as shown below. San Francisco requests that this additional language be included to remove confusion and contradictory language regarding which water quality standards could provide a basis for permit violation in wet weather. Additional discussion of these requested changes is provided below the followed excerpted permit text.

Proposed change (Page 11):

C. The discharge shall not cause a violation of any applicable water quality standard for receiving water adopted by the Regional Water Board or the State Water Board as required by the CWA and regulations adopted thereunder. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board may revise or modify this Order in accordance with the more stringent standards.

Applicable standards during dry weather are those for which this order establishes effluent limitations following the procedures in the State

> Implementation Policy and identified in Section IV.A. A violation is established by the exceedance of a water quality-based effluent limitation established in this order.
>
> During wet weather, applicable standards consist of implementation of San Francisco's long-term control plan (LTCP) as described in Sections 4.9.1 of the Basin Plan and identified in Order Section VI.C.5. A violation is established by not fully implementing the LTCP.

This proposal is consistent with language used by USEPA in the permit recently issued for the combined sewer system of Washington D.C.:

> Water Quality Standards Compliance
>
> Consistent with the Clean Water Act, Section 301(b)(I)(C), the permittee may not discharge in excess of any limitation necessary to meet applicable water quality standards including those of the District of Columbia set forth in Chapter 21 of the District of Columbia Municipal Regulations, Chapter 11 (2006).
>
> The limitations and conditions in this permit for the discharges from Blue Plains and the CSS are limitations that are necessary to meet the applicable water quality standards, including those of the District of Columbia referenced above.
>
> [*From USEPA NPDES permit for Washington DC – Blue Plains (2010), PART II. Standard Conditions for NPDES Permits, Section A. General Conditions. 2.*]

Reasons for the requested clarification or modification are as follows.

1. Proposed language purports to regulate wet weather discharges without developing wet weather standards, contrary to the CSO policy

A fundamental problem with the proposed permit requirement is that this "catch-all" language could be interpreted as requiring San Francisco's wet weather discharges to meet water quality standards designed for dry weather discharges. This expectation is not only unrealistic and infeasible, but also runs contrary to the Clean Water Act which explicitly anticipated devising wet weather standards for combined sewer systems wet weather discharges. "[D]evelopment of the long-term plan should be coordinated with the review and appropriate revision of water quality standards (WQS) and implementation procedures on CSO-impacted receiving waters to ensure that the long-term controls will be sufficient to meet water quality standards." (59 Fed. Rev. 18694 (1994)). EPA guidance on this issue recognizes that "[w]ater quality standards reviews are an important step in integrating the development and implementation of affordable, well-designed and operation CSO control programs with the requirements of the Clean Water Act (CWA)." EPA, Guidance: Coordinating CSO Long-Term Planning with Water Quality Standards Reviews (2001) at i. This EPA guidance specifically confirms that "[t]he CSO Control Policy anticipates the review and revision, as appropriate, of water quality standards and their implementation procedures when developing CSO control plans to reflect site-specific wet weather impacts of CSOs. Id. at 1.

San Francisco has repeatedly requested that this issue be addressed during the Basin Plan Triennial Review, but to date, no regulatory efforts have been made towards developing wet weather standards. It is fundamentally unworkable and contrary to the Clean Water Act to insert a permit provision which could potentially be used to hold San Francisco's wet weather discharges to water quality standards that do not appropriately account for those discharges' combined sewer characteristics.

2. The proposed violation of WQS provision is unacceptably vague without the clarification.

The proposed provision lacks key specifics to be appropriately implemented. For instance, it fails to specify the application point during wet weather (e.g., point of discharge, edge of mixing zone) and it does not address which water quality objectives apply (e.g., 1 hour; 4 day; 24-hr avg., etc.). It does not state whether the standard 10:1 dilution factor would be applied for discharges, or actual dilution, or whether a 303(d) listing in the receiving water would indicate that the standard is being exceeded. The proposed provision also fails to specify whether a numeric effluent concentration would be compared directly with a numeric water quality standard.

This imprecise provision could put San Francisco at constant risk of violation, even though the permit contains findings that compliance with the permit's specific water quality based effluent limitations will be consistent with the requirements of the federal Combined Sewer Overflow Control Policy (CSO Policy) and will protect applicable beneficial uses.

3. The proposed provision could be read to require compliance with all narrative and numeric water quality objectives, thereby supplanting the "reasonable potential" procedures in US EPA regulations and the State Implementation Policy.

The federal regulations at 40 CFR 122.44(d) require effluent limits in permits to ensure discharges do not cause, have a reasonable potential to cause, or contribute to the violation of a numeric or narrative water quality standard. For San Francisco's dry weather discharges, the reasonable potential procedures are defined in the *State Implementation Policy* (SIP).[1] This reasonable potential process is the standard procedure for developing effluent limits imposed in permits. Such limits cannot be imposed in the absence of a reasonable potential analysis, thus the proposed provision can refer only to those water quality based effluent limitations that are made applicable through the SIP process or similar process compliant with 40 CFR 122.44(d).

Furthermore, the effluent limitation procedures in the law and regulations provide flexibility to address pollutants using other than numeric limits. For example, section 402(a)(1) of the Clean Water Act, the regulations at 40 CFR 122.44(k) and the CSO Policy provide for best management practices to control or abate the discharge of pollutants when numeric limitations and standards are infeasible. A similar approach was used to require implementation of the LTCP in lieu of numeric effluent limits. The proposed provision C, without our suggested clarification, is inconsistent with the process for determining applicable effluent limitations required by law.

[1] The SIP does not apply to combined sewer overflows.

4. The proposed provision is inconsistent with the implementation of San Francisco's system under the CSO Policy.

During wet weather, discharges from combined sewer systems must comply with technology and water quality based effluent limitations, but the expression of those limitations is very different. The federal CSO Control Policy, codified in Clean Water Act section 402(q), mandates that the applicable technology-based effluent limitations (TBELs) for wet weather discharges from combined sewer systems are the Nine Minimum Controls and that the water quality-based effluent limits (WQBELs) shall be based on a long-term control plan (LTCP). The Policy further recognizes that compliance with numeric pollutant-specific criteria to protect beneficial uses [WQBELs] may be inappropriate for wet weather combined sewer discharges and, therefore, contemplates that they may be expressed as performance standards for CSO control based on average design conditions (59 Fed. Reg. 18696). Accordingly, the CSO Policy and implementing regulations "provide the State with the flexibility to adapt their [Water Quality Standards] and implementation procedures to reflect site-specific conditions including those related to CSOs," and allow the State to adopt site-specific criteria upon a determination that the criteria fully protects the applicable designated uses (59 Fed. Reg. 18694).

Although it has not developed site specific wet weather standards, the Regional Water Board and United States Environmental Protection Agency (USEPA) used this flexibility to create a different regulatory framework for San Francisco's wet weather discharges. In 1979, the Regional Water Board adopted R2-79-67, which states the Regional Water Board's intent to allow wet weather exceptions to numeric water quality objectives provided that beneficial uses are not adversely affected. The order found that beneficial uses would be protected if San Francisco designed, built and operated a system that reduced the frequency of CSOs to four in the North Shore, 10 in the Central Basin and one in the Southeast; ensured that the system's storage capacity is fully maximized prior to discharge; and equipped all overflow points with baffles or equivalent means to reduce floatables. The Regional Water Board's findings were based on an evaluation of the location and intensity of existing beneficial uses in the proximity of the discharges, the costs of constructing facilities to achieve different specific overflow frequencies, and the water quality benefits derived from construction of those facilities. The Regional Water Board's implementation requirements were, and continue to be, consistent with the CSO Control Policy's "demonstration approach." Furthermore, in 1994 after promulgation of the CSO Control Policy, the Regional Water Board and USEPA confirmed that the CSO controls put in place by San Francisco satisfied all the "presumption approach" requirements of the CSO Control Policy. Under either approach, the Regional Board and EPA have determined that San Francisco's performance is sufficient to meet water quality standards.

These requirements specifying design parameters and ongoing implementation of the LTCP constitute CWA-derived WQBELs intended to ensure protection of beneficial uses. Additionally, the protection of beneficial uses through the development and implementation of narrative requirements is codified in the current San Francisco Bay Basin Plan. Section 4.9.1 of the Basin Plan recognizes that numeric WQBELs are not readily established due to the unpredictability of storm events, that compliance will be expressed in the form of a narrative limitation, and that wet weather overflows from San Francisco will be controlled using "guidance for the design of overflow discharge structures."

Not only is the permit's proposed provision not consistent with the CWA and the Basin Plan, but it also is not necessary to protect beneficial uses. The current permit and the draft Order both require compliance with operational criteria necessary to maximize treatment and storage of the system, which ensures achievement of the long-term design criteria which, in turn, has been determined sufficient to protect beneficial uses. In the event that information becomes available that either (1) the system performance deviates significantly from the design performance or (2) the design performance is insufficient to protect beneficial uses, then San Francisco would have to undertake an update to its LTCP. No such evidence currently exists. The average CSD frequency since construction of San Francisco's system is at or below the design criteria and the CSDs that occur typically last a maximum of a few hours. As the draft order states, San Francisco is in compliance with its CWA-derived WQBELs and is protecting beneficial uses, and thus complies with all currently applicable water quality standards.

San Francisco's concern with the proposed provision is not hypothetical. Plaintiffs used similar language to challenge stormwater discharge compliance in the Ninth Circuit's recent decision in *NRDC v. County of Los Angeles*, 673 F.3d 880 (9th Cir. 2011). Notwithstanding the permit's reliance on compliance with a complex series of management practices to control stormwater pollutants, the Court required compliance with a similarly vague and inconsistent "catchall" receiving water quality limitations provision. The Court did not resolve the ambiguity or conflict between the two compliance obligations in that stormwater permit, and simply held that the permit means precisely what it said, leaving the Water Boards and interested parties to determine how best to draft future permit language. This decision and its application of that "catchall" provision created much controversy during consideration of the new statewide stormwater controls that remains unresolved, and consternation among stormwater agencies that do not believe compliance with this provision is possible.

5. <u>A more justified permit provision would be to clarify that wet weather operations are regulated through the LTCP referenced in Chapter 4 of the Basin Plan rather than being regulated by direct application of the Chapter 3 objectives</u>

   Finding No. 5 in Order 79-067 states:

   > That [1975] plan contains a prohibition against the discharge of untreated sewage, water quality objectives for San Francisco Bay and a recommended approach for regulating the discharge from wet weather diversion structures which recommends that exceptions to compliance be allowed provided the beneficial uses are not adversely affected.

   In Finding No. 6, Order 79-067, states:

   > It is clear that the intent of the [1975] Basin Plan is to allow exceptions and this Board will consider inclusion of a specific exception clause [for the combined sewer system] during the next Basin Plan updating.

The 1982 Basin Plan addresses San Francisco in detail in the Implementation Plan beginning on page 4-11:

> …This [San Francisco] Master Plan, as accepted by the Regional Board, does allow for some overflows of minimally treated wastewater during wet weather . . . . The Board applied the Wet Weather Overflow control strategy in accepting the Master Plan because the impairment of beneficial uses by such overflows was minimal compared with the exorbitant cost of total control of the overflows . . . . Board actions in the future regarding San Francisco will continue to emphasize this cost effective approach to water quality.

Section 4.9 of the current Basin Plan refers to the LTCP implementation:

> Such implementation [of the LTCP] 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 judgment. 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 clear intent of the Basin Plans through the years has been to apply "water quality-based performance standards" in lieu of the direct assessment or application of numeric water quality criteria. However, the proposed new general reference to violation of water quality standards appears to require compliance with not only the performance standards in Chapter 4, but also the specific numeric objectives in Chapter 3. This inconsistency can be addressed by including within the permit an explicit finding similar to those in prior permits.

6. <u>The proposed water quality standards provision is not feasible</u>

Bayside CSDs consist mainly of stormwater runoff, and consequently contain constituents typical of urban runoff. Copper, zinc, lead, bacteria, and some organic pollutants typically exceed standards at the point of discharge for stormwater and the same would occur for CSDs, or possibly less frequently for some pollutants since the CSD flows are more dilute. While San Francisco removes approximately 80% of the pollutant loading contained in stormwater, capturing all wet weather flows and, removing the remaining pollutants, and providing disinfection would not be feasible without exorbitant cost.

The CSO policy was developed in recognition of the infeasibility of wet weather discharges meeting dry weather water quality standards. "The Policy recognizes the site specific nature of CSOs and their impacts and provides the necessary flexibility to tailor controls to local situations." 59 Fed. Reg 18689 (1994).

For these reasons, we request that the Regional Board modify the Receiving Water Limitations provision C as requested above, pursuant to the directives of the CSO Policy.

6. Provisions and MRP language should clarify that the individual NPDES permit conditions govern if different from the standard Attachment G

There are overlapping concepts reflected in provisions of the main body of the permit and Attachment E, as well as in Attachment G (which is a standard document for all permits). Attachment G, moreover, was written with separate sanitary systems in mind, and as such it sometimes cannot be directly applied to San Francisco's combined system. San Francisco therefore requests that the permit language make clear that if there is a discrepancy between the Order and Attachment G provisions in this lengthy, 167-page permit that the Order language governs. If the Regional Water Board prefers to have this language in only one place, San Francisco prefers that it be in the first section below, the Standard Provisions.

Proposed change (Page 11):

VI. Provisions

A. Standard Provisions

1. The Discharger shall comply with all "Standard Provisions" in Attachment D.

2. The Discharger shall comply with all applicable provisions of the "Regional Standard Provisions, and Monitoring and Reporting Requirements for NPDES Wastewater Discharge Permits" (Attachment G). Attachment G provisions I.J (Storm Water) and III.A.3.c (Storm Water Monitoring) does not apply. Where provisions or reporting requirements specified in this Order, including Attachment E, are different from equivalent or related provisions or reporting requirements given in Attachment G, the specification of this Order shall apply.

B. Monitoring and Reporting

The Discharger shall comply with the MRP (Attachment E), and future revisions thereto, and applicable sampling and reporting requirements in Attachments D and G. Where provisions or reporting requirements specified in this Order, including Attachment E, are different from equivalent or related provisions or reporting requirements given in Attachment G, the specification of this Order shall apply.

Proposed change (Page E-17):

This MRP also modifies Attachment G as indicated below. Where provisions or reporting requirements specified in this Order, including Attachment E, are different from equivalent or related provisions or reporting requirements given in Attachment G, the specification of this Order shall apply.

7. For the effluent characterization, remedial measures should only be required for *new* situations where a concentration is above a water quality objective, and the cause of the exceedance is known.

Situations where a concentration has already been observed above a water quality objective (and therefore "reasonable potential" was triggered and an effluent limit applied) have already been controlled by the effluent limit in the permit. However, the language in the Tentative Order infers that remedial measures would be required if reasonable potential is triggered regardless of whether an effluent limit already exists. This is not an appropriate requirement because if feasible remedial measures would remove an effluent limit they would have already been conducted. Also, sometimes an effluent limit is triggered by a single isolated measurement of a particular chemical.

If chemical constituents for which an effluent limit does not currently exist are consistently detected at concentrations that would result in reasonable potential to cause or contribute to an exceedance of applicable water quality standards, the cause of these higher concentrations will be investigated and addressed to the extent feasible. However, establishing remedial measures is often not possible in these circumstances as the investigations can be inconclusive. For all of these reasons, San Francisco requests the language changes below. Additionally, San Francisco requests that "excursions" be replaced with "exceedance" to avoid potential confusion with collection system excursions.

Proposed change (Page 12):

> The Discharger shall evaluate on an annual basis if concentrations of any of these priority pollutants significantly and consistently increase over past performance. The Discharger shall investigate the cause of any such consistent increase. The investigation may include, but need not be limited to, an increase in monitoring frequency, monitoring of internal process streams, and monitoring of influent sources. The Discharger shall ~~establish remedial measures~~ address~~ing~~ any increase resulting in new reasonable potential to cause or contribute to an ~~excursion above~~exceedance of applicable water quality objectives during dry weather. This requirement may be satisfied through identification of the constituent as a "pollutant of concern" in the Discharger's Pollutant Minimization Program, described in Provision VI.C.3.

8. Language related to implementing the Pollutant Minimization Program should be revised.

While San Francisco endeavors to achieve continuous improvement in all its programs, codifying continuous improvement of the Pollutant Minimization Program in this permit is not appropriate. San Francisco already goes far beyond current requirements and has long been a leader in pollutant minimization. It has implemented numerous innovative pollution prevention programs including the nation's first mercury dental amalgam program; SF Greasecycle to keep fats, oils and grease out of the sewers and repurpose them as biofuels; many Low Impact Development (LID) initiatives; and public outreach regarding less toxic gardening practices. More information about these programs is available at www.sfwater.org/cleanbay. San Francisco is also a co-sponsor of State SB 727 which would require pharmaceutical

manufacturers to create and manage a stewardship program to help keep unused medications out of sewer systems.

Although improvements to the Pollutant Minimization Program should be made on an as-needed basis and as appropriate opportunities arise, continuous improvement should not be mandated without more specificity and justification of need. We request that the language be revised as shown below.

Proposed change (Page 13):

3. Pollutant Minimization Program

a. The Discharger shall continue to ~~improve~~ conduct its existing Pollutant Minimization Program to promote minimization of pollutant loadings to the treatment plant and therefore to the receiving waters.

9. San Francisco requests that the reporting requirements related to combined sewer system excursions be modified so as to be applicable San Francisco's unique combined sewer system.

The modifications shown below to the reporting requirements for excursions are requested to make technical corrections, tailor the reporting requirements appropriately for the function of agencies, and simplify the basis for the reporting requirement.

Proposed change (Pages 18 – 19):

ii. Combined Sewer System. For purposes of this Order, a combined sewer system "excursion" is a release or diversion of untreated or partially treated wastewater from the combined sewer system that exits the system temporarily and then re-enters it. Excursions are caused by blockages or flow conditions within the publicly owned portion of the combined sewer system, and can occur in public rights of way or on private property. Excursions do not include releases from privately owned sewer laterals, or authorized combined sewer discharges from Discharge Point Nos. 009 through 043.

(a) Excursion Database. By January 1, 2014, the Discharger shall develop and maintain a database containing information about excursion within the Southeast Plant service area. The Discharger may limit these data to excursions occurring within the City and County of San Francisco. The Discharger may, at its option, include information concerning releases from private sewer laterals. The database shall contain the following information for each excursion:

(1) Location, including latitude and longitude, street address (if available), zip code, cross street, and ~~manhole~~ asset number;

(2) Destination (if known), including whether the excursion was fully captured and returned to the combined sewer system and whether any

portion of it entered a drainage channel or surface water;

(3) Estimated volume, in gallons, including volume that reached a surface water or drainage channel, and volume recovered (all spills to drainage channels or surface waters are subject to MRP section IX.B, which modifies Attachment G section V.E.2);

(4) Date and time excursion was reported to the San Francisco Public Utilities Commission;

(5) Operator arrival date and time;

(6) End date and time of excursion, if known;

(7) Source (e.g., manhole, catch basin, vent trap);

(8) Cause (e.g., mainline blockage, roots, broken pipe)

(9) Corrective actions taken, including steps taken or planned to reduce, eliminate, and prevent reoccurrence;

(10) Parameters for which samples were analyzed and results (if applicable);

(11) Whether the County Health Officer was notified and health warnings were posted (if known);

(12) Whether a beach was affected and, if so, which one (if applicable);

(13) California Emergency Management Agency (CalEMA) control number, and date and time CalEMA was called (if applicable);

(14) Date and time County Health Officer was notified (if applicable).

If the Discharger chooses to include information regarding releases from private sewer laterals, it should also record responsible party contact information, if known.

(b) Routine Reporting. The Discharger shall report any excursion greater than 1,000 gallons, regardless of whether it enters a drainage channel or surface water, to the Regional Water Board and the San Francisco Department of Public Health. Routine reporting of excursions to the Regional Water Board shall be conducted through the Regional Water Board's spill hotline (510 622-2369). Reporting to the San Francisco Department of Public Health shall be conducted in accordance with standard procedures developed by the San

Francisco Public Utilities Commission and the San Francisco Department of Public Health. ~~in accordance with MRP section IX.B, which modifies Attachment G section V.E.2. (All spills to drainage channels or surface waters are subject to MRP section IX.B.) The Discharger shall make this report as soon as (1) it has knowledge of the excursion, (2) reporting is possible, and (3) a report can be provided without impeding cleanup or other emergency measures.~~

(c) Annual Report. The Discharger shall submit a report no later than August 15 each year that compiles and summarizes information from the excursion database for the preceding 12 months ending June 30. Within the report, the Discharger shall review collection system performance, evaluate excursion trends in terms of time and location, summarize actions taken within the preceding year to minimize excursions, and identify specific tasks for the coming year to further minimize excursions.

(d) Record Keeping. The Discharger shall maintain documentation supporting the database records for at least three years following each excursion. The Executive Officer may extend this period if necessary. Documentation shall include, but need not be limited to, work orders and other maintenance records associated with responses and investigations. The Discharger shall make all excursion records available for review upon Regional Water Board staff request.

If the Discharger collects water quality samples for analysis, it shall maintain the following information:

- Date, exact place, and time of sampling or measurement;
- Individual who performed sampling or measurement;
- Date of analysis;
- Individual who performed analysis;
- Analytical technique or method used; and
- Analysis results.

Proposed change (Page F-42):

ii. Combined Sewer System. For purposes of this Order, an "excursion" is a release or diversion of untreated or partially treated wastewater from the combined sewer system that exits the system temporarily and then re-enters it. The Discharger and the USEPA developed a collection system excursion reporting requirement in this permit so that the information would be available. ~~The Nine Minimum Controls include conducting proper operations and maintenance programs, as required by Provision VI.C.5.b.i. Minimizing excursion is consistent with proper operations and maintenance of the combined sewer system. Water Code sections 13267 and 13383, 40 C.F.R. section 122.41(h), and the first and ninth of the Nine Minimum Controls authorize the Regional Water Board to require~~

~~information about excursions. Such information is necessary to evaluate the Discharger's operations and maintenance practices. It is also necessary to determine whether any excursion results in a discharge to surface water or drainage system, and whether any excursion could affect public health or result in a nuisance as defined in Water Code section 13050.~~

10. The Nine Minimum Controls language should reflect the fact that San Francisco has completed its Long-Term Control Plan (one of the few cities in the nation to do so).

USEPA guidance indicates that the CSO Control Policy should be implemented in phases, through requirements in NPDES permits. The first phase includes permit provisions requiring the system operator to immediately implement the Nine Minimum Controls (NMCs) and develop a long-term control plan (LTCP). The second permitting phase requires implementation of the LTCP, continued implementation of the NMCs, and a post-construction monitoring program to confirm that the system is performing as intended. San Francisco is one of the few cities in the country to have fully implemented the NMC and a LTCP.

Implementation of the LTCP was completed in 1997 when construction of the transport/storage structures was finished, with expenditures of nearly $2 billion. As described in this permit (page 26 of the Tentative Order) and in previously adopted permits, San Francisco's combined sewer system controls were designed based on long-term average annual frequencies for combined sewer discharges (CSDs). Based on the City's Master Plan and additional studies and codified in Regional Water Board Order No. 79-67, these CSD frequency goals for different sections of the Bayside system were established in relation to the beneficial uses of the receiving waters. When establishing these design goals, San Francisco and the Regional Water Board considered the pollutant removal, water quality benefits, and costs of different levels of overflow control, and determined that achieving the design goals and implementing specific operational requirements would protect beneficial uses.

Because the LTCP is complete, the permit language shown below should be modified to clarify that achievement of the design goals for the combined sewer discharges has been deemed sufficient to protect beneficial uses.

Proposed change (Page 20):

> **(b) Inspect and Maintain Combined Sewer System.** The Discharger shall properly operate and maintain the collection system and the combined sewer discharge outfalls. ~~to reduce the magnitude, frequency, and duration of combined sewer discharges.~~

Proposed change (Page 21):

> **ii. Maximize Use of Collection System for Storage.** The Discharger shall continue to maximize the use of the collection system (i.e., collection system piping, not only the storage/transports) for in-line storage. ~~to reduce the magnitude, frequency, and duration of combined sewer discharges.~~

11. The Nine Minimum Controls language regarding dry weather overflows should be clarified.

Dry weather overflows are prohibited under the fifth of the Nine Minimum Controls, however, use of the phrase "prohibited combined sewer overflows" in isolation could be unclear, so it would be helpful to San Francisco if the language were more specific, as proposed below. In addition, only dry weather discharges from the combined sewer discharge points should be inspected because if a discharge happens during wet weather it is a combined sewer discharge and therefore taking place under design conditions. We request that the language be revised as shown below.

Proposed change (Page 20):

> **v. Prohibit Dry Weather Combined Sewer Overflows.** Dry weather combined sewer overflows from Discharge Point Nos. 002 through 043 are prohibited. The Discharger shall respond to ~~prohibit~~ such dry weather combined sewer overflows in accordance with MRP section IX.B, which modifies Attachment G section V.E.2. During any dry weather combined sewer overflow, the Discharger shall inspect the overflow point each day until the overflow stops. The Discharger shall document in the inspection log each event, its duration, its cause, and the corrective measures taken.

12. The permit language should acknowledge that street sweeping and catch basin cleaning are already part of San Francisco's Pollution Prevention Program.

Street sweeping and catch basin cleaning are currently conducted in San Francisco; it would not be a new program. Therefore, San Francisco requests the changes shown below.

Proposed change (Page 22):

> **vii. Develop and Implement Pollution Prevention Program.** The Discharger shall continue to implement a Pollution Prevention Program focused on reducing the impact of combined sewer discharges and overflows on receiving waters. It shall develop and implement this program in accordance with Provision VI.C.3.
>
> The Discharger shall also continue to implement its street sweeping program and clean ~~out~~ catch basins at a frequency sufficient to prevent large accumulations of pollutants and debris.

13. San Francisco requests that the permit language be clarified to limit posting of warning signs to those beaches where recreational use has the potential to be affected by combined sewer discharges.

The language currently in the Tentative Order could be interpreted as requiring the posting of warning signs when CSDs occur regardless of the potential to affect recreational beaches. The requested language below clarifies that warning signs will be posted at recreational beaches when CSDs *that occur nearby* could affect those beaches. This requested language is consistent

with the current permit. As discussed further at Comment #20, no CSD locations affect Aquatic Park or Crissy Field.

Proposed change (Page 21):

> **viii. Notify Public of Combined Sewer Discharges.** The Discharger shall continue to implement a public notification plan to inform citizens of when and where combined sewer discharges occur. The plan shall include the following:
>
> **(a)** A mechanism to alert persons using recreational beaches ~~receiving waters~~ affected by combined sewer discharges ~~for recreation~~.
>
> **(b)** A system to determine the nature and duration of conditions resulting from combined sewer discharges potentially harmful to receiving water users.
>
> Warning signs shall be posted at beach locations where water contact recreation occurs whenever a combined sewer discharge occurs that might affect those locations. Warning signs shall be posted on the same day as the combined sewer discharge event unless the combined sewer discharge occurs after 4:00 p.m., in which case, signs shall be posted by 8:00 a.m. the next day. The Discharger shall maintain records documenting public notification.

14. The requirement to monitor each CSD location for priority pollutants at least once per year is inconsistent with past data collection efforts, and technically infeasible.

Currently the Tentative Order language requires that "The Discharger shall also monitor each combined sewer discharge location . . . at least once per year." San Francisco requests that this language be revised to indicate that at least one CSD sample be analyzed for priority pollutants once per year (total, not one for each CSD). First, due to the technical and safety challenges of obtaining CSD samples, is infeasible to count on getting a CSD sample from each outfall each year. CSDs generally occur for short time periods (less than three hours), often in the middle of the night, and some CSD locations are not safely accessible for collecting grab samples. San Francisco has used auto-samplers for CSD sampling but the auto-samplers have been subject to vandalism and mechanical difficulties. Additionally, samples taken via auto-sampler often cannot be preserved or refrigerated in accordance with standard sampling protocols. Second, not all outfalls experience a CSD each year, a circumstance which is made even more pronounced by the high variability in rainfall between different wet weather seasons.

Therefore, San Francisco respectfully requests that the language be revised as indicated below. We have also included requested revisions to indicate that the CSD monitoring should only be included in this provision of the permit and not the MRP, due to the previously-raised data quality concerns. Additionally, San Francisco requests that the combined sewer discharge points be referred to using the names and numbers as shown in Table 2 of the Tentative Order. Using a different "Monitoring Location" number for these locations creates the potential for confusion and error. Please also see Comment #19 regarding removing references to these CSD "Monitoring Locations" in the MRP.

Proposed change (Page 22):

> **~~(2) Combined Sewer Discharges.~~** ~~The Discharger shall collect effluent samples representing Discharge Point Nos. 009 through 043 at Monitoring Locations CSD-007 through CSD-012, as defined in the MRP~~. The Discharger shall collect samples at ~~a monitoring location~~ combined sewer discharge points 010, 029, and 031A when~~ever~~ a combined sewer discharge event of at least one hour in duration occurs at that location (and may also collect samples representing shorter events). The Discharger may also collect samples at combined sewer discharge points 025, 041, and 043 to maintain consistency with previous sampling efforts. ~~In addition to the monitoring required in MRP Table E-5, t~~The Discharger shall monitor each sample for the following:
>
> - total suspended solids ~~sediment~~
> - settleable matter
> - pH
> - metals (arsenic, cadmium, copper, lead, nickel, selenium, silver, and zinc)
> - cyanide
> - ammonia (total)
>
> At least once per year, the Discharger shall also monitor ~~each~~ at least one combined sewer discharge location for the remaining priority pollutants listed in Attachment G, Table C, ~~at least once per year~~ as feasible.

15. Dry weather shoreline monitoring requirements should be deleted from the ninth of the Nine Minimum Controls.

There is no authority for the permit to require dry weather shoreline monitoring, as this type of monitoring is not associated with any discharge and State law AB1876 does not apply. Additionally, sufficient data already exists for the purpose of characterizing ambient conditions. Shoreline monitoring in the MRP is only required in association with combined sewer discharges. Because there is no jurisdictional basis for requiring dry weather shoreline monitoring under this permit, we request that this requirement be removed. (See also related Comment #19)

Proposed change (Page 23):

> **(3) Shoreline Monitoring.** The Discharger shall collect shoreline receiving water grab samples ~~at Monitoring Locations S-202.4, S-202.5, S-210, S-211, S-300.1, S-301.1, and S-301.2,~~ as defined in the MRP. ~~In addition to the monitoring required in MRP Table E-6, the Discharger shall monitor enterococcus and fecal coliform at a frequency sufficient to characterize ambient conditions (e.g., weekly).~~

16. The acute toxicity monitoring requirement for wet weather effluent EFF-002 should be deleted because it has not shown toxicity.

Wet weather toxicity testing of effluent EFF-002 has shown no toxicity. In 80 tests performed over more than 10 years (2003-2013), using both three-spined sticklebacks and juvenile rainbow

trout, mean percent survival was 99.3% and the minimum survival was 90% (See Attachment A). We therefore request that the requirement for acute toxicity monitoring for EFF-002 be removed. The language change we propose is below in Comment 17.

17. Language should modified to be consistent with the Basin Plan's Conceptual Approach for determining consistency with the CSO Control Policy

Section 4.9.1 of the Basin Plan states:

> 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.)

To be consistent with Basin Plan language, San Francisco requests that language in the reporting requirements for the ninth of the Nine Minimum Controls be modified as shown below. Comparison of the system performance with respect to the CSD design goals is appropriate now that San Francisco's long-term control plan is complete.

Proposed change (Pages 22 - 23):

(b)Reporting Requirements

(1) Routine Reporting. The Discharger shall, within 60 days of receipt of analytical results, indicate in the transmittal letter for the appropriate self-monitoring report that a sample for this study was collected.

(2) Final Report. The Discharger shall report its findings by September 30, 2017. The report shall include the following:

- All ~~wet weather~~ combined sewer discharge monitoring data collected, including acute toxicity data from EFF-001B and EFF-003 (the Discharger shall include data that do not necessarily conform to the test procedures in 40 C.F.R. part 136 and explain these circumstances to provide context for data interpretation);

- All shoreline monitoring data collected as required in the MRP and any discharge-related beach closures;

- Updated water contact recreational use surveys, focusing particularly on recreational use following combined sewer discharge events;

- Evaluation of combined sewer discharge control efficacy (e.g., using TSS as a proxy for pollutant removal efficiency); and

- Evaluation of combined sewer discharge impacts (e.g., reviewing long-term CSD frequencies in comparison to design goals, determining whether there are adverse impacts to receiving waters, etc.~~comparing average and~~

~~maximum discharge and receiving water monitoring data with water quality objectives, translated as appropriate using available metals translators and water effects ratios~~).

18. San Francisco requests that the definition for wet weather be modified to more accurately represent the start of wet weather events at the Southeast Treatment Plant

The 2008 permit definition of an influent flow of 110 MGD at the Southeast Treatment Plant which was utilized in this TO is not a definitive indicator of wet weather operations in our current system and may be an artifact of earlier plant operating constraints. The operational difference between dry weather and wet weather occurs when discharge begins at EFF-002. Prior to discharge at EFF-002, all wastewater receives full secondary treatment at the plant. We therefore request the wet weather definition language be changed as indicated below:

Proposed change (Page A-5):

Wet Weather
Weather in which any one of the following conditions exists as a result of rain (determined on a day-by-day basis):

1. ~~Instantaneous influent flow to the Southeast Plant (at Monitoring Location INF-110 as defined in the Monitoring and Reporting Program) exceeds 110 MGD;~~ Discharge occurs at EFF-002 at the Southeast Plant;
2. Average influent biochemical oxygen demand (BOD5) or total suspended solids (TSS) concentration at the Southeast Plant is less than 100 mg/L; or
3. North Shore storage/transport wastewater elevation exceeds 100 inches.

19. CSD monitoring should continue to be addressed as part of the Nine Minimum Controls rather than as routine compliance monitoring. Shoreline monitoring required by this permit should be limited to shoreline monitoring in association with CSDs.

We request that the CSD monitoring locations be removed from Table E-1 and that Table E-5 be removed entirely because CSD monitoring is already addressed in the main permit section under the Nine Minimum Controls, and more specifically in the section "Monitor to Effectively Characterize Overflow Impacts and the Efficacy of CSO Controls" (Page 21). Additionally, due to the challenges of CSD sampling, this effort should be considered a study, not a compliance monitoring effort, which the placement in Attachment E suggests. As discussed in Comment 14, it is challenging for San Francisco personnel to sample CSDs because they generally occur for short time periods (less than three hours), often in the middle of the night, and some CSD locations are not safely accessible for sampling. San Francisco has used auto-samplers for CSD sampling but the auto-samplers have been subject to vandalism and mechanical difficulties. Additionally, samples taken via auto-sampler often cannot be preserved or refrigerated in accordance with standard sampling protocols. Having the language regarding CSD monitoring in the section on Nine Minimum Controls is also more straightforward and less confusing (with less risk of conflicting language).

We also request that the shoreline monitoring locations at Crissy Field and Aquatic Park, as shown in Table E-1, be deleted. These stations are sampled on a weekly basis year-round, but they are not sampled after a CSD. Requiring sampling at 009, 010, 011, 013 or 015 after a CSD is a new requirement and is unwarranted because there is no correlation between CSDs at these locations and exceedances of the applicable bacteriological standards contained in Cal. Code of Regs. tit. 17, section 7958(a)(1) (See Attachment B).

As the attachment shows, from 2008 through 2012 there have been no discharges from CSD 011 and only two from CSD 013 (both in 2012), the closest two discharge points to Aquatic Park. As shown in Attachment B for Aquatic Park, enterococcus and fecal coliform bacteria (as E. coli) values were not affected by the two discharges on 3/14/12 or 11/30/12. Neither indicator approached their respective single sample maximum values nor did the geometric mean values approach their respective thresholds unless they were already elevated from a non-CSD source. From 2008 through 2012 there have been CSDs from the two closest discharge sites to Crissy Field (CSD 09 and CSD 10) in 2010, 2011, and 2012. As shown in Attachment B for Crissy Field, enterococcus and fecal coliform bacteria (as E. coli) values were not affected by the discharges.

The lagoon adjacent to Station 202.4 (Crissy Field East) with storm drain input during wet weather is a source of bacteria at that station whereas the closest discharge point (CSD 009) is located 290 feet offshore. Bacteria TMDLs are currently in progress at both Aquatic Park and Crissy Field. As there are no CSD locations that affect Aquatic Park or Crissy Field this monitoring should not be a requirement within this permit.

Additionally, it is also important that the shoreline sampling locations at Candlestick Point SRA be modified, to clarify that sampling at these locations takes place in association with combined sewer discharges from nearby combined sewer discharge points.

Proposed change (Pages E-3 to E-4):

Table E-1. Monitoring Locations

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description [1]
Influent	INF-001	Any point at the Southeast Plant upstream of the primary sedimentation basins at which all waste tributary to the treatment system is present, and preceding any phase of treatment. *Latitude 37.744611 Longitude -122.392111*
Influent	INF-002	Any point at the North Point Facility upstream of the primary sedimentation basins at which all waste tributary to the treatment system is present, and preceding any phase of treatment. *Latitude 37.806333 Longitude -122.409389*
Effluent	EFF-001A	During dry weather, any point at the Southeast Plant between the point at which all wastes have gone through complete secondary treatment, including disinfection, and Discharge Point No. 001 (deep water outfall). *Latitude 37.743611 Longitude -122.390000*

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description [1]
Effluent	EFF-001B	During wet weather, any point at the Southeast Plant at which adequate disinfection is assured and Discharge Point No. 001 (deep water outfall) (may be the same as Monitoring Location EFF-001A). *Latitude 37.743611 Longitude -122.390000*
Effluent	EFF-002	During wet weather, any point at the Southeast Plant between the point at which all wastes have gone through complete secondary treatment, including disinfection, and Discharge Point No. 002 (Islais Creek outfall). *Latitude 37.746944 Longitude -122.388056*
Effluent	EFF-003	During wet weather, any point at the North Point Facility between Discharge Point Nos. 003 and 004 (Pier 33 outfalls) and 005 and 006 (Pier 35 outfalls) and the point at which all waste tributary to those outfalls is present and adequate disinfection is assured. *Latitude 37.806667 Longitude -122.407500*
~~Combined Sewer Discharge~~	~~CSD-007~~	~~During wet weather, any point between Discharge Point No. 029 (Mariposa Street outfall) and the point at which all waste tributary to the outfall is present.~~ ~~*Latitude 37.764722 Longitude -122.385278*~~
~~Combined Sewer Discharge~~	~~CSD-008~~	~~During wet weather, any point between Discharge Point No. 031A (North Islais North outfall) and the point at which all waste tributary to the outfall is present.~~ ~~*Latitude 37.747778 Longitude -122.387500*~~
~~Combined Sewer Discharge~~	~~CSD-009~~	~~During wet weather, any point between Discharge Point No. 043 (Sunnydale Avenue outfall) and the point at which all waste tributary to the outfall is present.~~ ~~*Latitude 37.747222 Longitude -122.386944*~~
~~Combined Sewer Discharge~~	~~CSD-010~~	~~During wet weather, any point between Discharge Point No. 010 (Pierce Street outfall) and the point at which all waste tributary to the outfall is present.~~ ~~*Latitude 37.806944 Longitude -122.440000*~~
~~Combined Sewer Discharge~~	~~CSD-011~~	~~During wet weather, any point between Discharge Point Nos. 041 or 042 (Yosemite Avenue or Fitch Street outfalls) and the point at which all waste tributary to the outfalls is present.~~ ~~*Latitude 37.723889 Longitude -122.381389* or *Latitude 37.722222 Longitude -122.381389*~~
~~Combined Sewer Discharge~~	~~CSD-012~~	~~During wet weather, any point between Discharge Point No. 025 (Sixth Street North outfall) and the point at which all waste tributary to the outfall is present.~~ ~~*Latitude 37.071944 Longitude -122.396111*~~
~~Shoreline~~	~~S-202.5~~	~~Crissy Field West~~ ~~*Latitude 37.811667 Longitude -122.490000*~~
~~Shoreline~~	~~S-202.4~~	~~Crissy Field (east of Lagoon)~~ ~~*Latitude 37.810278 Longitude -122.452778*~~
~~Shoreline~~	~~S-210.1~~	~~Aquatic Park (Hyde St. Pier)~~ ~~*Latitude 37.8150DW00 Longitude -122.425833*~~
~~Shoreline~~	~~S-211~~	~~Aquatic Park Beach East End~~ ~~*Latitude 37.814722 Longitude -122.424167*~~

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description [1]
Shoreline	S-300.1	After a combined sewer discharge begins at combined sewer discharge point 043, any safely accessible point on the shoreline of Candlestick Point SRA (Sunnydale Cove Beach) *Latitude 37.715833 Longitude -122.394167*
Shoreline	S-301.1	After a combined sewer discharge begins at combined sewer discharge point **~~040 042~~ 043**, any safely accessible point on the shoreline of Candlestick Point SRA (Windsurfer Circle) *Latitude 37.715278 Longitude -122.366607*
Shoreline	S-301.2	After a combined sewer discharge begins at combined sewer discharge point **~~043~~040-042**, any safely accessible point on the shoreline of Candlestick Point SRA (Jack Rabbit Beach) *Latitude 37.718611 Longitude -122.366667*
Biosolids	BIO-001	Biosolids (treated sludge)

Footnote:

[1] Latitude and longitude information is approximate for administrative purposes.

Proposed change (Page E-7):

~~2. Combined Sewer Discharge Outfalls.~~ ~~During wet weather, when combined sewer discharges are occurring, the Discharger shall monitor combined sewer discharges at Monitoring Locations CSD-007 through CSD-012 as follows.~~

~~Table E-5. Combined Sewer Discharge Monitoring~~

~~Parameter~~	~~Units~~	~~Sample Type~~	~~Minimum Sampling Frequency~~
~~Event Duration~~	~~minutes~~	~~—~~	~~1/Event~~
~~Flow Volume [1]~~	~~MG~~	~~Continuous~~	~~1/Event~~

~~Unit Abbreviations:~~

~~MG = million gallons~~

~~Sample Type:~~

~~Continuous = measured continuously~~

~~Sampling Frequency:~~

~~1/Event = once per combined sewer discharge event~~

~~Footnote:~~

~~[1] Flow volume may be estimated using models.~~

~~The Discharger shall also record and report in its self-monitoring reports the following information for each combined sewer discharge event at Monitoring Locations CSD-007 through CSD-012:~~

~~**a.** Date and time that combined sewer discharge started;~~

~~**b.** Rainfall intensity and amount (aggregated hourly data); and~~

~~**c.** Information supporting discharge volume estimate (if estimated).~~

Proposed change (Page E-12)

VI. RECEIVING WATER MONITORING REQUIREMENTS

B. Shoreline Monitoring. ~~Following any combined sewer discharge event at Discharge Point Nos. 009, 010, 011, 013, or 015, the Discharger shall monitor shoreline receiving waters at Monitoring Locations S-202.4, S-202.5, S-210, and S-211.~~ Following any combined sewer discharge event at Discharge Point Nos. 040, 041, or 042, ~~or 043,~~ the Discharger shall monitor at Monitoring Location~~s S-300.1, S-301.1, and~~ S-301.2. Following any combined sewer discharge event at Discharge Point No. 043, the Discharger shall monitor at Monitoring Locations S-300.1 and S-301.1. Monitoring shall be conducted at each location as follows for up to seven days or until the single-sample bacteriological standards of Cal. Code of Regs. tit. 17, section 7958(a)(1), are met at that location (i.e., the enterococcus density is less than 104 most probable number (MPN)/100 mL and the fecal coliform density is less than 400 MPN/100 mL). Samples shall be collected between 8:00 a.m. and 4:00 p.m.

20. San Francisco requests that the dry weather monitoring frequency for 1,2-Diphenylhydrazine remain twice per year and not increase.

There has only been one detection of 1,2-Diphenylhydrzine in many years of monitoring, and this detection was either an isolated incident or a result of laboratory variability, because there were no detections in follow-up monitoring. As a result, an increased monitoring frequency is not warranted. In addition, proposed changes have been made to ensure consistency with the definition of wet weather as described in Comment 18. We request the proposed revised language shown below.

Proposed change (Pages E-4 to E-5):

Table E-3. Effluent Monitoring — Dry Weather

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow [1]	MGD	Continuous	Continuous/D
BOD_5	mg/L	C-24	1/Week [2]
TSS	mg/L	C-24	5/Week
Chemical Oxygen Demand (COD)	mg/L	C-24	5/Week [2]
Oil and Grease [3]	mg/L	Grab	1/Month
pH [4]	standard units	Continuous or Grab	Continuous or 5/Week
Enterococcus [9]	MPN/100 mL	Grab	4/Year [8]
Fecal Coliform [9]	MPN/100 mL	Grab	1/Week
Total Residual Chlorine [5]	mg/L	Continuous or Grab	Continuous/H or 1/Hour
Acute Toxicity [6]	% Survival	Flow through	1/Month
Chronic Toxicity [7]	TUc	C-24	2/Year
Ammonia, Total	mg/L as N	Grab or C-24	1/Month
Copper, Total Recoverable	µg/L	C-24	1/Month
Cyanide, Total	µg/L	Grab	1/Month
Dioxin-TEQ	µg/L	Grab	2/Year
1,2-Diphenylhydrazine	µg/L	Grab	~~1/Month~~ 2/Year

21. Several revisions are needed for the wet weather monitoring requirements.

San Francisco requests that the following changes be made to Table E-4 (Effluent Monitoring – Wet Weather)

- Add a footnote stating that oil and grease samples shall be collected only from monitoring point EFF-003, consistent with the existing permit.
- Remove the acute toxicity monitoring requirement for wet weather events at EFF-002. Please also see Comment #17 for further discussion.

The requested changes are shown below.

Proposed change (Pages E-6 through E-7):

Table E-4. Effluent Monitoring — Wet Weather

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow [1]	MGD	Continuous	Continuous/D
TSS	mg/L	C-X	1/Month
COD	mg/L	C-X	1/Month
Oil and Grease [3]	mg/L	Grab	1/Month
pH	standard units	Continuous or Grab	Continuous or 1/Month
Enterococcus [5]	MPN/100 mL [2]	Grab	1/Day [4]
Fecal Coliform	MPN/100 mL [2]	Grab	1/Day [4]
Total Residual Chlorine	mg/L	Continuous or Grab	Continuous/H or 1/Hour
Acute Toxicity at EFF-001b and EFF-003 [3]	% Survival	Grab	1/Month
Copper, Total Recoverable	µg/L	C-X	1/Month
Cyanide, Total	µg/L	C-X	1/Month
Ammonia, Total	mg/L as N	Grab	1/Month

Unit Abbreviations:

MGD = million gallons per day
mg/L = milligrams per liter
mg/L as N = milligrams per liter as nitrogen
µg/L = micrograms per liter
MPN/100 mL = most probable number per 100 milliliters

Sample Type:

Continuous = measured continuously
C-X = composite sample comprised of individual grab samples collected at equal intervals of no more than one hour for the duration of the discharge event but not exceeding 24 hours. If an event does not last at least 24-hours, the Discharger shall sample for as long as possible and note the duration in its self-monitoring report.
Grab = grab sample

Sampling Frequency:

Continuous/H = measured continuously, and recorded and reported hourly
Continuous/D = measured continuously, and recorded and reported daily
1/Hour = once per hour
1/Month = once per month
1/Day = once per wet weather day

Footnotes:

[1] Flow shall be monitored continuously and the following information shall be reported in monthly self-monitoring reports:
- Daily average flow (MGD)
- Monthly average flow (MGD)
- Total monthly flow volume (MG)
- Maximum and minimum daily average flow rates (MGD)

[2] Results may be reported as colony forming units (CFU)/100 mL if the laboratory method used provides results in CFU/100 mL.

[3] Oil and grease samples shall be collected only from monitoring point EFF-003. Acute bioassay tests shall be performed in accordance with MRP section V.A.

[4] Wet weather effluent samples shall be collected within 4 hours after discharges start (when discharges start between 4:00 a.m. and 2:00 p.m.). If the wet weather facility begins operation after 2:00 p.m., samples shall be

collected first thing the next morning during business hours (by 9:00 a.m.), provided that the discharge is still occurring.

[5] Data from both wet and dry weather shall be included when calculating the geometric mean for compliance with this monthly wet weather limitation. For days with discharge but no sampling, the enterococcus densities shall be assumed to be the same as the densities of the most recent discharge samples. For days with no discharge, enterococcus densities shall be assumed to be 1 MPN/100 mL for calculational purposes.

Proposed change (Page E-8):

A. Whole Effluent Acute Toxicity

1. During dry weather, acute toxicity at Discharge Point No. 001 (Monitoring Location EFF-001A) shall be evaluated by measuring survival of test organisms exposed to 96-hour continuous flow-through bioassays. The Discharger may stop a bioassay if wet weather occurs during a 96-hour test. If so, the Discharger shall initiate another test as soon as possible (i.e., as soon as approximately 96 hours of dry weather is forecasted). The Discharger may choose to continue a test during wet weather unless ~~the instantaneous flow to the Southeast Plant (at Monitoring Location INF-001 as defined in the MRP) exceeds 110 MGD~~ discharge occurs at EFF-002 as identified in the MRP.

During wet weather, acute toxicity at Discharge Point Nos. 001, and 003 through 006 (Monitoring Locations EFF-001B~~, EFF-002~~, and EFF-003) shall be evaluated by measuring survival of test organisms exposed to 96-hour static bioassays.

22. The due date for the USEPA Biosolids Annual Report should be consistent with federal regulations.

In EPA Region 9, wastewater treatment plants with influent flows over 1 MGD must report to EPA Region 9 on their biosolids use/disposal by February 19 of each year for the previous calendar year. As shown below, San Francisco would like the inclusion of this due date for clarification.

Proposed change (Page E-14):

b. Annual SMR — Annual SMRs shall be due February 1 each year, covering the previous calendar year. The annual SMR shall contain the items described in sections V.C.1.f of Attachment G. See also Provisions VI.C.2 (Effluent Characterization Study and Report) and VI.C.5.b.ix (Monitor to Characterize Wet Weather Discharge Impacts and Efficacy of Controls) of the Order for requirements to submit reports with the annual SMR. The Annual Report detailing Sludge and Biosolids Management shall be submitted according to the requirements of 40 CFR503 and submitted to the U.S. EPA Region IX with a copy provided to the Executive Officer on or before February 19th each year.

23. San Francisco requests the hard copy DMR reporting requirement be removed.

This requested change is consistent with the most recent direction from the DMR Processing Center provided on March 21, 2012, which requires only one original DMR. The requested change is shown below.

Proposed change (Page E-17):

2. ~~Once notified by the State Water Board or Regional Water Board, the Discharger shall submit hard copy DMRs.~~ The Discharger shall sign and certify DMRs as Attachment D requires. The Discharger shall submit the original DMR to one of the addresses listed below:

24. San Francisco requests several changes to the Modifications to Attachment G.

Attachment G sections I.I.2., I.J., and III.A.3.c. do not apply to combined systems such as San Francisco's; these sections should be deleted from Attachment G for this permit. As noted in Comment #6, Attachment G is a standard document for all permits and was written with separate sanitary systems in mind.

In addition, a different definition for biosolids is more appropriate and consistent with the definition in the Fact Sheet, section VI.C.4.b.

The requested changes are shown below.

Proposed change (Page E-17):

A. Attachment G sections I.I.2., I.J., III.A.3.c. do not apply to this Discharger and are deleted.

B. ~~A.~~ Attachment G sections V.C.1.f and V.C.1.g are revised as follows, and section V.C.1.h (Reporting data in electronic format) is deleted.

f. Annual self-monitoring report requirements

By the date specified in the MRP, the Discharger shall submit an annual report to the Regional Water Board covering the previous calendar year. The report shall contain the following:

1) Annual compliance summary table of treatment plant performance, ~~including documentation of any blending events~~ (this summary table is not required if the Discharger has submitted the year's monitoring results to CIWQS in electronic reporting format by EDF/CDF upload or manual entry);

2) Comprehensive discussion of treatment plant performance and compliance with the permit (this discussion shall include any corrective actions taken or planned, such as changes to facility

equipment or operation practices that may be needed to achieve compliance, and any other actions taken or planned that are intended to improve performance and reliability of the Discharger's wastewater collection, treatment, or disposal practices);

Proposed change (Page E-20):

d. Communication Protocol – *Deleted*

D. Attachment G sectionVIII.2 is revised as follows.

2. Biosolids refers to the solid, semisolid, and liquid residue removed during primary, secondary, and advanced wastewater treatment processes that has been treated and may be beneficially used.

25. The dilution series under "Chronic Toxicity Screening Phase Requirements" in the MRP should be corrected.

The dilution series for whole effluent chronic toxicity shown on page E-8 of the Tentative Order is correct. As shown below, the reference to this same dilution series on page E-22 should be corrected to match that on page E-8 and as shown below. Alternatively, the references to the dilution series could be changed to match the following language in the current permit for the Oceanside Water Pollution Control Plant (Order No. R2-2009-0062):

- "The Discharger shall conduct tests at the in-stream waste concentration (IWC), four concentrations bracketing the IWC, and a control." (page E-7, Order No. R2-2009-0062)
- "Dilution series should include the IWC, and four concentrations that bracket the IWC, or other concentrations approved by the Executive Officer." (page E-20, Order No. R2-2009-0062)

It is especially important to delete the 100% as it is impossible to conduct a marine chronic test on 100% effluent.

Proposed change (Page E-22):

5. Dilution series of ~~100%, 50%, 25%, 12.5%, 6.25%, and 0 %~~ 20%, 15%, 10%, 5%, and 2.5%, where "%" is percent effluent as discharged, or as otherwise approved the Executive Officer if different dilution ratios are needed to reflect discharge conditions.

26. All appropriate tests must be included in Table AE-1 to avoid subverting the intent of the requirement.

The purpose of the chronic screening requirement is to determine the most sensitive species/endpoint for any particular effluent. This cannot be accomplished if only a subset of appropriate tests are allowed by the permit. The EPA determined the appropriate marine chronic tests and endpoints for the west coast in the "West Coast Manual" (EPA/600/R-95-136). Every test in the West Coast Manual, including several with multiple endpoints, is in Table AE-1

except the echinoderm larval development test. For the reasons stated above and to be consistent with the current permit requirements, language should be revised as follows:

Proposed change (Page E-23):

Table AE-1. Critical Life Stage Toxicity Tests for Estuarine Waters

Species	(Scientific Name)	Effect	Test Duration	Reference
Alga	*(Skeletonema costatum)* *(Thalassiosira pseudonana)*	Growth rate	4 days	1
Red alga	*(Champia parvula)*	Number of cystocarps	7–9 days	3
Giant kelp	*(Macrocystis pyrifera)*	Percent germination; germ tube length	48 hours	2
Abalone	*(Haliotis rufescens)*	Abnormal shell development	48 hours	2
Oyster Mussel	*(Crassostrea gigas)* *(Mytilus edulis)*	Abnormal shell development; percent survival	48 hours	2
Echinoderms - Urchins Sand dollar	*(Strongylocentrotus purpuratus, S. franciscanus)* *(Dendraster excentricus)*	Percent fertilization	1 hour	2
Echinoderms - Urchins Sand dollar	***(Strongylocentrotus purpuratus, S. franciscanus)*** ***(Dendraster excentricus)***	**larval development**	**72 hours**	**2**
Shrimp	*(Americamysis bahia)*	Percent survival; growth	7 days	3
Shrimp	*(Holmesimysis costata)*	Percent survival; growth	7 days	2
Topsmelt	*(Atherinops affinis)*	Percent survival; growth	7 days	2
Silversides	*(Menidia beryllina)*	Larval growth rate; percent survival	7 days	3

27. Rainbow trout should be shown in the fact sheet as an approved test species for whole effluent toxicity testing.

The approved test species specified in the MRP (on page E-8 of the Tentative Order) are rainbow trout (*Oncorhynchus mykiss*) or fathead minnow (*Pimephales promelas*). We therefore request that it be included in the Whole Effluent Acute Toxicity provision as indicated below.

Proposed change (Pages F-37 to F-38):

5. **Whole Effluent Acute Toxicity**

   This Order includes dry weather effluent limitations for whole effluent acute toxicity based on Basin Plan Table 4-3. All bioassays are to be performed according to the U.S. EPA approved method in 40 C.F.R. section 136, currently *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 5th Edition (EPA-821-R-02-012). The approved test species specified in the MRP ~~is~~ are rainbow trout *(Oncorhynchus mykiss)* or ~~the~~ fathead minnow (*Pimephales promelas*).

28. The test species for previous semiannual chronic toxicity testing should be corrected.

Consistent with current permit requirements, the echinoderm larval development test has been used for previous semiannual chronic toxicity testing. We therefore request its inclusion in the Reasonable Potential Analysis provision here. Please see Comment #26 for further discussion.

Proposed change (Page F-38):

b. Reasonable Potential Analysis. The Discharger conducted semiannual chronic toxicity tests during the previous order term using the ~~sand dollar (*Dendraster excentricus*)~~ enchinoderm larval development test. The previous order contained chronic toxicity triggers (three-sample median of 10 TUc or single-sample maximum of 20 TUc) for accelerated chronic toxicity testing. The maximum single-sample chronic toxicity result during the previous order term was 10 TUc in July 2009. The relatively low toxicity indicates low reasonable potential for chronic toxicity so this Order contains only a narrative chronic toxicity limit. A numeric limit is unwarranted.

Conclusion:

San Francisco thanks you for this opportunity to comment on the Tentative Order for its Southeast Treatment Plant. We are proud of the environmental services our combined sewer system provides, and we hope our comments are useful in finalizing this permit to ensure sound, efficient and beneficial regulation of this wastewater treatment system.

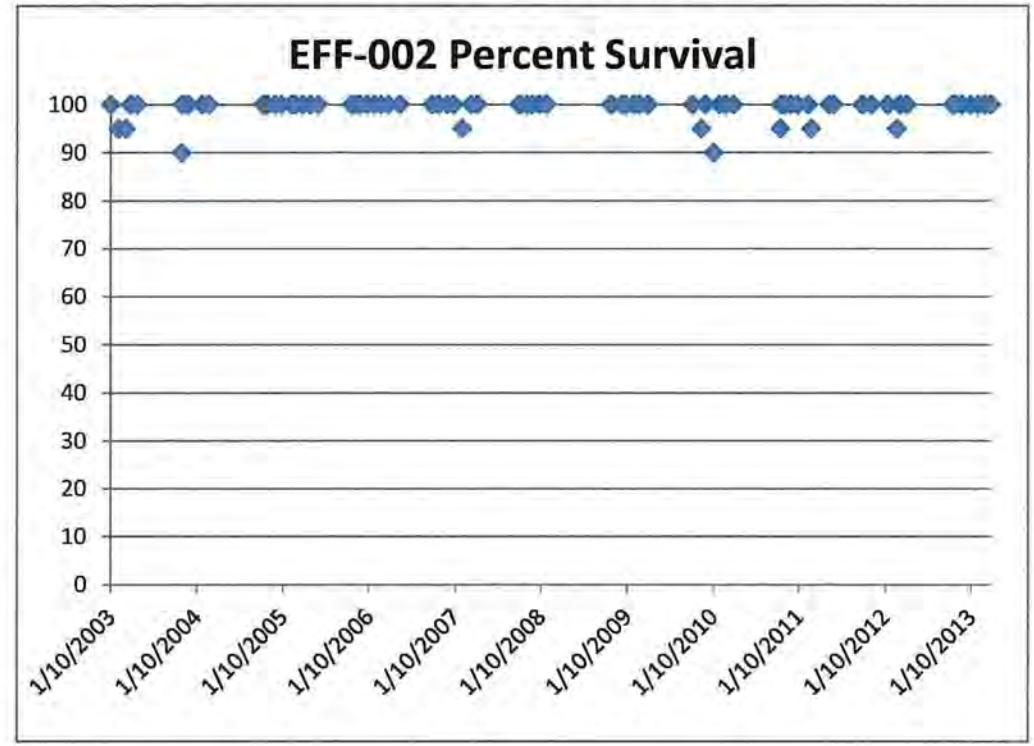
Attachment A

Acute Toxicity

SFPUC Southeast Plant Effluent EFF-002 Acute Toxicity Percent Survival 2003 - 2013

EFF-002 Sample Dates and Percent Survival 2003 - 2013					
Sample Date	Percent Survival	Sample Date	Percent Survival	Sample Date	Percent Survival
1/10/2003	100	11/2/2006	100	2/16/2011	100
2/12/2003	95	12/9/2006	100	3/2/2011	95
3/15/2003	95	1/4/2007	100	5/17/2011	100
4/4/2003	100	2/9/2007	95	6/4/2011	100
5/3/2003	100	3/20/2007	100	10/5/2011	100
11/7/2003	90	4/14/2007	100	11/12/2011	100
11/9/2003	100	10/10/2007	100	1/20/2012	100
11/30/2003	100	10/13/2007	100	2/29/2012	95
12/5/2003	100	11/11/2007	100	3/13/2012	100
2/2/2004	100	12/4/2007	100	4/10/2012	100
3/1/2004	100	1/3/2008	100	10/22/2012	100
10/19/2004	100	2/3/2008	100	10/23/2012	100
10/20/2004	100	11/2/2008	100	11/1/2012	100
11/4/2004	100	11/4/2008	100	12/1/2012	100
12/7/2004	100	12/19/2008	100	1/6/2013	100
1/3/2005	100	1/2/2009	100	2/8/2013	100
2/15/2005	100	2/6/2009	100	3/6/2013	100
3/2/2005	100	3/1/2009	100	4/1/2013	100
4/3/2005	100	4/8/2009	100		
5/5/2005	100	10/13/2009	100		
6/8/2005	100	11/20/2009	95		
10/29/2005	100	12/7/2009	100		
11/7/2005	100	1/12/2010	90		
11/28/2005	100	2/5/2010	100		
12/1/2005	100	3/2/2010	100		
1/1/2006	100	4/5/2010	100		
2/1/2006	100	10/23/2010	95		
3/2/2006	100	10/24/2010	100		
4/2/2006	100	11/7/2010	100		
5/21/2006	100	12/5/2010	100		
10/5/2006	100	1/1/2011	100		

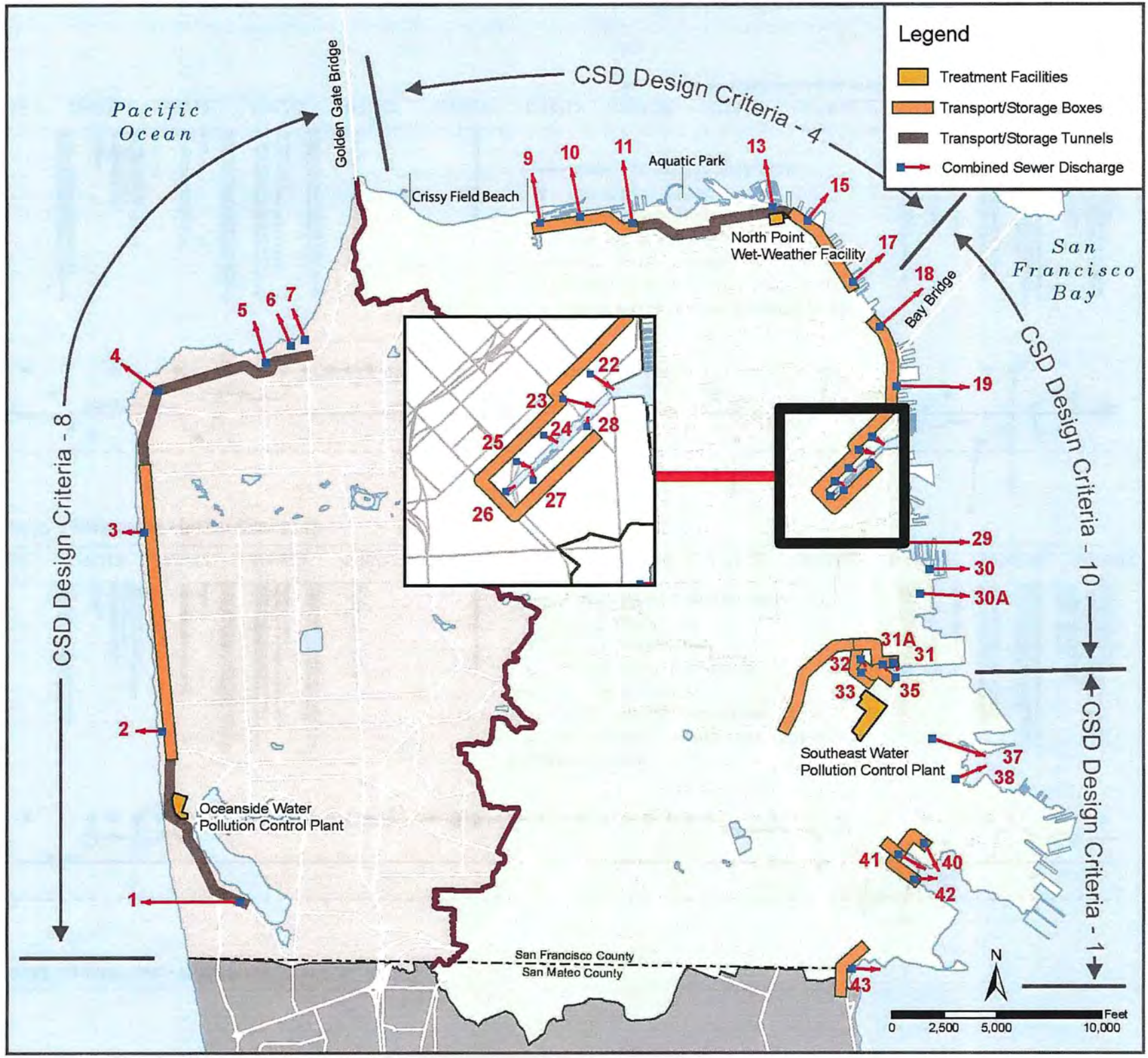
EFF-002 2003 - 2013			
Number of Tests	Minimum Survival	Mean Survival	Maximum Survival
80	90	99.3	100



EFF-002 Percent Survival

Attachment B

Aquatic Park


Legend
Treatment Facilities
Transport/Storage Boxes
Transport/Storage Tunnels
Combined Sewer Discharge
Pacific Ocean
Golden Gate Bridge
CSD Design Criteria - 4
CSD Design Criteria - 8
CSD Design Criteria - 10
CSD Design Criteria - 1
San Francisco Bay
Crissy Field Beach
Aquatic Park
North Point Wet-Weather Facility
Bay Bridge
Oceanside Water Pollution Control Plant
Southeast Water Pollution Control Plant
San Francisco County
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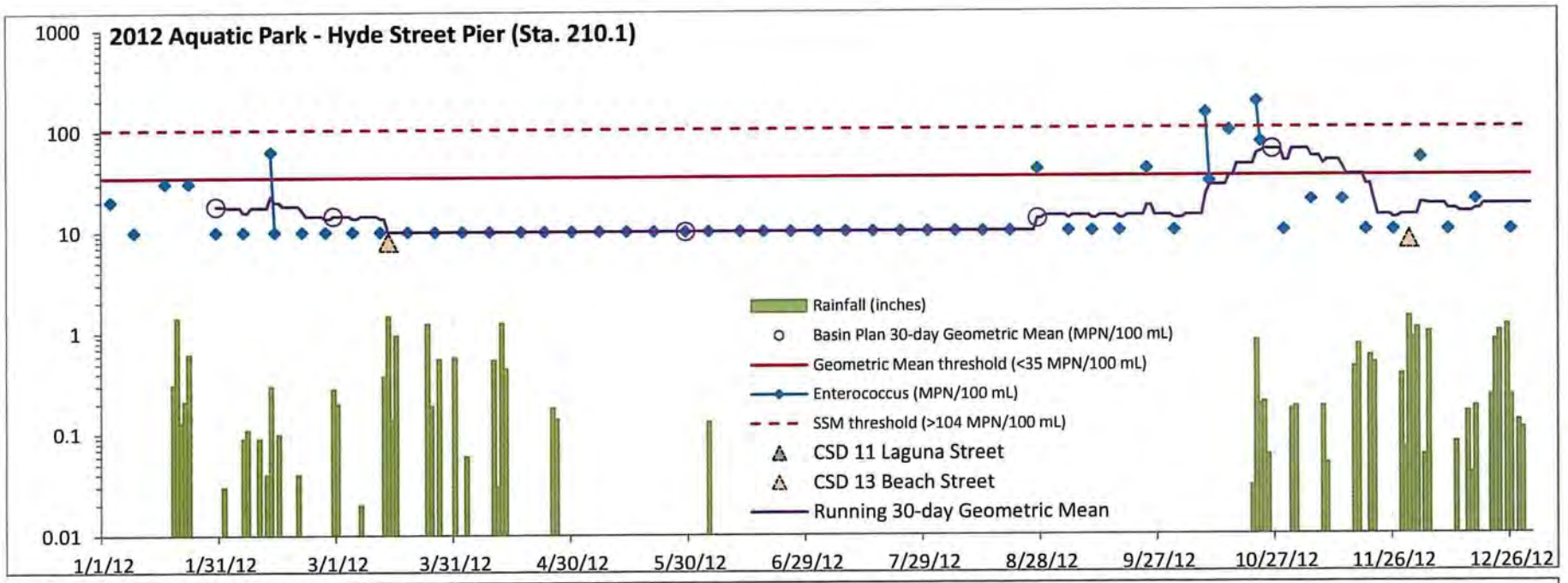
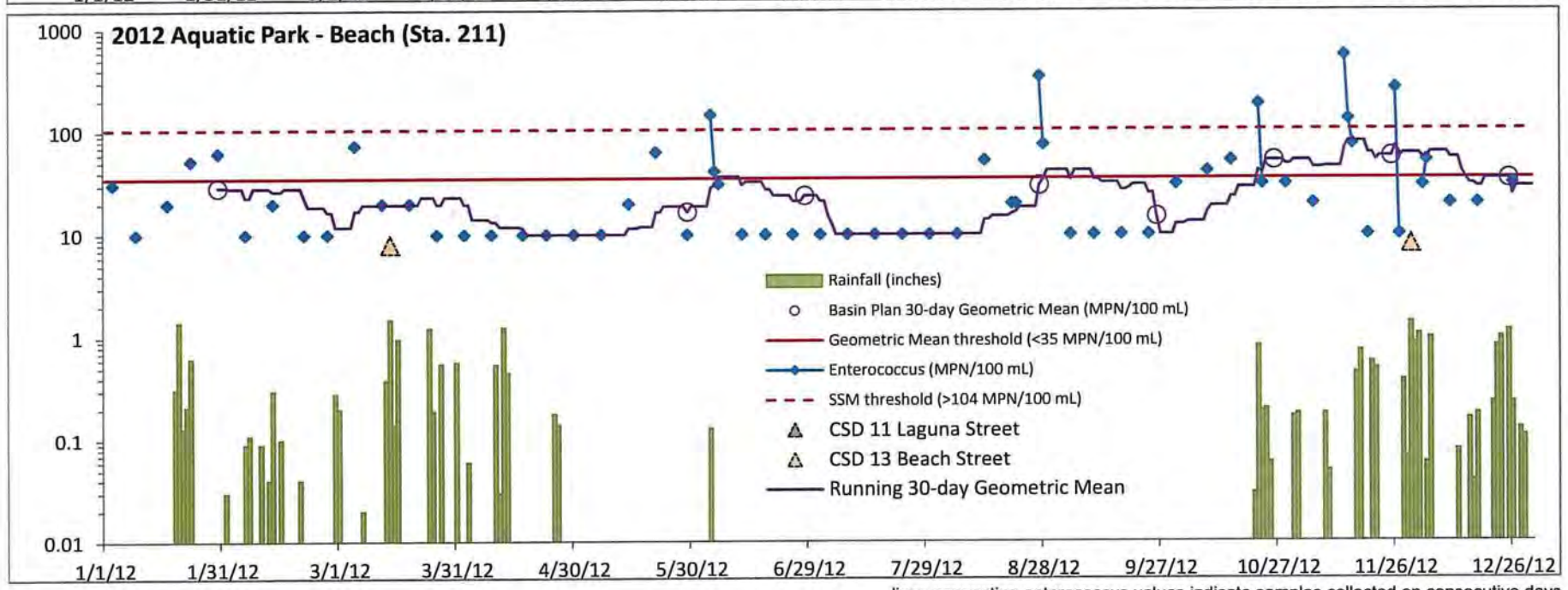
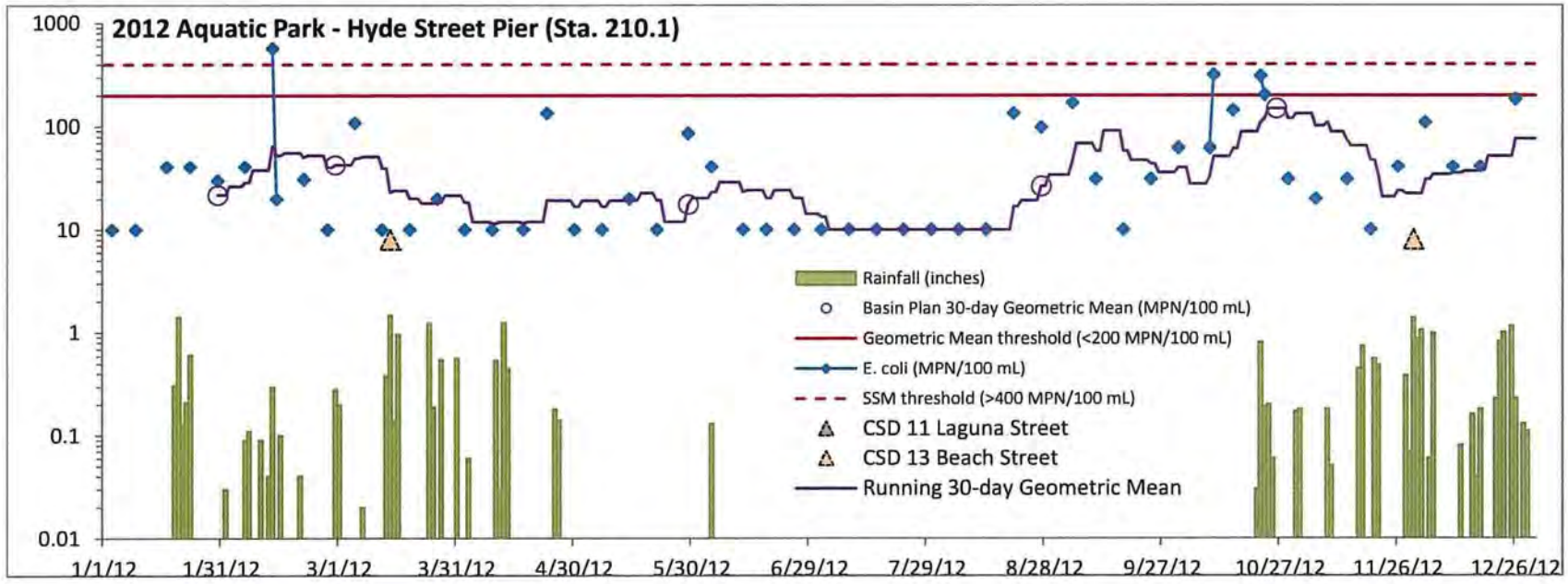
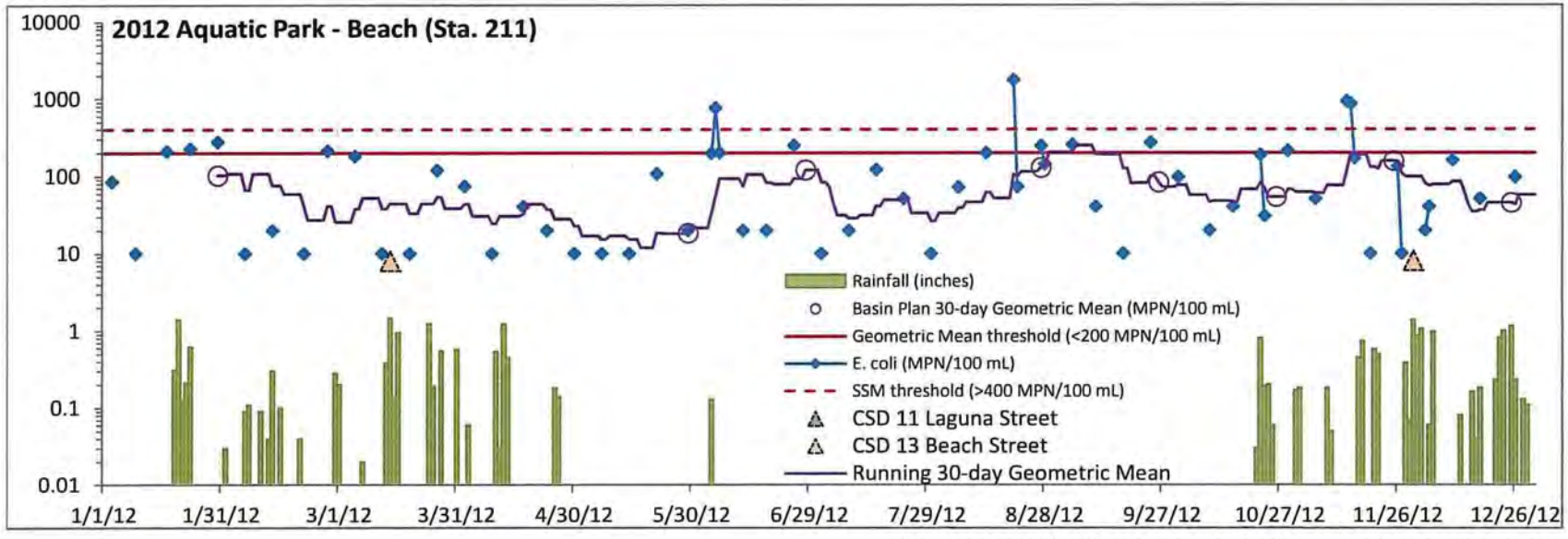




lines connecting enterococcus values indicate samples collected on consecutive days

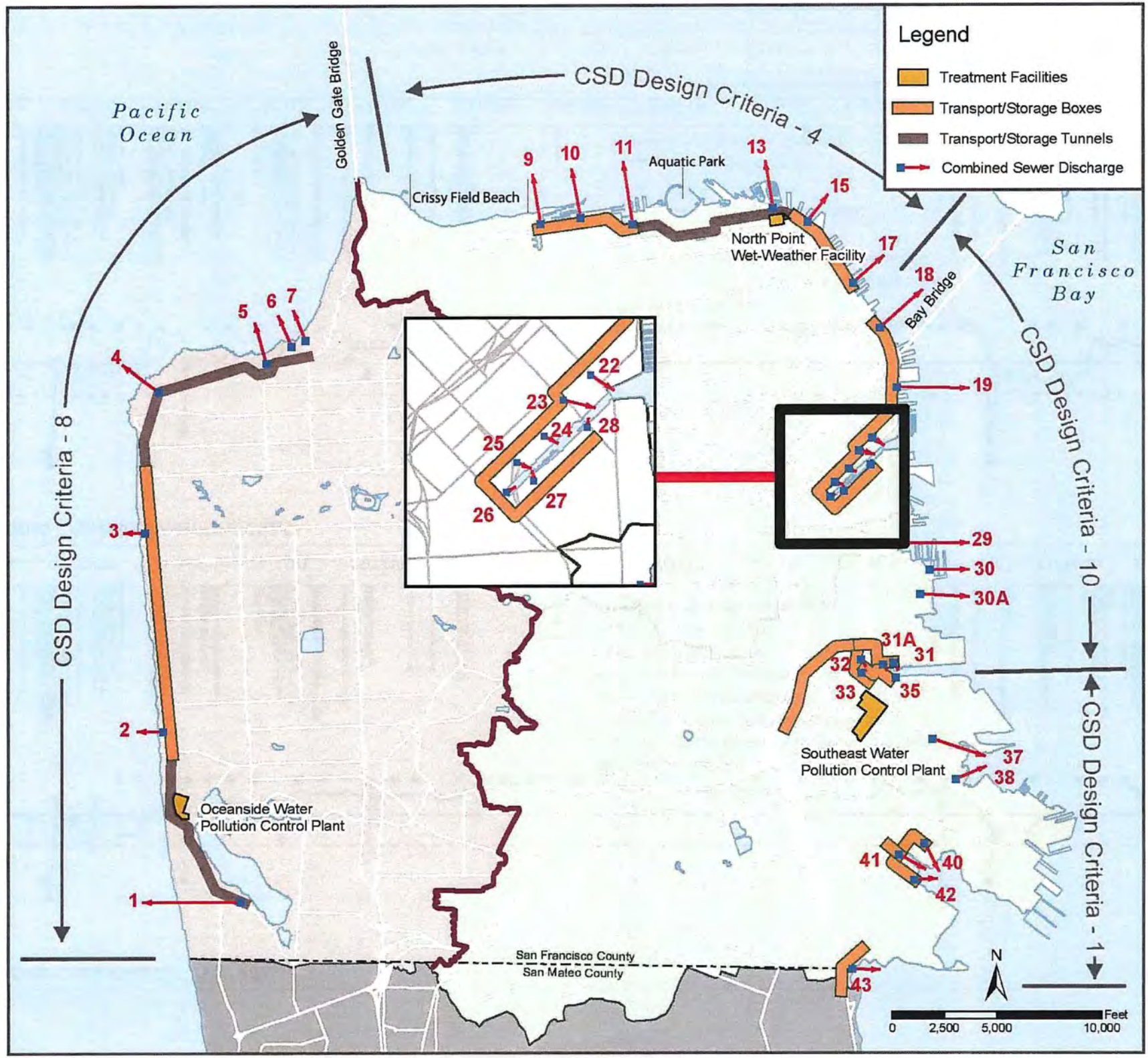




lines connecting E. coli values indicate samples collected on consecutive days

Attachment B

Crissy Field


Legend
Treatment Facilities
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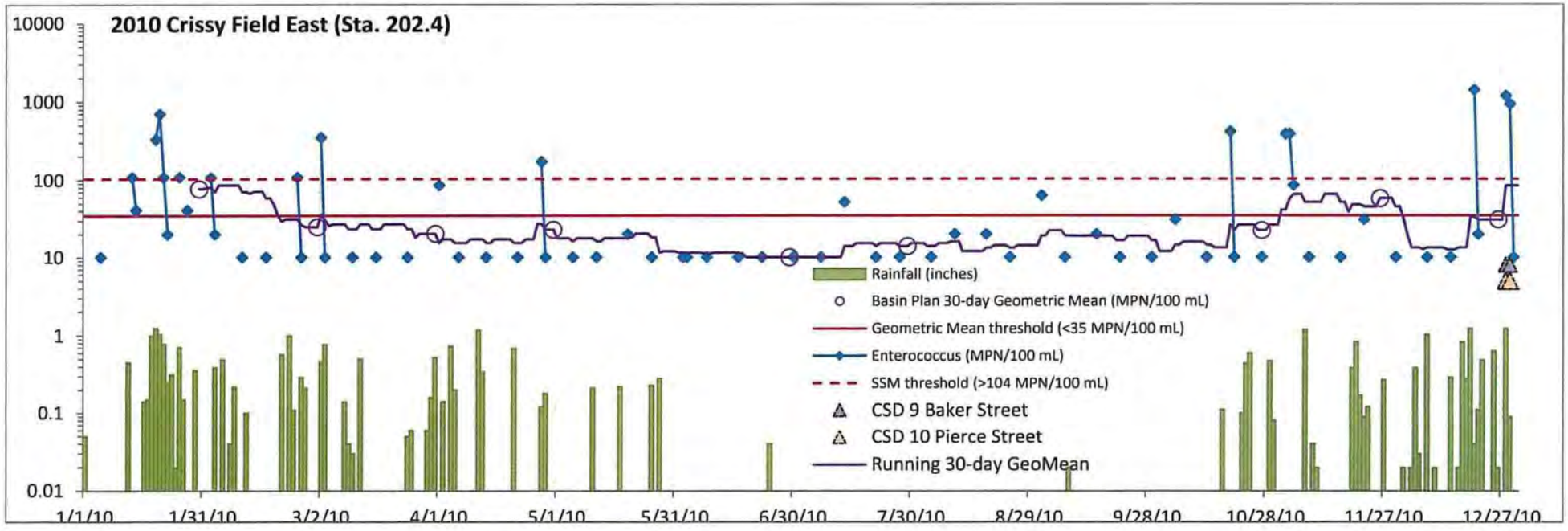
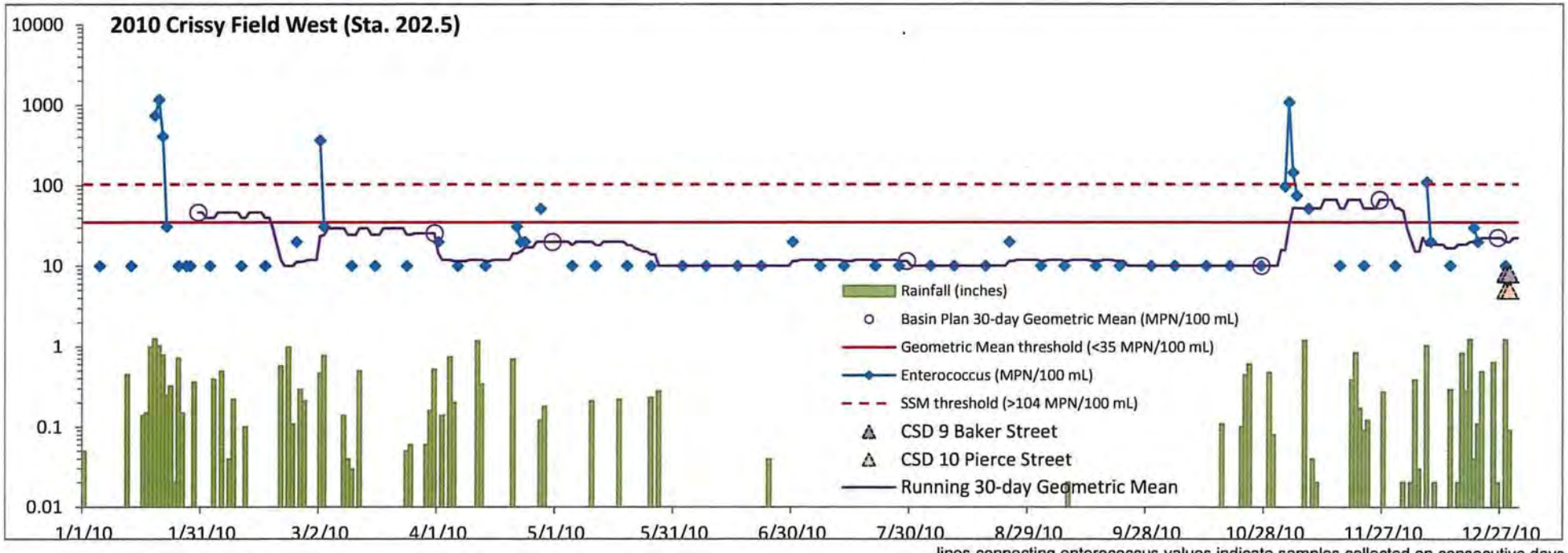
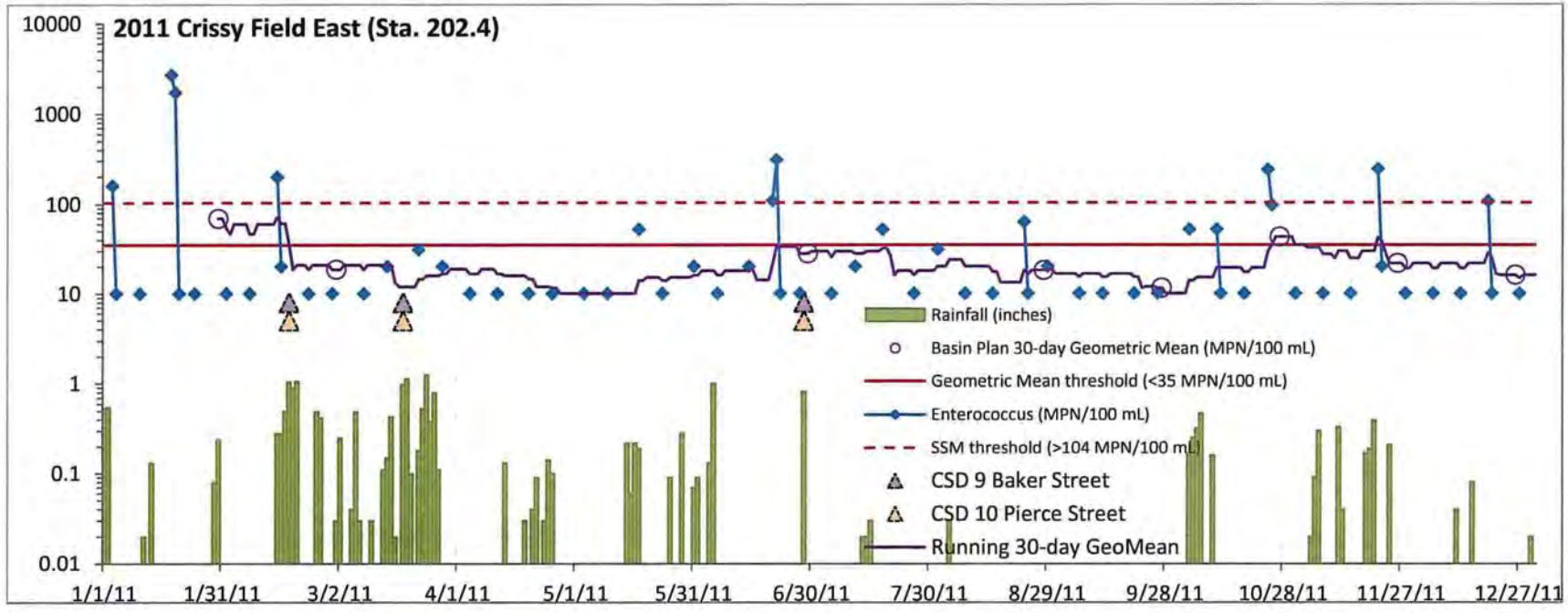
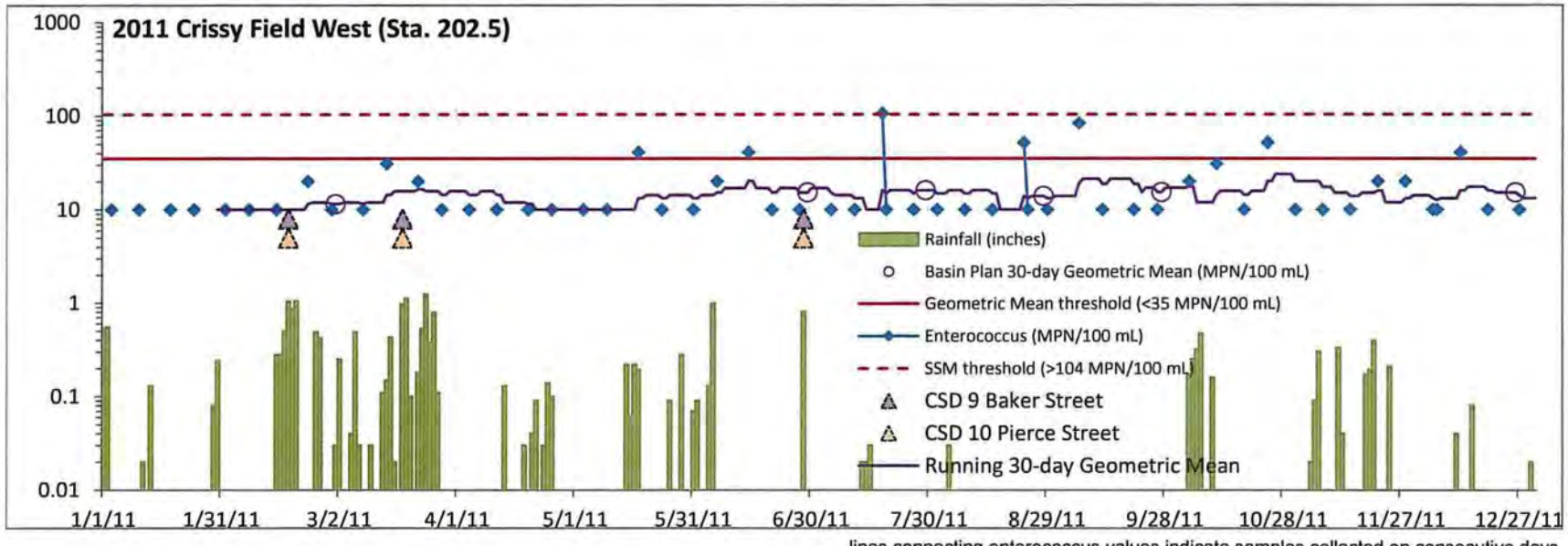


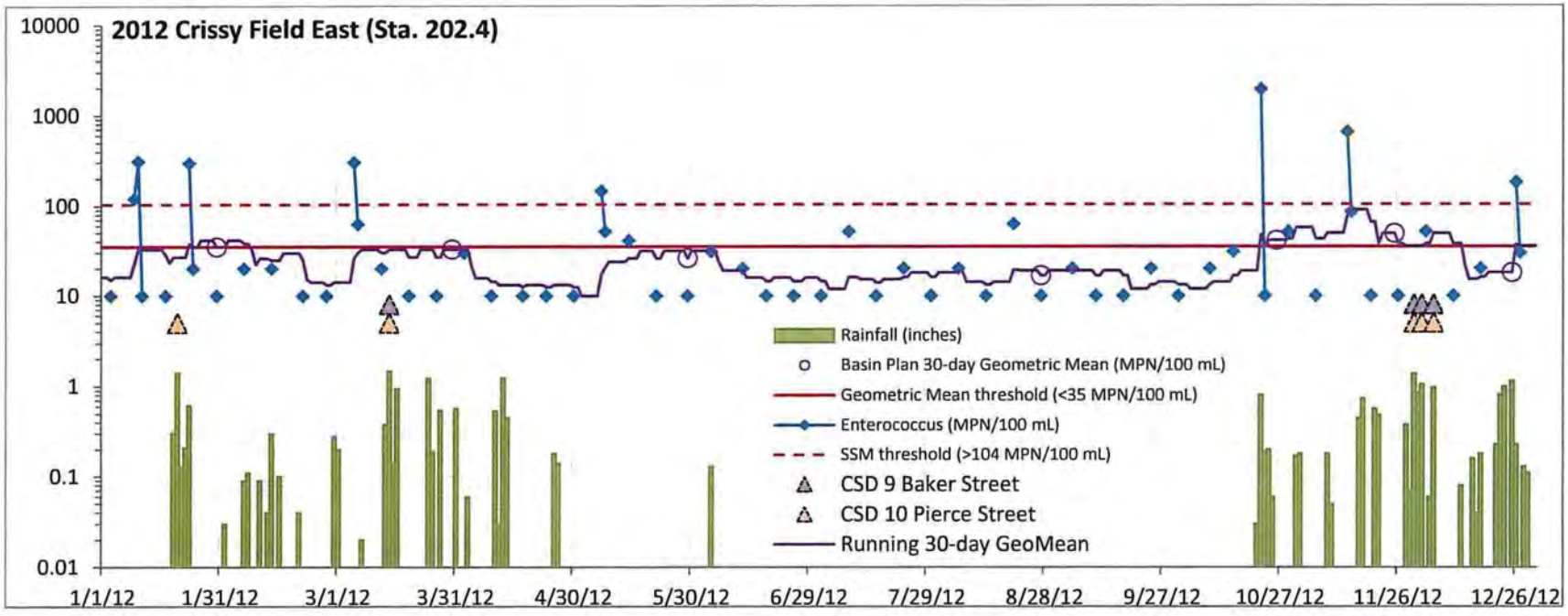


lines connecting enterococcus values indicate samples collected on consecutive days





lines connecting enterococcus values indicate samples collected on consecutive days


2012 Crissy Field East (Sta. 202.4)
10000
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100
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0.1
0.01
1/1/12
1/31/12
3/1/12
3/31/12
4/30/12
5/30/12
6/29/12
7/29/12
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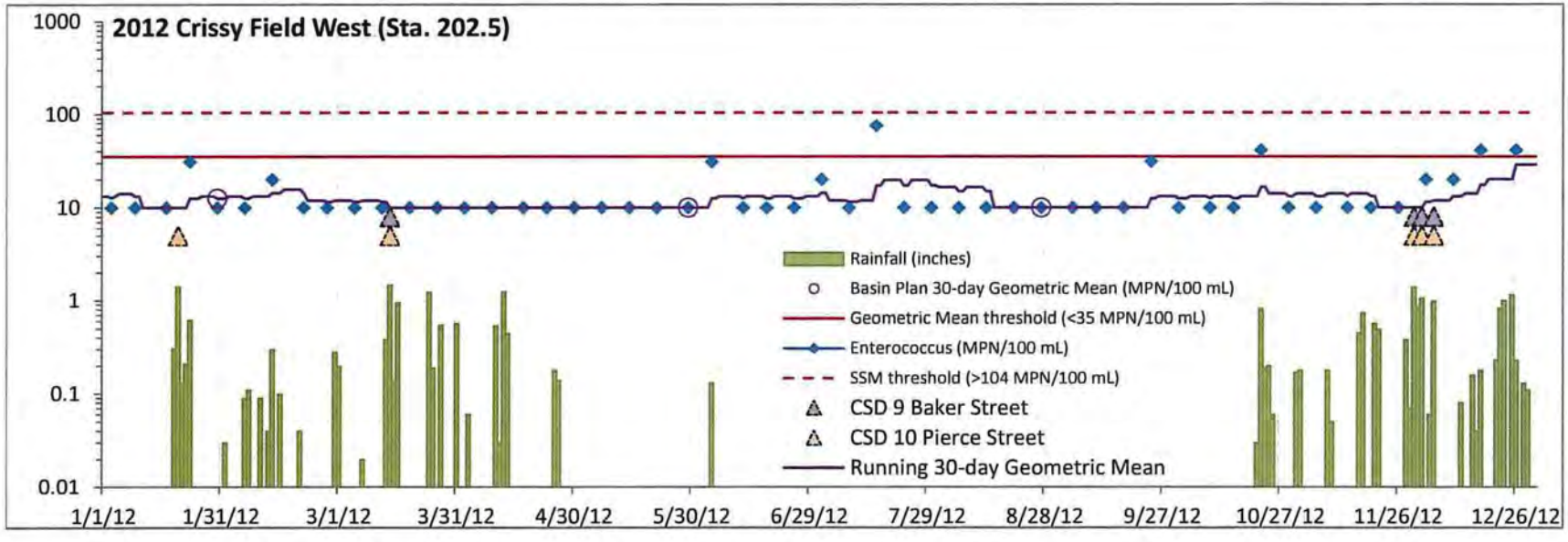
9/27/12
10/27/12
11/26/12
12/26/12
Rainfall (inches)
Basin Plan 30-day Geometric Mean (MPN/100 mL)
Geometric Mean threshold (<35 MPN/100 mL)
Enterococcus (MPN/100 mL)
SSM threshold (>104 MPN/100 mL)
CSD 9 Baker Street
CSD 10 Pierce Street
Running 30-day GeoMean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1/31/12
3/1/12
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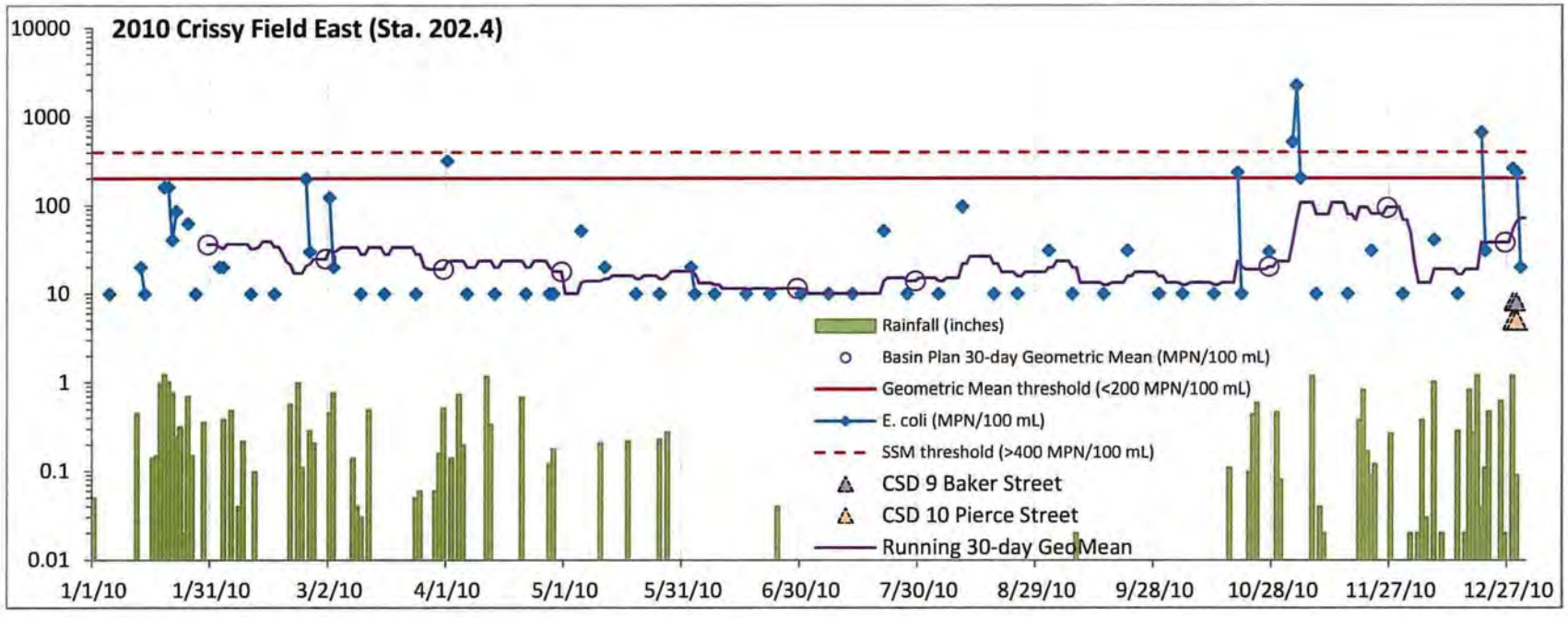
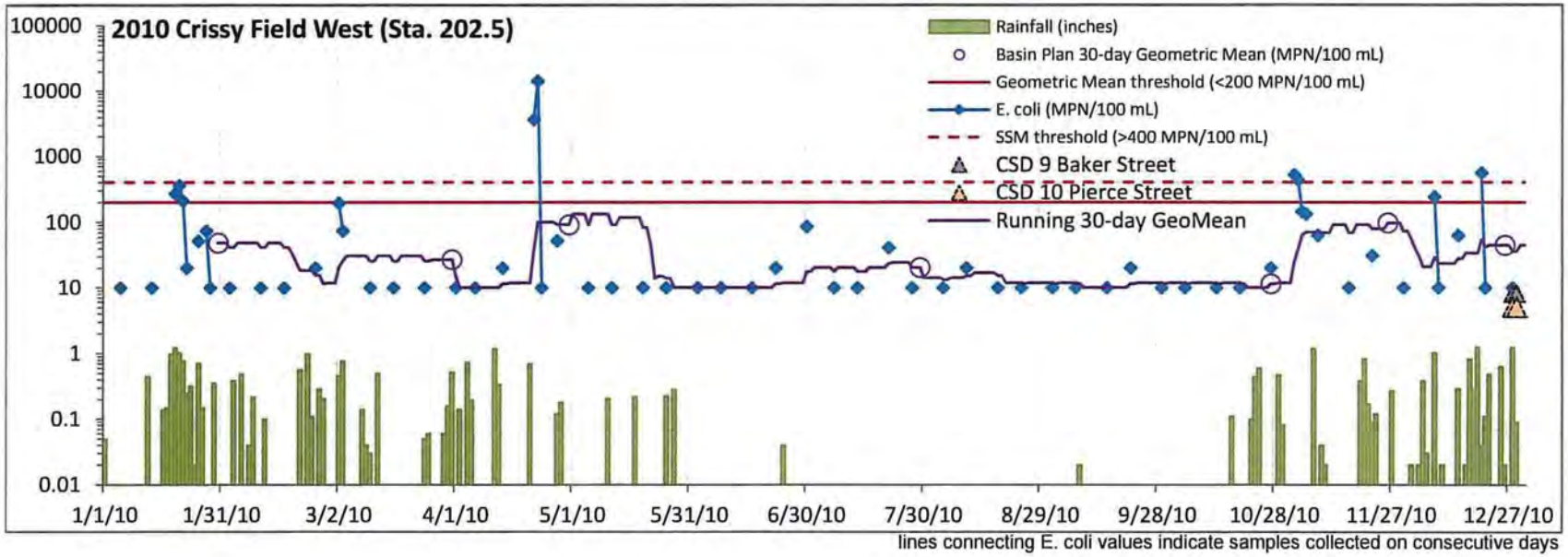
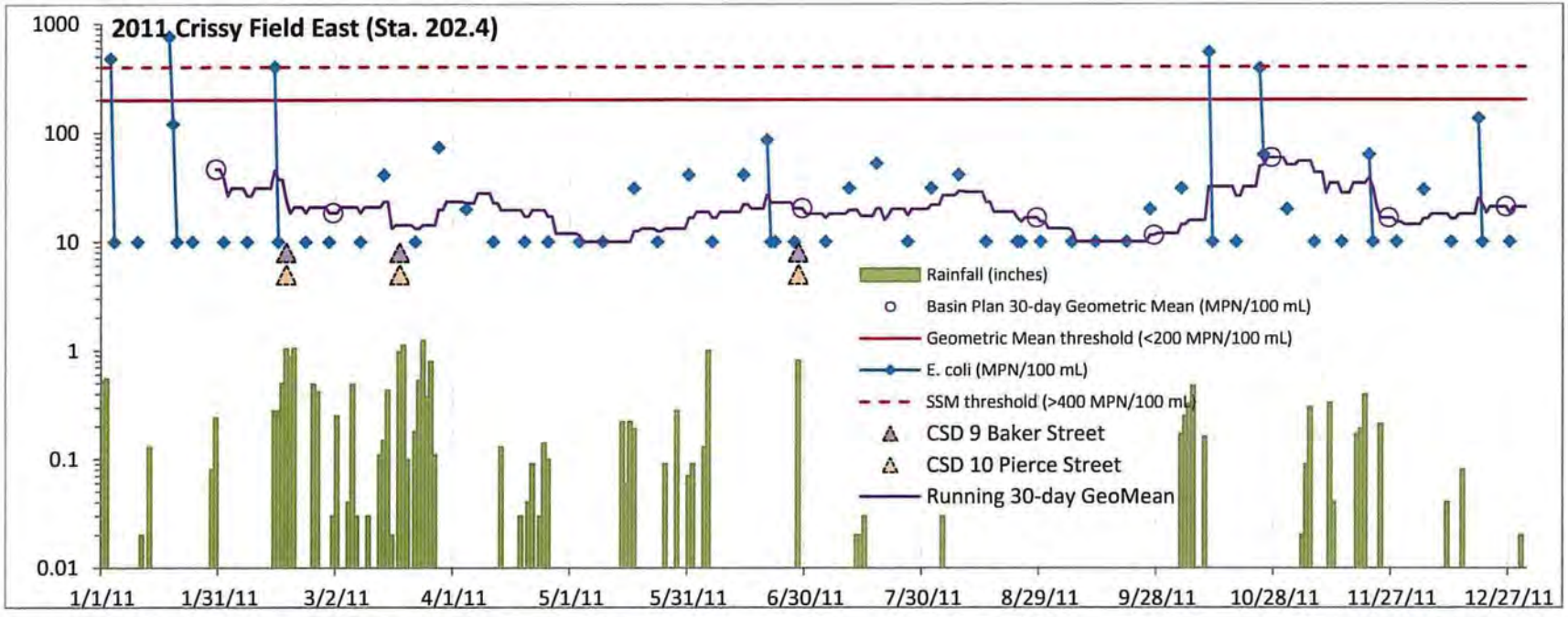
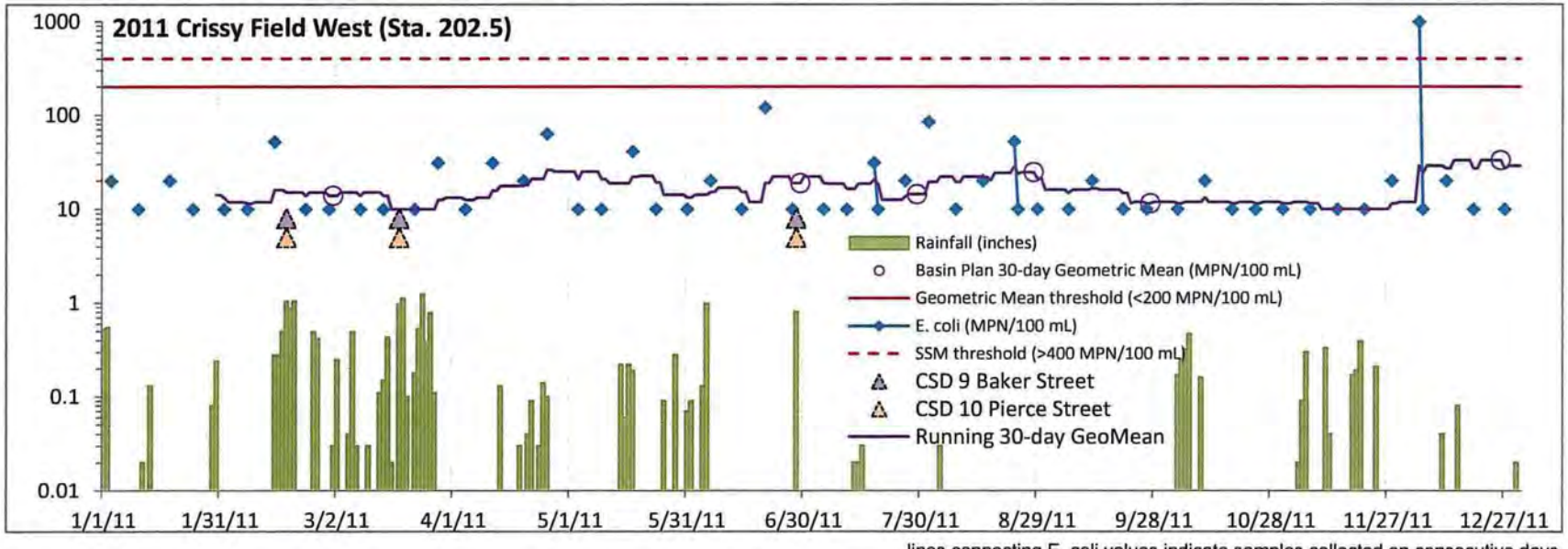
4/30/12
5/30/12
6/29/12
7/29/12
8/28/12
9/27/12
10/27/12
11/26/12
12/26/12
Rainfall (inches)
Basin Plan 30-day Geometric Mean (MPN/100 mL)
Geometric Mean threshold (<35 MPN/100 mL)
Enterococcus (MPN/100 mL)
SSM threshold (>104 MPN/100 mL)
CSD 9 Baker Street
CSD 10 Pierce Street
Running 30-day Geometric Mean



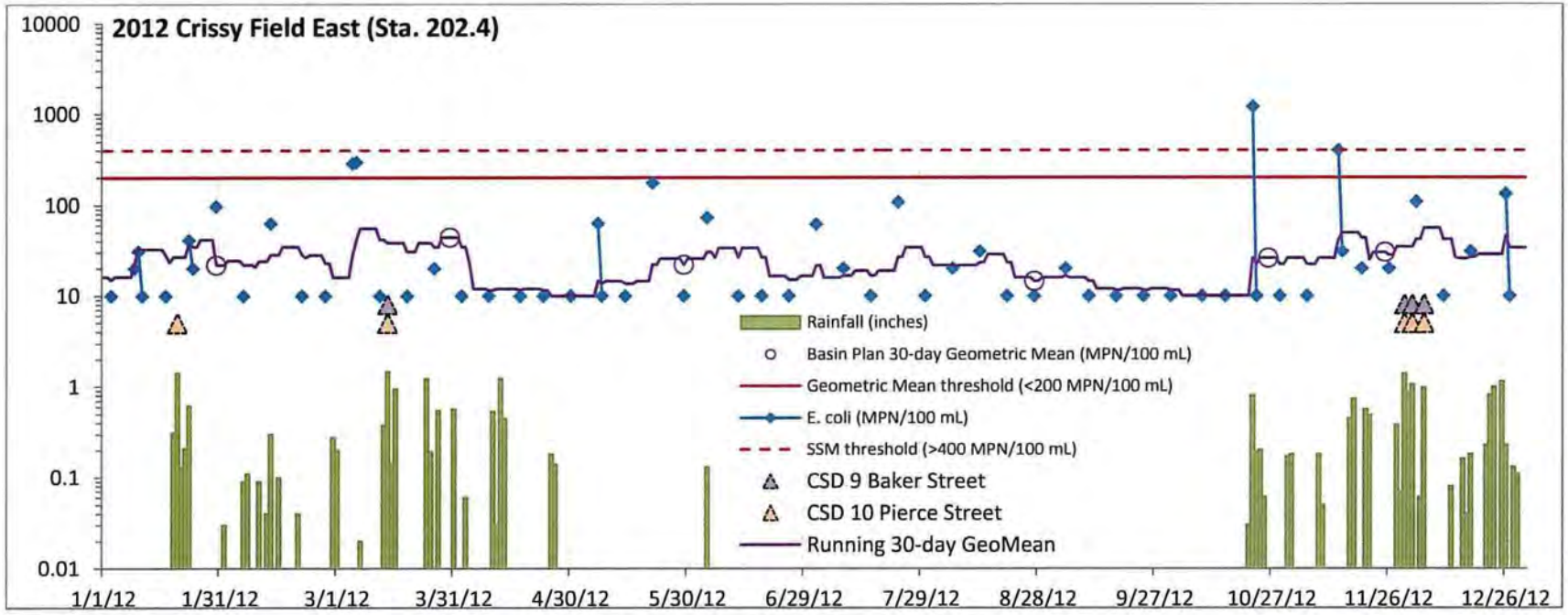


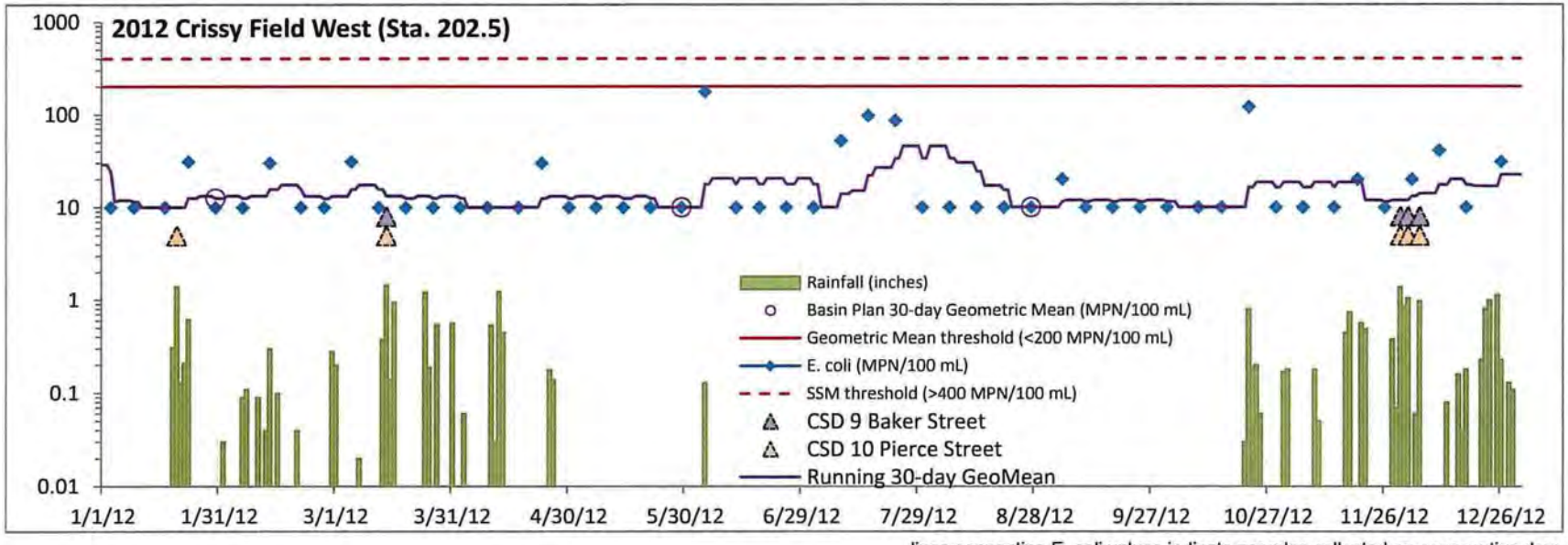
lines connecting E. coli values indicate samples collected on consecutive days





lines connecting E. coli values indicate samples collected on consecutive days





lines connecting E. coli values indicate samples collected on consecutive days

Johnson, Bill@Waterboards

From: Stuber, Robyn <Stuber.Robyn@epa.gov>
Sent: Wednesday, June 26, 2013 1:00 PM
To: Johnson, Bill@Waterboards
Cc: Smith, Davidw@epamail.epa.gov
Subject: U.S. EPA comments on draft NPDES Permit No. CA0037664

Dear Mr. Johnson,

I have reviewed the draft permit for the City and County of San Francisco's Southeast Water Pollution Control Plant, North Point Wet Weather Facility, Bayside Wet Weather Facilities, and Wastewater Collection System (Tentative Order No. R2-2013-XXXX, NPDES No. CA0037664). We appreciate your efforts towards timely reissuance of this important permit regulating discharges to San Francisco Bay under USEPA's Combined Sewer Overflow (CSO) Policy. The proposed permit continues to include provisions based on EPA's Nine Minimum Controls for CSOs and the permittee's Long-Term Control Plan to address them. We support these provisions and are pleased the permit requires the permittee to further synthesize and update its Long-Term Control Plan into one document that reflects current circumstances for the CSO.

As we have discussed with you and the permittee, we strongly support provisions under Section VI.C.4.c of the draft permit related to collection system management and reporting. Inclusion of these provisions in the permit is key to EPA Region 9's support of the final permit. As a result of these discussions, we are requesting the following change to page F-42 of the draft permit fact sheet:

> ii. Combined Sewer System. For purposes of this Order, an "excursion" is a release or diversion of untreated or partially treated wastewater from the combined sewer system that exits the system temporarily and then re-enters it. ~~The Nine Minimum Controls include conducting proper operations and maintenance programs, as required by Provision VI.C.5.b.i. Minimizing excursion is consistent with proper operations and maintenance of the combined sewer system. Water Code sections 13267 and 13383, 40 C.F.R. section 122.41(h), and the first and ninth of the Nine Minimum Controls authorize the Regional Water Board to require information about excursions. Such information is necessary to evaluate the Discharger's operations and maintenance practices. It is also necessary to determine whether any excursion results in a discharge to surface water or drainage system, and whether any excursion could affect public health or result in a nuisance as defined in Water Code section 13050.~~<u>The Discharger and the USEPA developed a collection system excursion reporting requirement in this permit so that the information would be available.</u>

I have also reviewed the draft permit's effluent limitations and receiving water limitations and the fact sheet's reasonable potential analysis. I agree with your reasonable potential determinations which properly incorporate all certified data and address backsliding. I have no recommended changes and support these limitations for the permitted discharges, as proposed.

We recommend reissuance of the permit and fact sheet that incorporates the revision described above. If you have questions regarding these comments, please contact me or my manager, David Smith (415-972-3464).

Sincerely,

Robyn Stuber,

Environmental Scientist

Robyn Stuber
NPDES Permits Office I 415.972.3524
U.S. EPA Region IX I 75 Hawthorne Street (WTR-5) I San Francisco, CA 94105

July 1, 2013

Mr. Derek Whitworth
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

VIA EMAIL: dwhitworth@waterboards.ca.gov

Subject: Comments on Tentative Order Issued to the City and County of San Francisco Southeast Water Pollution Control Plant, North Point Wet Weather Facility, Bayside Wet Weather Facility, and Wastewater Collection System

Dear Mr. Whitworth:

The Bay Area Clean Water Agencies (BACWA) appreciates the opportunity to comment on the Tentative Order issued to the City and County of San Francisco Southeast Water Pollution Control Plant, North Point Wet Weather Facility, Bayside Wet Weather Facility, and Wastewater Collection System collectively referred to as the Southeast Plant Permit. BACWA is a joint powers agency whose members own and operate publicly-owned treatment works (POTWs) and sanitary sewer systems that collectively provide sanitary services to over 6.5 million people in the nine-county San Francisco Bay Area. BACWA members are public agencies, governed by elected officials and managed by professionals who protect the environment and public health.

On behalf of its member agencies, BACWA requests that the San Francisco Bay Regional Water Quality Control Board (Water Board) consider the following comment on the Tentative Order's requirements for chronic toxicity testing and hopes that changes will be made prior to issuance of the final Order for the Southeast Plant Permit.

1. **All appropriate tests must be included in Table AE-1 to avoid subverting the intent of the chronic toxicity testing requirement.**

The permit requires determination of the most sensitive species in order to conduct on-going chronic toxicity testing. This cannot be accomplished if only a subset of appropriate tests are allowed by the permit. The EPA determined the appropriate marine chronic tests and endpoints for the West Coast in the "West Coast Manual" (EPA/600/R-95-136). Every test in the West Coast Manual, including several with multiple endpoints, is in Table AE-1 except the 72 hour echinoderm larval development test. If the permit goes forward as written, SFPUC may have to use the less reliable 1 hour echinoderm fertilization test. We feel the 72 hour test with its longer exposure time is more conservative plus there is a larger database of

test results for comparison if this test is allowed. We understand that in other permits this test does not show up in Table AE-1 and that the Water Board desires to have permits be as consistent as possible. However, we believe the reason that the test does not show up in other permits is the due to a clerical error made several years ago which should not be the basis for continued omission of a valid critical life stage toxicity test in this and future permits.

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For the reasons stated above and to be consistent with the current permit requirements, language should be revised as follows:

Proposed change (Page E-23):

Table AE-1. Critical Life Stage Toxicity Tests for Estuarine Waters

Species	**(Scientific Name)**	**Effect**	**Test Duration**	**Reference**
Alga	*(Skeletonema costatum) (Thalassiosira pseudonana)*	Growth rate	4 days	1
Red alga	*(Champia parvula)*	Number of cystocarps	7–9 days	3
Giant kelp	*(Macrocystis pyrifera)*	Percent germination; germ tube length	48 hours	2
Abalone	*(Haliotis rufescens)*	Abnormal shell development	48 hours	2
Oyster Mussel	*(Crassostrea gigas)* *(Mytilus edulis)*	Abnormal shell development; percent survival	48 hours	2
Echinoderms - Urchins Sand dollar	*(Strongylocentrotus purpuratus, S. franciscanus)* *(Dendraster excentricus)*	Percent fertilization	1 hour	2
Echinoderms - Urchins Sand dollar	***(Strongylocentrotus purpuratus, S. franciscanus) (Dendraster excentricus)***	**larval development**	**72 hours**	**2**
Shrimp	*(Americamysis bahia)*	Percent survival; growth	7 days	3

Shrimp	*(Holmesimysis costata)*	Percent survival; growth	7 days	2
Topsmelt	*(Atherinops affinis)*	Percent survival; growth	7 days	2
Silversides	*(Menidia beryllina)*	Larval growth rate; percent survival	7 days	3

BACWA appreciates the opportunity to comment on this Tentative Order and thanks you for considering our concerns.

Respectfully Submitted,

David R. Williams

David Williams
Executive Director
Bay Area Clean Water Agencies

cc: BACWA Board