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VIA ELECTRONIC MAIL

Ms. Lila Tang
Regional Water Quality Control Board for the
San Francisco Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Re: Comments on ACL Complaint No. R2-2008-0070
Client-Matter No. 39052.00000

Dear Ms. Tang:

The Sewerage Agency of Southern Marin ("SASM") submits the following comments on the draft Administrative Civil Liability ("ACL") Complaint No. R2-2008-0070 issued by the Regional Water Quality Control Board for the San Francisco Region on August 11, 2008. At the end of this letter, SASM also proposes settlement of the ACL with potential changes to the final ACL, including a substantial portion of the ACL penalty going to Supplemental Environmental Projects. Additional detail on the proposed SEP projects is included in **Exhibit A**.

I. SASM Has Valid Upset Defenses

For the two spill events alleged in the ACL Complaint, SASM is entitled to the existing upset defense in the federal NPDES permit regulations at 40 C.F.R. section 122.41(n) and in SASM's Permit at pg. D.3, Provision I.H.[1] (*See Sierra Club of Mississippi, Inc. v. City of Jackson*, 136 F. Supp 2d. 620 (S.D. Miss. 2001).) Although the CWA is a "strict liability" statute, several courts (including the 9th Circuit Court of Appeals) have ruled that some sort of upset defense must be provided at the very least for any technology-based effluent limitations, because technology is inherently fallible. (*See FMC Corp. v. Train*, 539 F.2d 973 (4th Cir.1976) and *Marathon Oil v. EPA*, 564 F.2d 1253 (9th Cir. 1977).)

[1] In addition to the upset defense, which is most relevant to this case, there is a bypass defense as described below, established by regulation and the permit, and perhaps even a defense for impossibility of performance. *See Chesapeake Bay Foundation Inc. v. Bethlehem Steel Corp.*, 25 ERC 1684, at 1693, (U.S D.C., Dist. of Mo.; Jan. 30, 1987).

A. An Affirmative Defense of Upset Exists Against the Penalty Proposed for the January 25, 2008 Spill.

The first SASM sewer spill referenced in ACL Complaint R2-2008-0070 was the result of an "upset" as defined by 40 C.F.R. §122.41(n) and Standard Provision I.H at Permit, pg. D-3, which are incorporated into NPDES Permit No. CA0037711 (Order No. R2-2007-0056) at pg. 6.

The federal regulations and the Standard Provisions define "upset" as "an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations because of factors beyond the reasonable control of the Discharger." *See* 40 C.F.R. §122.41(n)(1); *see also* Standard Provision I.H.1 at Permit pg. D-3. "Upsets may be caused by external events, such as power failures or storms, or by unpreventable failures of effluent treatment equipment." *Natural Resources Defense Council, Inc. v. U.S.E.P.A.*, 859 F.2d 156, 205 (1988)(emphasis added).[2]

In order to prove the existence of an "upset," properly signed, contemporaneous operating logs or other relevant evidence that: (a) an upset occurred and the Discharger can identify the cause(s)

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[2] In 1982, EPA proposed to extend the upset defense to violations of water-quality-based limits. 47 Fed.Reg. at 52,089/1. The defense would be available only to permittees who could demonstrate that despite the upset, instream water quality standards were maintained in all stream segments and for all parameters that could have been affected by the discharge. *Id.* Although EPA did not regard this extension as legally required (*id.* at 52,079/2), it offered the proposal on the view that there was no reason to punish a permittee for an upset if it could prove the absence of injury to water quality standards. *Id.*

In 1984, after reevaluating its proposal in light of various criticisms, the agency concluded that it would be impractical to extend the upset defense to violations of water quality-based effluent limitations. 49 Fed.Reg. at 33,038/2. It reasoned that "[a]lthough the proposal would seemingly allow permittees to claim an upset defense, the costs, burdens, and technical difficulty of establishing that water quality standards were not violated would make the defense nearly impossible to establish." *Id.* at col. 3. Rather than leave in place an affirmative defense it believed "illusory," EPA decided to deny extension of the defense and to rely instead on case-by-case prosecutorial discretion. *Id.*

Industry's objections to EPA's action was two-fold: 1) the agency is legally required to provide for such a defense, at least where the discharge does not result in the violation of a water quality standard; and 2) the agency's decision to scrap its 1982 proposal was arbitrary and capricious because, even if the defense (as proposed) could not be met and was therefore "illusory," the agency failed to evaluate potential alternatives. The Court reviewing the industry challenge found that:

> Lacking infallibility, no pollution control technology works perfectly all of the time. Occasionally, through no fault of the operator, the technology will fail, and pollution levels in the effluent will correspondingly rise. Current EPA regulations provide that when permit effluent limitations based on technological capabilities are briefly exceeded as the result of such an incident, the offending plant will nevertheless be deemed to be in compliance with the Act. [40 C.FR. §122.41(n)] This is the so-called "upset defense." . . . because the technology used to satisfy water quality-based permit limitations is no more foolproof than that employed to meet technology-based permit limitations, industry petitioners contend that the rationale for the upset defense extends to water quality-based limitations as well.

Natural Resources Defense Council, Inc. v. U.S.E.P.A, 859 F.2d at 206 (finding meritorious industry's claim that EPA acted arbitrarily when it declined to provide an upset defense to WQBELs). The Court ordered EPA to conduct further proceeding to determine whether to extend the upset defense to violations of water quality-based permit limitations. It is not clear that EPA has ever complied with this court order.

of the upset; (b) the permitted facility was being properly operated at the time of the upset; (c) notice of upset was timely submitted in accordance with Standard Provision V.E.2.b (24 hour reporting); and (d) the Discharger complied with any remedial measures required in Standard Provision I.C (duty to mitigate). *See* Standard Provision I.H.2; *see also* 40 C.F.R. §122.41 (n)(3)(i)-(iv).

In addition to a demonstration that the discharge was temporary[3] and unintentional,[4] SASM can demonstrate that it meets each of the other required factors, as follows:

1. The Upset Occurred Due to an Identifiable Cause.

Federal regulations at 40 C.F.R. section 122.41(n)(3)(i) and Standard Provision I.H.2.a. require that the permittee should show that an upset occurred and identify the cause(s) of the upset. The ACL Complaint itself states that: "On Friday, January 25, 2008, a winter storm struck Marin County. According to SASM's January 2008 Self-Monitoring Report, the peak influent for that day was about 44 MGD. This is 19.3 MGD in excess of the plant's influent flow capacity." *See* ACL Complaint R2-2008-0070 at para. 10.a, at pg. 4. Thus, the Regional Board's own complaint recognized that the upset was due to extreme wet weather event.

"The January 25 and 26, 2008 Storm Event was preceded by a series of smaller storm events starting on January 3 with a combined rainfall of seven inches that, when combined with the December 2007 storms, likely created saturated soil conditions across the SASM tributary service area. The saturated soil conditions would support a rapid sewer infiltration rate response to any subsequent precipitation." *See* LWA Independent External Audit Report at pg. 39. "Based on the rainfall data, this storm can be characterized as a long duration, moderate intensity event. The duration was over 22 hours, the peak 60 minute intensity was 0.49 inches/hour, and the average intensity was 0.22 inches per hour. The impact of the storm event on the hourly influent flows at the SASM Wastewater Treatment Plant is shown on Figure 4. The peak hour flow rate was 33.5 million gallons per day. The influent flows exceeded the SASM outfall capacity (24.7 million gallons per day) for a period of approximately 14 hours (1400 to 0200)." *Id.* at pg. 40. Thus, SASM could not physically push more water through the outfall during this time period.

The January 25 and 26, 2008 storm event approached the intensity of a 20 year return interval storm (0.22 inches per hour at 22 hours). Rainfall recorded at the wastewater treatment plant for the 24 hour period was 3.38 inches. This storm event would have been problematic for many of the wastewater collection and treatment facilities in the San Francisco Bay Area. *Ibid.* In fact, many other dischargers in the Bay Area also had spills on this date, but not all have been issued penalties.

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[3] *See* ACL Complaint R2-2008-0070 at para. 10 describing temporary nature of event.

[4] There is no evidence that this release was an intentional act.

2. The Permitted Facilities were being Properly Operated at the Time of the Upset.

Federal regulations at 40 C.F.R. section 122.41(n)(3)(ii) and Standard Provision I.H.2.b. require that the permitted facilities were being operated properly at the time of the upset. Although the Regional Board alleges this event was foreseeable and that similar events had occurred in the past, the plant and collection system were functioning normally and were compliant during every other day between December 2005 and January of 2008. *See* Proposed ACL Order at pg. 11 (Compliance History). Although the plant and collection system were being operated properly, even well operated plants occasionally exceed effluent limitations and well operated systems have occasional malfunctions. *See Weyerhaeuser Company v. Costle*, 590 F.2d. 1011, 1056 (D.C. Cir. 1978)("Waste treatment facilities occasionally release excess pollutants due to such unusual events as plant start-up and shut-down, equipment failures, human mistakes, and natural disasters."); *Marathon Oil v. EPA*, 564 F.2d 1253, 1273 (9th Cir. 1977)(emphasis added). In the *Marathon Oil* case, the Ninth Circuit Court of Appeal concluded that a facility using proper technology operated in an exemplary fashion would not necessarily be able to comply with effluent limitations one hundred percent of the time, and thus an upset defense in the permit was necessary.[5] The events where SASM has had discharge events such as the one on January 25, 2008 only occurred during extraordinary rain events. *See* ACL Order at pg. 11 ("Both of the above incidents in 2005 occurred during extreme wet weather flooding when Marin County was in a state of emergency.")

3. Notice of the Upset was Submitted Within 24 Hours.

Federal regulations at 40 C.F.R. section 122.41(n)(3)(iii) and Standard Provision I.H require that the permittee submit notice of the upset as required (24 hour notice). The Regional Board was notified on January 26, 2008, at approximately 11:37 a.m., within 24 hours after having knowledge of the alleged noncompliance. On Saturday morning, January 26th, SASM notified the Regional Board by email that:

> "On the evening of Januray [sic] 15 [sic], 2008, at approximately 7:30pm, the Equalization Ponds at Sewerage Agency of Southern Marin wastewater treatment plant exceeded their capacity. The partially treated wastewater overflowed through the emergency overflow and discharged to Richardson Bay. The ponds [sic] capacity was exceeded to high flows caused by the extreme weather conditions experienced throughout the day. At this writing I do not have final figures related to this event. I will have complete details avialable [sic] on Monday. I wanted to get this reported to your as soon

[5] *Id.* at 1273; *see also* proposed Secondary Treatment Rules, 38 Fed. Reg. 10642-3 (April 30, 1973) stating at Section 133.103: "Secondary treatment may occasionally be upset resulting in a temporary increase in the amounts of pollutants discharged in excess of effluent limitations based on secondary treatment. It is recognized that upsets may occur over which little or no control may be exercised. Such occurrences in well designed and well operated treatment works are recognized as representing the inherent imperfections of secondary treatment." (emphasis added).

as possible. Formal wirtten [sic] reports will follow."

See email from S. Danehy to Tong Yin, SFBRWQCB (1/26/08)(attached as **Exhibit B**). The report was acknowledged as received by Ms. Yin on Monday, January 28, 2008 at 8:25 a.m. The typographical error regarding the date being the 25th instead of the 15th was cleared up in a subsequent report, and in an email to Tong Yin on February 5, 2008. *See* email from S. Danehy to Tong Yin, SFBRWQCB (2/5/08)("As we discussed, 1/15 is a typo, and should read 1/25/")(attached as **Exhibit C**).

This original notice was confirmed with a written report within five days as required by Standard Provision I.H.2.c. *See* Report of Overflow on January 25, 2008 from Stephen J. Danehy, certified and dated on January 28, 2008 (attached as **Exhibit D**). Ms. Tong Yin confirmed that the Regional Board had a hard copy of this letter in their files, dated 1/28, which was received on January 30, 2008. *See* Exhibit C (email from T. Yin to Stephen Danehy). Thus, the District timely submitted the required notice.

Nevertheless, the ACL Complaint alleges that SASM "failed to properly report the January 25, 2008, discharge to the California Office of Emergency Services (OES) and the Regional Water Board as required in its permit and by Water Code Section 13271." (*See* ACL Complaint at pg. 5, para. 10.h.) The Permit does not require that OES be notified, only that 24-hour notice be given pursuant to Standard Provision V.E. Water Code section 13271 does not apply as this code section specifically states that "the notification [of OES] required by this section shall not apply to a discharge in compliance with waste discharge requirements or other provisions of this division." Thus, the allegations of failed or improper notice are inaccurate.

4. SASM Complied with Remedial Measure of the Duty to Mitigate.

During the January 25th event, SASM's operators attempted to push as much effluent through the treatment plant as possible without overwhelming the treatment system. In addition, even prior to this event, SASM was in the process of contracting to expand the amount of storage capacity available in the SASM Equalization Ponds

Before this event occurred, Nute Engineering Inc. began looking at various options for the Ponds. A draft plan and timeline for storage capacity improvements to the Equalization Ponds was updated that would restore the berms to elevations established in 2000 plus add an additional 12 inches to the berms and increase the weir elevation by 12 inches. This improvement was included and begun as a Capital Improvement Project for FY 2007/2008 (which was carried over to FY 2008/2009), which was estimated to increase capacity of the ponds from approximately 1.7 million gallons to approximately 2.5 million gallons. *See* SASM May 12, 2008 Letter response to RWQCB's 4/25/08 Correspondence related to Cleanup and Abatement Order (CAO No. R2-2008-0010) and March 12, 2008 13267 Letter (attached as **Exhibit E**). By May of 2008, geotechnical work had already begun, with the first soil borings completed on May 7, 2008. Final design and bid documents were to be available in June of 2008 and improvements were initially anticipated to be completed by the end of September. *Id.* at pg. 2.

The planning and engineering work for this project took a little longer than originally expected as SASM undertook extra geotechnical work (i.e., additional soil borings and an analysis). The work on the pond improvements was awarded to Maggiora and Ghilotti, Inc. by the SASM Board at the August 29, 2008 Board Meeting. The Notice to Proceed was issued on September 23, 2008. Actual work began on October 13, 2008 and, at the time of this submittal, was moving along very well. The project schedule calls for completion in 45 days from Notice to Proceed, which should be approximately November 7, 2008. The final plan and improvements are anticipated to increase the total capacity of the two Ponds from 1.7 million gallons to 3.3 million gallons.

These actions along with the infiltration/inflow correction actions being taken under the EPA Compliance Order should make substantial headway in ensuring that events such as this do not occur again except in extraordinary conditions.[6] As the permit recognizes at pg. 2, para. 7, "[e]ach satellite collection system is responsible for an ongoing program of maintenance and capital improvements for sewer lines and pump stations within its respective jurisdiction.... The responsibilities include managing overflows, controlling Infiltration and Inflow (I&I) and implementing collection system maintenance." SASM is coordinating with these systems, but has limited jurisdiction over the individual collection systems that discharge to its treatment plant.

B. An Affirmative Defense of Upset Exists Against the Penalty Proposed for the January 31, 2008 Spill.

1. The Upset Occurred Due to an Identifiable Cause.

SASM can show that an upset occurred on January 31st, 2008, and can identify the cause(s) of the upset. The ACL Complaint itself states that:

- Prior to leaving the WWTP, Mr. Ehni, the plant operator, "left two of the six effluent pumps in the automatic position. This would be adequate for a flow of 14 mgd," which would have covered a rain event of "approximately a half inch of rain." ACL Complaint R2-2008-0070 at pg. 5, para. 11.a.
- "Rain was steady and heavier than predicted earlier in the day." *Id.* at para. 11.b.
- "The influent flow reached 18 mgd by 4:30 p.m. and an alarm signal was sent out to the alarm company dispatcher," but "the alarm company failed to make contact with any plant operators." *Id.* at para. 11.c.

Thus, the Regional Board's own complaint recognized that the upset was due to a higher than anticipated wet weather event, along with human errors.

[6] *See* LWA Audit at pg. 43 ("Reductions in the RDI/I rates on the order of 30% will be required [in the satellite collection systems] to bring peak flows in line with the SASM Wastewater Treatment Plant Capacity. SASM and its Member Agencies are required by the EPA Administrative Order to conduct capacity and condition assessments in the near term.")

2. The Permitted Facilities were being Properly Operated at the Time of the Upset.

The permitted facilities were being operated properly at the time of the upset. Although the plant and collection system were being operated properly, even well-operated plants occasionally exceed effluent limitations and well operated systems have occasional malfunctions. *See Weyerhaeuser Company v. Costle*, 590 F.2d. 1011, 1056 (D.C. Cir. 1978)("Waste treatment facilities occasionally release excess pollutants due to such unusual events as plant start-up and shut-down, equipment failures, human mistakes, and natural disasters."); *Marathon Oil v. EPA*, 564 F.2d 1253, 1273 (9th Cir. 1977)(emphasis added). Thus, courts have concluded that an upset defense in the permit is necessary and could be used to cover instances of human error, such as the instance in this case where the operator miscalculated the number of pumps needed in reliance on weather reports that turned out to be inaccurate. This miscalculation was compounded by the alarm company's failure to follow the prescribed procedures for calling all the numbers provided until an actual person was contacted and notified of the plant's alarm situation.

Prior to this, SASM had had not problems with Redwood Security, SASM's former alarm company, and relied heavily upon them to monitor equipment alarms and notify the on-call operator of alarm events. Once a week alarm tests were sent to Redwood to ensure the alarms were functioning well and no concerns ever surfaced. However, on the date in question, Redwood merely left a message on an answering machine and did not follow protocol to keep calling home and cellular phone numbers on the list until the alarm could be reported live. Had proper protocols been followed, an operator would have been at the site much more quickly and the spill might have been substantially lessened, if not completely averted.

3. Notice of the Upset was Submitted as Required.

SASM's Permit at Provision I.H.2.c required that SASM provide 24 hour notice of the upset event. The ACL Complaint acknowledges that "[b]oth the Regional Water Board and OES were notified in a timely manner." *See* ACL Complaint at pg. 6, para. 11.g. Thus, this requirement was satisfied.

4. Remedial Measures were Implemented as Required.

Standard Provision I.H.2.d. attached to the SASM permit at pg. D-4 requires compliance with Standard Provision I.C., which provides the following:

> "The discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment."

See SASM Permit at pg. D-1, Provision I.C. (emphasis added). Once the SASM operator became independently aware of the situation, he immediately returned to the treatment plant and

started up additional pumps, thereby solving the problem within minutes. Although the operators began clean up of the treatment plant immediately, SASM also, the next day, hired a contractor to finalize cleanup.

SASM also installed new alarm systems, replacing the former alarm company with new systems that provide greater information and detail on exactly what type of problem is occurring at the plant. A computer based program, WIN 911, works with the Wastewater Plant's SCADA system and monitors all process alarms within the wastewater plant designated as critical. There are over 50 critical alarms, which include the wastewater plant and remote pump stations. The alarm program continuously scans SCADA and reports to the On Call Operator exactly what the alarm is. The On Call Operator must acknowledge the alarm condition when notified, otherwise the alarm program calls the next person on the On Call list.

In the event of a failure of the WIN 911 alarm notification system, SASM has also installed a back up Autodialer System. Active alarms trigger a timer mechanism at the Main Control Panel in addition to activating the WIN 911 program. If the timer is not "reset" within a preset time period, the Autodialer also calls the On Call Operator as well as other staff as necessary. The Autodialer also calls the On Call Operator anytime the Autodialer senses a power loss, no matter how brief. All alarm and SCADA systems have emergency power supplies via the Plant Emergency Generators as well as battery back up units.

B. SASM Has Adequately Demonstrated An Upset, Thereby Prohibiting Enforcement.

All of the above demonstrates that the incidents experienced by SASM were "upsets." Therefore, the District has established an **affirmative defense** against liability for this incident, and no penalty can be assessed for these upset conditions.

The *Marathon Oil* decision cited above is very instructive in this case. In that case, the Court reviewed the effluent limits and determined that "it would be impossible and impracticable to set a standard that could be met 100 percent of the time" even assuming the treatment technology is "employed in an exemplary fashion." *See Marathon Oil,* 564 F.2d at 1272. The Court in *Marathon,* therefore, required EPA to place an "upset" provision in the permit to deal with this event. *Id.* at 1273; *see accord FMC Corp v. Train*, 539 F.2d 973, 986 (4th Cir. 1976), which stated:

> "This court is of the opinion that EPA should provide an excursion provision .... Plant owners should not be subject to sanctions when they are operating a proper treatment facility. Such excursions are provided for ... under the Clean Air Act, ..., and this Court sees no reason why appropriate excursion provisions should not be incorporated in these water pollution regulations." (emphasis added)

See also Portland Cement Ass'n v. Ruckleshaus, 486 F.2d 375, 398-99, n. 91 (D.C.Cir. 1973) *cert. denied* 417 U.S. 921 (1974)(informal treatment of upsets is inadequate; "companies must be on notice as to what will constitute a violation").

A very telling case that could be analogized to apply to sewer spills would be the case of *Essex Chem. Corp. v. Ruckleshaus*, 486 F.2d 427, 432-433 (D.C.Cir. 1973) *cert. denied* 416 U.S. 969 (1974). In that case, the Court held that "variant provisions appear necessary to preserve the reasonableness of the standards as a whole.... The record does not support the 'never to be exceeded' standard currently in force." *Id.* (emphasis added). The Regional Board apparently believes that a similar "never to occur" or zero discharge standard exists in the NPDES permit for sewer spills. Such a standard is technology-based and subject to the upset defense. Otherwise, the standards would not be reasonable as set forth in the *Essex* case, and as required under the California Water Code at section 13000.

Both the Ninth Circuit and the Fourth Circuit Courts of Appeal have held or at least alluded that a permit's "upset" defense should be utilized to offset these expected exceedances. *See Marathon Oil,* 564 F2d. at 1274; *FMC Corp.*, 539 F.2d at 986. SASM encourages the Regional Board to recognize this affirmative defense and deem the January 25th and 31st, 2008, spills to not be a "violation" subject to assessment of penalties. The Regional Board should utilize the "upset" defense to determine that the instances of alleged permit noncompliance contained in ACL No. R2-2008-0070 do not constitute "violations" for enforcement purposes.

II. SASM Has A Valid Bypass Defense for the January 25th Event

SASM is also entitled to the bypass defense in the federal NPDES permit regulations at 40 C.F.R. section 121.41(m) and incorporated into SASM's Permit, Order No. R2-2007-0056 at pg. D-2, Standard Provision G (and in the 1993 Standard Provisions related to bypass) for the January 25, 2008 event. Under the bypass provisions, even though a bypass to waters of the United States is generally prohibited, an enforcement action cannot be taken if:

A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime;[7] and

C) The permittee submitted notices as required under Standard Provisions – Permit Compliance I.G.5, which requires 24-hour notice of an unanticipated bypass. *See* Permit at pg. D-3, Provision I.G.5, and pg. D-7, Provision V.E.

For the reasons set forth herein, SASM qualifies for the bypass defense.

[7] This subsection also states that "[t]his condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance." (40 C.F.R. §122.41(m)(4)(i)(B).) However, this exception is not applicable to the January 25, 2008 events because those events were not "during normal periods of equipment downtime or preventative maintenance."

1. Bypass was unavoidable to prevent severe property damage.

SASM's portion of the collection system was not responsible for the large amounts of flows to the treatment plant on the day of January 25th. On that day, there was no feasible alternative to the bypass once the equalization ponds were full and the flows through the outfall reached maximum capacity. Pushing additional water through the secondary system would have resulted in a washout of the bugs in the secondary system, and closing off flows to the plant would have resulted in sanitary sewer overflows throughout the collection system that would have caused severe and extensive property damage to homes and businesses near those spills. "Severe property damage" is defined to include "substantial physical damage to property," and "damage to the treatment facilities that causes them to become inoperable." *See* Permit, Attachment G Standard Provisions regarding bypass. Both types of damage would have been unavoidable on that day had the bypass not occurred.

2. No feasible alternatives existed besides the ones that were used.

SASM's treatment plant has a dry weather capacity of 3.6 million gallons per day (MGD) and can treat up to 24.7 MGD during wet weather flow periods with flows in excess of this being diverted to the equalization basins. *See* Permit at pg. 1, para. B.1. On the date of the event, the two earthen equalization basins had a total volume of between 1.7 and 2.2 million gallons.

The ACL Complaint recognized that the peak influent flow capacity was about 44 MGD, which is 19.3 MGD in excess of the plant's influent flow capacity. *See* ACL Complaint at pg. 4, para. 10.a. On January 25th, SASM did what it could with its then available resources. It used all available storage, which is an permitted alternative to full treatment, but after that storage was full and the "overwhelming volume of influent" [per ACL Complaint at pg. 4, para. 10.b.] was continuing, there was no way for SASM to immediately do anything else but have overflows occur. Even the Regional Board recognizes this "corresponds to the predictable overflow point based on maximum pumping capacity." *See* ACL Complaint at pg. 4, para. 10.b. As reflected and not rebutted by the ACL Complaint, "SASM asserts that the bypass complied with 'the approved Operation and Maintenance plan' for the facility." *Id.* at 10.d.

As recognized by LWA's independent external audit of SASM's facility, "the WWTP was actually designed to discharge from the equalization basins during rainfall events that exceed a 20-year return period. It is stated on page 3-41 of the original O&M Manual that 'There is the possibility that, during extreme peak flow conditions, the flow to the equalization storage basins could exceed the capacity of both basins.... Although this condition is not expected to occur regularly, it is possible and could result in the discharge of a very dilute untreated sewage into the tidal flats to the east of the plant. This event would occur if the design capacity of the plant is exceeded.'"[8] *See* LWA Audit Report at pg. 20. This plant was approved by both the SWRCB

[8] The LWA Audit also noted: "that restoring the available storage volume to 3.3 million gallons would not protect the WWTP from overflow discharges during all storm events. An engineering study should be conducted to reassess the capacity of the restored basins in terms of the storm return frequency that can be accommodated (design storm). To completely prevent

and EPA with this design when it received state and federal grant funding. Therefore, penalizing SASM for operating the plant as designed serves no real purpose, except solely punitive.

3) SASM Complied with Notice Requirements.

As set forth in section I.A.3. above, proper notice of the bypass event was provided. The ACL Complaint at pg. 9, para. 1.a. states that this event "could not properly qualify as a bypass under the NPDES permit provisions because SASM failed to give the Regional Water Board prior notice and failed to conduct appropriate sampling, as required." The Complaint is incorrect, as prior notice is not required in the case of an *unanticipated* bypass, such as occurred on January 25th. *See* 40 C.F.R. §122.41(m)(3)(ii); Permit at pg. D-3, para. I.G.5.b. and para. V.E.; 1993 Standard Provisions related to bypass ("The discharger shall submit notice of an unanticipated bypass as required by 40 CFR 122.41(*l*)(6)(24 hour notice)"). Moreover, sampling is not required in order to obtain a bypass defense.

The Permit's discharge prohibition III.A. did not apply to this event as this was not related to a discharge "of treated wastewater." *See* Permit at pg. 7. In addition, discharge prohibition III.E. did not apply since this was not a sanitary sewer overflow, as the discharge involved overflow of the equalization basins, not from sanitary sewers. *Id.* The only applicable discharge prohibition would be the prohibition in III.C. regarding "bypass of untreated or partially treated wastewater to waters of the United States." *See* Permit at pg. 7, para. III.C. However, this paragraph states an EXCEPTION as provided for in the conditions in 40 CFR section 122.41(m)(4) and in A.12 of the Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993 (Attachment G).

III. Proper Application of the Enforcement Policy Requires a Significant Reduction in the Proposed ACL Amount.

The imposition of an ACL by the Regional Board requires the exercise of reasoned discretion concerning a number of factors under CWC §13327 and §13385(e). The proper application of the State Water Resources Control Board's ("SWRCB") Water Quality Enforcement Policy (" Enforcement Policy") requires a significant reduction in the proposed ACL. The Enforcement Policy, adopted on February 19, 2002 as SWRCB Resolution 2002-0040, represents a state policy for water quality control that is binding on the Regional Board. (Cal. Wat. Code §§13140, 13146.)

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overflows, the storage volume would have to be increased substantially or the wet weather I/I reduced substantially. Since considerable improvements to the collection systems are likely to be performed as part of the response to the January 2008 overflows, it is recommended that any decision regarding further expansion of the storage volume beyond the 3.3 million gallon capacity be integrated with the collection system work to yield an optimal solution to overflow prevention. Any additional expansion of the equalization basins should be based on accommodation of a design storm event that is accepted by the Regional Water Board, with the understanding that extreme storm events that exceed the design storm could result in unavoidable overflows." *See* LWA Audit Report at pg. 20.

State law requires that the determination of the amount of an administrative civil liability include the consideration of a number of specific factors. (CWC §§13327, 13385(e); Enforcement Policy at pg. 34.) The Enforcement Policy specifies a step-wise approach to applying these factors and establishing the amount of liability. (Enforcement Policy at pg. 35.)

The first step is to set an "initial liability" based on factors related to the discharge: the nature, circumstances, extent, and gravity of the violation, the degree of toxicity of the discharge, and the susceptibility of the discharge to cleanup or abatement. The next step is to determine the beneficial use liability. This involves a review of the designated beneficial uses of the receiving water and a determination as to whether the violation resulted in any quantifiable impacts related to beneficial uses. The initial liability, together with the beneficial use liability, constitutes the "base amount" of the ACL. (Enforcement Policy at pg 37.)

The base amount must then be adjusted to reflect the various factors set forth in the law, including conduct of the discharger. These adjustments reflect factors such as the degree of culpability of the discharger, any voluntary cleanup efforts undertaken, and the discharger's history of violations. The economic benefit to the Discharger, if any, shall be added to the adjusted base amount unless the Regional Board determines that such an upward adjustment is not appropriate.

The record fails to establish that the Regional Board staff followed the requisite steps in preparing the ACL proposed in the Complaint. Although the Complaint determined the maximum potential liability of $34,160,000, the Regional Board gave no explanation for how it arrived at the final value $1,600,000. The ACL recommended in the Complaint is much larger than other recent ACL fines even though there are several mitigating factors, as follows:

A. Nature, Circumstances, Extent, and Gravity of Alleged Violations.

In considering the nature and circumstances in which a violation occurs, the Regional Board must address several factors, including, but not limited to: (1) the number of violations; (2) the duration of noncompliance; (3) the significance of the violation (degree of exceedance and relative importance of the provision violated); and (4) the actual or potential harm to human health and the environment. (*Hawaii's Thousand Friends v. City and County of Honolulu,* 821 F. Supp. 1368, 1383 (D. HI 1993), citing EPA, "Clean Water Act Penalty Policy," Feb. 11, 1985, at 3-5.)

At issue here are two unrelated overflow and spill events. The response to both events was prompt. The overflow and spill events were both comprised of diluted domestic sewage without any toxic industrial contaminants (due to lack of industrial users in the service area). No evidence exists in the record of any toxic effect resulting from the overflow. In fact, the wastewater that entered the receiving waters was diluted since both events occurred during rain events and there were no cited instances of any harm to any beneficial uses. The Regional Board stated that "any discharge of untreated or partially treated sewage would be expected to

raise the level of coliform and other pollutants in the receiving waters." *See* ACL Complaint at pg. 10, para. 1. However, no evidence was cited to confirm this allegation.

As for the January 25, 2008 event, the Regional Board incorrectly states that "the discharges were avoidable through better planning, facility improvements and repairs, adequate storage, and larger staffing." *See* ACL Complaint at pg. 9, para. 1.a. Since SASM has limited jurisdiction over the satellite collection systems, there was nothing that could be done by SASM to correct the influent flows to the plant. While additional storage could have been built, SASM does not have enough land or facilities to store flows of the levels seen that day. Thus, on January 25th, given the facts and reality that existed on that date, this event was not avoidable.

In addition, as to the January 31, 2008 event, the Regional Board failed to give SASM staff any credit for taking the initiative to double-check on the status of the plant and returning promptly to fix the problem that they had not been notified of due to the failure of their contracted alarm company.

Much emphasis is given in the ACL Complaint to the lack of monitoring during these events. However, both events occurred at night during rain events, raising issues related to worker safety and Cal-OSHA requirements. Moreover, the composition of dilute sewage is fairly predictable, so the collection of samples would have merely confirmed what was already known.

B. Susceptibility to Clean Up or Abatement of the Discharge.

In establishing the initial liability under Water Code section 13385, the Regional Board is also required to consider the susceptibility of the discharge to cleanup or abatement. Here, extensive efforts were undertaken to store and lessen the overflows on January 25th, where feasible. On January 31st, had SASM staff not returned to the plant, a greater number of gallons of wastewater would have otherwise overflowed. Moreover, SASM staff and contractors did undertake efforts to clean up the discharges at the treatment plant.

Although the ACL Complaint states that the wastewater "was not recoverable" (*see* ACL Complaint at pg. 10, para. 2.), the Complaint ignored the facts related to abatement of these flows. The sewage was already diluted with storm water and SASM staff did their best to avoid additional flows to the Bay.

Because no calculations or spreadsheets showing adjustments to the maximum ACL amount were provided, it is not clear how or by how much the ACL amount was adjusted under this or any other factor. However, SASM questions whether enough credit and reduction was provided under this factor given the substantial efforts undertaken to avoid and abate the overflow, and given the remedial efforts taken after the fact to modify its alarm system and increase its equalization basin capacity.

C. Degree of Toxicity of the Discharge

As stated above, the overflows from the treatment plant contained diluted domestic sewage without any toxic industrial contaminants. The ACL Complaint recognizes that "given the intensity of the rainfall during both events, some of the toxic effect was likely reduced." (ACL Complaint at pg. 10, para. 3.)

Although an increase in liability was stated to be presumed or warranted (ACL Complaint at pg. 11, para. 3.), no indication of how much the ACL amount was altered, if any, based on this factor. This failure of the Complaint to explain how the factors were used to adjust the ACL amount brings into question the validity of the entire ACL. The basis for any findings or conclusions in any Regional Board order must be clearly articulated, and this basis must be supported by evidence in the record. Orders not supported by the findings or findings not supported by the evidence constitute an abuse of discretion. (*See Topanga Assn for a Scenic Community v. County of Los Angeles*, 11 Cal. 3d 506, 515 (1974); *California Edison v. SWRCB*, 116 Cal. App. 751, 761 (1981); *see also* Enforcement Policy at pg. 35.)

D. Ability to Pay

Under CWC §13385(e), the Regional Board must consider various mitigating factors when imposing an ACL. One of those factors is the alleged violator's "ability to pay." The Complaint incorrectly uses the $2.3 million annual operating budget of SASM to determine "ability to pay." For purposes of determining civil liabilities, the required ability-to-pay analysis must address the ability to pay of the party *above and beyond* its other financial obligations. If SASM were to expend $1.6 million on the proposed penalty, more than 2/3rds of its annual financial obligations to operate and maintain its treatment plant would be utilized to pay the fine.

As acknowledged in the Enforcement Policy, the ability of a discharger to pay an ACL is limited by its revenues and assets. (Enforcement Policy at p. 41) "If there is strong evidence that an ACL would result in widespread hardship to the service population or undue hardship to the discharger, it may be reduced on the grounds of ability to pay." (*Ibid.)*

The Regional Board unduly relies upon the allegation that "SASM has the authority to adjust its rates to accommodate its financial needs." (ACL Complaint at pg. 11, para. 4.) While this may be true, there is no guarantee that an effort to raise rates will be successful. Many communities around California are finding that rate increases are being protested under Prop. 218 and rate increases are made impossible or, at best, substantially delayed. If this were the case, then SASM might not have enough capital to fund the ACL fine, make the improvements required by U.S. EPA in their Compliance Order, and properly fund and operate the treatment plant on a day-to-day basis.

For this reason, and because SASM has already funded substantial improvements to equalization basins and alarm systems to avoid similar occurrences in the future, SASM has requested that a

substantial portion of the fine (e.g., more than 50%) be put toward local Supplemental Environmental Projects (SEPs), such as a lateral repair loan program (*see* **Exhibit A**). Unlike a fine, SEPS will provide a benefit to the local community and environment by reducing sewer overflows, while at the same time creating a benefit to the treatment plant by reducing influent flows during storm events. SASM has also requested reduction or deferral of the fine, or at least the ability to pay any fine over time without the imposition of additional interest payments. All of these requests have thus far been denied by the Regional Water Board's prosecution team.

E. The Regional Board Must Consider the Financial Impacts to SASM.

Any exercise by the Regional Board of its power to assess Administrative Civil Liability against dischargers, particularly those that are public entities, must include consideration by the Regional Board of the impact of its assessments upon those constituents of the entity against which it considers assessing liability. In this instance, the interests of the ratepayers within the SASM, who have borne the expense of the remedial efforts with regard to the overflow and spill events and the costs associated with the substantial new programs and repairs required under the U.S. EPA Administrative Order for the collection systems, will ultimately bear the financial burden of any administrative civil liability in addition to the cost of those efforts. The cumulative effect of these financial burdens must be considered by the Regional Board in connection with its ultimate determination of the level of liability assessed against SASM. (*See accord Associated Homebuilders v. City of Livermore* (1976) 18 Cal.3d 582, 608-609 (must consider any significant or adverse effects of their action on surrounding communities or regions).)

As a local public entity, SASM pays for improvements and any assessments of liability principally through the sewer fees and rates assessed upon the individuals and businesses within that district. These constituents, who as the local residents were likely most impacted by sewage overflows, have already paid for the improvements to the alarm system to ensure no events such as the one on January 31st happen again, for improvements to the capacity of the equalization basins, and for repairs and new programs related to the collection systems. As the entity that owns and operates the treatment plant, SASM will also be called upon to fund any administrative civil liability assessment issued by the Regional Board. This means that the assessment will be borne, as were the costs of addressing and the bulk of the burdens of the overflow events, by the constituents of SASM. The penalty will go into the State's Cleanup and Abatement Fund or to Supplemental Environmental Projects approved by the Regional Board and may not be used on projects that directly benefit these ratepayers. Any benefit resulting to the people and entities most directly affected by the overflow that may result from an assessment of an ACL will be far outweighed by the direct cost of the penalty against SASM. Such an outcome is directly contrary to the consideration required for those directly affected by governmental action that is the underlying theme of the *Associated Homebuilders* case.

F. Ability to Continue in Business

The ACL Complaint states that "no information has been provided indicating that SASM would

be unable to continue its business if it pays the recommended assessment." (ACL Complaint at 11, para. 5.) SASM is not a business, it is a public entity, and therefore the assessment of a large ACL will not have an effect on its "ability to continue in business" as it has no choice but to do so and to continue to perform the valuable public service of treating Marin County's sewage. (*Id.*) Nevertheless, the Complaint fails to recognize that a large ACL amount will adversely impact the operation and maintenance of SASM because each dollar assessed as an ACL will divert funds from SASM's existing budget.

As noted by the federal District Court in refusing to impose a $10 million dollar penalty against the City of San Diego for years of alleged violations:

> "The City is not pleading poverty and has not stated that it is unable to pay the amount requested by plaintiffs. However, insofar as plaintiffs' request would represent a transfer of wealth from the residents of San Diego to the federal treasury, the court is concerned that the only victims in this case will be those residents."

(*United States v. San Diego*, 1991 U.S. Dist. LEXIS 5459, *15, 33 ERC (BNA) 1256 (SD Cal. 1991).) Similarly, if the proposed $1.6 million ACL is imposed, the ratepayers in the SASM service area will be unfairly economically penalized. The ACL Complaint looked only at the overall wastewater budget of SASM, but failed to undertake an analysis of SASM's budget and the impact a large ACL would have on continued levels of operation and maintenance. Every dollar spent on the ACL will be one less dollar available for continued operations and additional maintenance, and SASM might suffer a corresponding budget shortfall, which is already occurring in municipalities throughout the state given the tough economic times.

G. Voluntary Clean Up Efforts Undertaken

The Complaint acknowledges that SASM undertook voluntary clean up efforts "within the WWTP itself" (ACL Complaint at pg. 11, para. 6.), but does not state that it gave SASM any credit for these activities or for SASM's attempts to lessen the overflows from the storage ponds by monitoring and adjusting the flows through the treatment plant during the January 25, 2008 event. Since not all of these efforts were recognized in the discussion of this factor (*see* ACL Complaint at pg. 11, para. 6.), it is unclear whether a proper and reasonable reduction was given for SASM's voluntary cleanup efforts.

H. Prior History of Violations

The Regional Board's Complaint purports to present, as required by Water Code section 13327(f), the "prior history of violations" from in mitigation or aggravation of the liability amount to be assessed. Because the State Board has determined that this prior history is a "conduct factor" used to adjust the amount of administrative civil liability to be assessed, it appears calculated to help determine the level of culpability of the discharger regarding the discharge. (Enforcement Policy at Sec. VII.D., pg. 38.)

Nonetheless, the purported history discussed in the Complaint alleges that "it is likely that events similar to the January 25 discharge have occurred in the past." (ACL Complaint at pg. 11, para. 7.) However, the Regional Board was only able to find one other recent event during the large rain events in January of 2008 and one historic event (from December 30-31, 2005 during a flood event in Marin County). Thus, this "history" fails to recognize the lack of spills at SASM's plant and, instead, appears calculated to maximize the Board's potential assessment rather than to serve the goals that purportedly underlie the concept of administrative civil liability pursuant to Water Code sections 13350 and 13385.

The Regional Board failed to state that the other 2005 wastewater overflow events referenced were due to the reasons similar to the cause of the January 25th event cited in the ACL Complaint (e.g., extreme wet weather). The prior history section also failed to identify that there has not been other overflows from the Plant since 2005 until the 2008 events. That represents is a very small number of overflows for SASM's treatment plant. The prior history also failed to state that there were very few exceedances of NPDES permit requirements at the SASM Plant between 2003 and 2008.

When considering the SASM's compliance history, the Regional Board must take into account the seriousness and impact of any previous violations. Where there is a pattern of repeated similar violations or the violations were intentional, the assessed liability should consider aggregate impacts. (Enforcement Policy at p. 38.) Here, no such pattern of noncompliance exists. Furthermore, the prior overflows listed by the Regional Board have not been demonstrated to have resulted in any specified adverse impacts given the simultaneous flooding.

The purported "violations" cited on pg. 11 of the Complaint, which were presumably introduced in aggravation of the ACL amount by the Regional Board, do not constitute relevant or reliable evidence[9] of negligent, intentional, or culpable conduct, or indicate that future similar releases are more likely. Although the Regional Board appears to have exercised its discretion to not assess administrative liability for these previous "violations,"[10] and despite the fact that these overflows were reported in the manner required by applicable law, the Regional Board now asserts that the existence of these other overflows somehow makes it more likely that misconduct

[9] Because this liability must be assessed following an adjudicative procedure based upon evidence in the record before the Regional Board (*see* Code Civ. Proc. § 11513), the evidence introduced must be, at a minimum, relevant and reliable. (*Aengst v. Board of Medical Quality Assurance*,110 Cal. App. 3d 275, 283 (1980).) Relevant evidence is that evidence which has "any tendency in reason to prove or disprove any disputed fact that is of consequence to the determination of the action." (Evid. Code §210.) Where evidence of prior offenses or acts is offered to prove another fact in the criminal law context, such evidence is only admissible to the extent that: (1) the evidence is material to the fact to be proved or disproved; (2) the evidence possesses sufficient probative value to prove or disprove the fact; and (3) no rule or policy exists requiring exclusion even if the evidence is relevant. (*People v. Daniels* (1991) 52 Cal. 3d 815, 856.) Such evidence may be admitted if there is a "direct relationship" between the prior offense and elements of the charged offense. (*Id.* at 857.)

[10] SASM has requested that these prior "violations" be combined under the ACL being proposed to avoid citizen enforcement for these historic events, but has gotten no firm answer from the Prosecution Team on that request.

by SASM caused the January 2008 overflows and this conduct must be deterred to avoid similar conduct in the future. This conclusion is not supported by any evidence.

The Regional Board's consideration of historic overflows, while failing to consider the relatively low incidence and circumstances of such occurrences within the same system, suggests that the object of compiling this "history" was to ignore the objective evidence of SASM's overall exemplary performance and focus on specific, rare events to inflate the amount of ACL. The existence of these past "violations" is neither probative of the facts asserted by the Regional Board nor consistent with the statutory goals of full compensation for injury and deterrence of future violations.

The Regional Board's consideration to date of the "prior history" factor plainly lacks the type of defined, rational approach contemplated by the State's enforcement policy. Rather than considering SASM's overflow history within the context of its entire history, or the specific relationship between the present overflow and these other incidents, the Regional Board appears to seek to consider past overflows only in the aggregate, without perspective or consideration of the relevance or materiality to the goals of ACL assessment. Thus, the Regional Board's analysis is inconsistent with the policy underlying the ACL statutes and with the proper use of the adjudicative function under California law.

I. Degree of Culpability

The Enforcement Policy specifies that, in considering the conduct of the discharger, higher ACL amounts should be set for intentional or negligent violations than for accidental, non-negligent violations. (Enforcement Policy at p. 38.) As a first step, the Regional Board should identify any performance standards (or, in their absence, prevailing industry practices) in the context of the violation. The test is what a reasonable and prudent person would have done or not done under similar circumstances. (*Ibid.*)

The Complaint concludes that "SASM should not be rewarded for its failure to upgrade its WWTP and collection system if necessary, to properly train its staff, and to assure that its contractors perform their proper functions or a suitable system is put into place." ACL Complaint at pg. 13, para. 8. It is unclear how SASM has been rewarded, when the ACL proposes to fine it well over a million and a half dollars. As stated before, SASM does not own 98% of the collection system and has limited jurisdiction or legal ability to "upgrade" the independent satellite collection systems. As for its own plant, SASM was already working on a plan to upgrade the equalization basins. However, *even if* that work had been completed prior to the January 25th event, overflows would not have been prevented because of the "overwhelming volume of influent." ACL Complaint at pg. 4, para. 10.b.; *see also* footnote 8 above.

The ACL Complaint, using 20/20 hindsight, alleges that the spill may have been prevented if a Contingency Plan had been in place prior to the discharge. (ACL Complaint at pg. 12, para. 8.) SASM had an O&M Manual and an Emergency Response Plan in place at the time of these

events. However, even assuming a specific document called a Contingency Plan was in place, that plan would not have required anything different than what occurred on January 25th when the equalization basins were overwhelmed. The existence of a different plan would not have altered what occurred since the Plant was operated in the manner in which it was designed as recognized by the O&M Manual.

SASM's compensatory measures, such as changes to the Contingency Plan, the addition of additional storage capacity or modifying its alarm systems, should not weigh as a measure of culpability as is proposed currently in the Complaint. State and federal laws of evidence preclude the use of subsequent safety or remedial measures as being used as evidence of culpability. Specifically, California law states that:

> "When, after the occurrence of an event, remedial or precautionary measures are taken, which, if taken previously, would have tended to make the event less likely to occur, evidence of such subsequent measures is inadmissible to prove negligence or culpable conduct in connection with the event."

(Cal. Evid. Code §1151 (emphasis added); *see also* Fed. Rules of Evid. 407 regarding Subsequent Remedial Measures, which also prohibits admissibility to prove culpable conduct.) For these reasons, the subsequent remedial activities put in place after the overflow should not be used as an aggravating factor justifying the Regional Board's action not to reduce the amount of the proposed ACL.

Moreover, as alluded to above, the State and federal government provided grant funding to the SASM treatment plant as designed and built. The State could have, at that time, demanded and paid for additional storage facilities for the rare event that the treatment plant capacity is exceeded by severe wet weather events. That did not occur, and the State should bear some of the culpability for the ensuing events.

J. Economic Benefit or Savings

The penalty proposed of $1.6 million is almost three times the Regional Board's estimated economic savings of $545,600 for SASM. Moreover, the Regional Board's estimates are likely over-estimates based on the following:

1. Plant upgrades

No economic benefit or savings inured to SASM as a result of the overflow. At the time of the overflows, SASM was in the process of upgrading the storage capabilities at the Plant. The upgrades were bid at a cost of $359,359.00. The Complaint's allegation that costs were saved by not having additional storage capacity is ludicrous. (ACL Complaint at pg. 13, para. 9.) The Complaint alleges that should be increasing capacity not by 1 million gallons, but by 2 million gallons. (*Id.*) Even a 2 million gallon storage facility would not have contained all the flows

from the extraordinarily heavy rains that occurred. The conclusion of the Complaint should have been that no economic benefit or savings were realized and, therefore, a reduction from the maximum civil liability was warranted.

Moreover, some credit should be given to SASM's relatively new manager, who began the CIP process when he arrived to make sure that the capacity of the equalization ponds was on the CIP list and being implemented. The manager has also been looking for other creative ways to deal with these types of events in the future, but prior to all of the I&I corrections being completed. For example, he is currently looking to add storage capacity by discussing with Richardson Bay the possibility of using tankage at their old treatment plant to store excess flows during wet weather events. At the time that this event occurred, he was unaware that this was a possibility. This creative problem-solving should be rewarded, not punished.

2. Increase in staffing during rain events

The Complaint also alleged that additional staffing would have made a difference in "the magnitude of the January 2008 discharges." ACL Complaint at pg. 13, para. 9.b. Staffing increases would not have made a difference in the January 25th event as there were staff on site all night monitoring and adjusting the flows as necessary. As such, the conclusion that "the discharges could have been prevented had SASM had in place additional, properly trained staff" is incorrect.

Use of an alarm system by a small treatment plant is not unusual or unreasonable. Given that the type of event that occurred on January 31st has never happened before and is unlikely to happen again given the changes made to the alarm system, a conclusion that 24-hour staffing is required has not been adequately demonstrated.

3. Staff Training Improvements

The ACL Complaint inaccurately states that "[t]raining could have helped to prevent the discharge and their effects on the environment." The Regional Board has not adequately explained how either event would have been different with additional training. The first event was the result of "overwhelming influent flows." Only a reduction in those flows or additional plant capacity would have changed the result, not additional training.

The second event was a series of misjudgments, first by the operator in determining the number of pumps to leave on given the predicted storm size and second by the alarm system failing to follow stated contact protocols. It is not clear that additional training would have changed either of these mistakes in judgment.

4. O&M Improvements

The Complaint alleges that "SASM could have made Operating and Maintenance improvements

that would likely have reduced the magnitude of the discharges that occurred in January 2008." The first event could have only been prevented by large capital repair and replacement projects (mostly in areas outside of SASM's control or jurisdiction), and the second event was caused by human errors. It is unclear, and the Regional Board did not specify, how O&M projects would have changed the outcomes of these events.

5. Alarm system upgrades

Upgrades were not necessary until a failure occurred, which did not happen until the January 31st event. No other incidences of alarm failure can be cited by the Regional Board that would have prompted the need for upgrades. Nevertheless, once the failure occurred, SASM purchased and installed a new system with backup and emergency power, as described above. Therefore, there was no economic savings realized.

K. Other Matters as Justice May Require

The Complaint reveals that, notwithstanding the fact that this is either the largest or one of the largest ACL amounts ever proposed by this region, the Regional Board staff has not proven that the unprecedented penalty amount proposed in this matter fits the circumstances of the overflow.

1. The Regional Board has not Proven the Alleged Violations Occurred.

On page 9 of the ACL Complaint, several alleged "Violations" are listed both the Water Code and the Permit, including the Standard Provisions. No analysis or proof has been offered up by the Regional Board that these violations in fact occurred and are actionable.

For example, the Complaint alleges a violation of Section III.A. of the permit, which states that "the discharge of treated wastewater at a location or in a manner different from that described in this order is prohibited." This prohibition would not apply to an "untreated" wastewater. No analysis has been performed to separate out "treated" from "untreated" wastewater to determine the applicability of this provision to the situations that occurred.

Similarly, the Compliant alleges a violation of Section III.D., which states that the "bypass of untreated or partially treated wastewater to waters of the United States is prohibited, except as provided for in the conditions stated in 40 CFR 122.41(m)(4) and in A.12 of the Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge permits, August 1993." (ACL Complaint at pg. 7.)

The term "bypass" is defined in the Complaint as "the intentional diversion of waste streams from any portion of the treatment facility [40 CFR 122.41(m)(1)(i)(4)[11]]." (ACL Complaint at

[11] It should be noted that this citation to the federal rules is incorrect. The correct citation is 40 C.F.R. §122.41(m)(1)(i).

pg. 7.) The Complaint fails to analyze whether SASM qualified for an unanticipated bypass, and merely states in a later portion of the Complaint that "this diversion of flow could not properly qualify as a bypass under the NPDES permit provisions because SASM failed to give the Regional Board *prior notice* and failed to conduct appropriate sampling. (ACL Complaint at pg. 9.) As stated in the section above related to bypass, prior notice is not required for unanticipated bypass, only for *anticipated* bypass. (*See* 40 C.F.R. §122.41(m)(4)(i)(C) cross-referencing §122.41(m)(3), which in subparagraph (ii) states that unanticipated bypass only requires 24-hour notice per 40 C.F.R. §122.41(*l*)(6)[12].) All unproven allegations, such as the inapplicability of a bypass defense, must be removed from the Complaint and no ACL amount must attach to those alleged violations covered by a valid defense.

As for the allegations of a failure to sample the discharge events, the plant staff were busy trying to keep the plant in operation and controlling the spills, which is also a permit requirement under the duty to mitigate. *See* Permit at pg. D-1, para. I.C. As previously stated, the events occurred at night, during rain events, and there were safety considerations that the Regional Board discounted and didn't weigh against the need for the samples.

2. The Regional Board May Be Preempted from Acting to Enforce Violations under the Clean Water Act Where EPA has Already Acted.

Water Code section 13385 represents the State's enforcement statute required as part of its delegated program under the Clean Water Act. (CWC §§13385, 13370(c); 40 C.F.R. §§123.24(b)(4), 123.27). Under the Memorandum of Agreement between U.S. EPA and the SWRCB, EPA may take the lead in enforcement actions where there is an overriding federal interest. (*See* NPDES Memorandum of Agreement Between the U.S. EPA and the California SWRCB at pgs. 42-43 (Sept 22, 1989).) Reasons for this overriding federal interest include, *inter alia*, where EPA enforcement can reasonably be expected to expedite the discharger's return to full compliance. (*Id.* at pg. 42.) Although EPA normally coordinates with the State, EPA can also take enforcement actions without notice to the State. (*Id.* at pg. 44, para. 5.) Once EPA has taken an enforcement action, the State is arguably preempted from taking additional action to enforce and issue penalties for similar violations under the Clean Water Act. (33 U.S.C. §1319(g)(6)(A).)

In this case, EPA has acted and exercised its discretion not to impose a penalty. EPA has issued Findings of Violation and Order for Compliance ("EPA CO") under the Clean Water Act, which required substantial injunctive relief in the form of contingency plans and upgrades to the collection systems and pump stations. Interestingly, the ACL Complaint makes no mention of this EPA action.

Under sections 308(a) and 309(a) of the Clean Water Act, the EPA CO ordered SASM and the

[12] Section 122.41(*l*)(6) requires that "any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances."

contributing satellite sanitary sewer entities to comply with immediate steps and longer term programmatic procedures to reduce the number of collection system spills. (*See* EPA CO at pgs. pgs. 9 through 17.) There is no expiration date on the EPA CO, and the order remains in effect until terminated. (*Id.* at pg. 19, para. F.) For SASM, this Order requires new Standard Operating Procedures to be in place for the WWTP, approximately $200,000 in flow monitoring additions, and long term pipe repairs to SASM's portion of the collection system estimated to cost between $250,000 to $500,000. These are costs in addition to those in the current annual budget. These costs will need to be raised in addition to the costs proposed to be paid to the Regional Board in penalties. The total costs to SASM from the EPA and RWQCB orders must be viewed in concert to determine the financial impacts. This was not done since the ACL Complaint does not even mention EPA's involvement.

Violation of the CO subjects SASM and the other entities under the EPA CO to civil penalties under sections 309(b)-(d) of the Clean Water Act. (33 U.S.C. §1319(b)-(d).) Therefore, EPA is arguably occupying the field of Clean Water Act enforcement and the State should be preempted from over-filing in a largely duplicative enforcement action that merely adds punitive financial penalties on top of the already required costs associated with complying with EPA's mandatory injunctive relief to control sewer spills and treatment plant overflows.

3. Application of the ACL Statutes Must Serve Some Compensatory Purpose.

The Supreme Court has determined that the "civil penalties" contained in provisions of Water Code section 13350 dealing with oil overflows, are not barred where these penalties are not "simply" or "solely" punitive. (*People ex. rel. Younger v. Superior Court,* 16 Cal. 3d 30, 35 (1976).) The Court has also applied this reasoning to penalties assessed under Water Code section 13385. (*San Francisco Civil Service Assn. v. Superior Court,* 16 Cal.3d. 46, 51 (1976).) However, the liability assessed under these statutes is supposed to compensate the people of the state for the unquantifiable damage that an overflow causes and the money assessed is to be used to aid in cleaning up and abating pollution of state waters. (*People v. Alameda Co.,* 16 Cal.3d. 30 (1976); *San Francisco Civil Service Assn.* at 51.) Such penalties are upheld where such liability was not solely a punitive assessment,[13] but is needed to fulfill a "legitimate and fully justified compensatory function of providing full compensation for all aspects, quantifiable and unquantifiable, of a spill as well as to impress upon the public the necessity of taking every precaution against releases. (*See People ex. rel. Younger v. Superior Court* (1976) 16 Cal. 3d 30 at 35-37.)

Given this legal backdrop, ACL assessments must be consistent with the goal of providing *compensation* for any actual harm caused. Where the amount of an assessment exceeds the amount necessary to achieve the goal of reasonable compensation for any actual harm, that assessment is punitive and improperly claimed from a public entity. Where there is evidence that

[13] California Government Code section 818 provides that public entities shall not be liable for damages imposed primarily as punishment.

quantifies the impact of a particular factor, no additional amount for "unquantifiable" impacts attributable to the same factor should be assessed. Otherwise, an ACL constructed in such manner would be the equivalent of "double-dipping," and would constitute an abuse of discretion.

Here, no basis exists in the record before the Regional Board on this matter that would justify the imposition of an ACL for punitive reasons. The overflows alleged in the Complaint did not result from intentional or malicious conduct, and SASM was already in the process of constructing upgrades to its treatment plant storage capacity.

The record similarly fails to demonstrate any "unquantified" damages that might also require compensation above and beyond the activities being undertaken by SASM on its own and under the EPA CO. The evidence in the record fails to support either an adequate basis for punishment or the need for compensation for unquantified damages.

4. The Proposed ACL Must Comport with State Law and Policy

a. Procedures Applicable to ACL Proceedings Must Be Followed.

Administrative adjudications are subject to certain minimal requirements to satisfy the requirements of due process, either where constitutionally required or required by statute or regulation. Generally, due process requires that parties to an adjudication be provided with the opportunity to be heard in a meaningful time and a meaningful manner, with such other procedural protections provided as necessary in a particular situation. (*Southern California Underground Contractors, Inc. v. City of San Diego* (2003) 108 Cal.App.4th 533, 543.) The California Legislature and/or the State Board have determined that certain basic procedural protections are necessary for the Regional Board's adjudicative proceedings. Ultimately, any decision reached by the Regional Board in this matter must be based upon competent evidence in the record, its findings must be provided in writing, and its evidentiary bases must be set forth therein. (Govt. Code §§11425.10 (a)(6), 11425.50.)

b. The Regional Board has the Burden of Proof for the ACL.

The Regional Board has the burden of proof, except on the establishment of any possible defenses. Burden of proof is an evidentiary concept, which obligates the prosecuting party to establish evidence to a requisite degree of belief. (*Fukuda v. City of Angels* (1999) 20 Cal.4th 805.) In administrative proceedings, the burden of proving charges or allegations of violation rests upon the party making the charges or asserting that violations occurred. (*Parker v. City of Fountain Valley* (1981) 127 Cal.App.3d 99, 113; *Cornell v. Reilly*, 127 Cal.App.2d 178, 183.) The obligation of a party with the burden of proof requires the production of evidence for that satisfies this purpose. (*Pipkin v. Board of Supervisors* (1978) 82 Cal.App.3d 652, 658.) For this ACL, the Regional Board is the prosecutor as well as the initial decision-maker and is, therefore, subject to the burden of proof requirement.

The agency has the burden of establishing that each of the elements needed to establish its case is supported by the weight of the evidence. (Cal. Evid. Code §115.) The weight of the evidence test is also called the preponderance of the evidence standard or the "51%" proof standard. Simply stated, "the scales of justice" must be tipped in favor of the agency's conclusions (*e.g.*, the evidence on one side outweighs or preponderates the evidence on the other side). (*People v. Miller* (1916) 171 Cal.649, 652.) The agency's decision must also contain adequate findings to bridge the analytical gap between the evidentiary record and the conclusion in the decision. (*Topanga Assn. v. City of Los Angeles* (1974) 11 Cal.3d 506, 515.)

Two orders of the SWRCB are relevant to the burden of proof issue. Both SWRCB orders cited below involve ACLs issued to the County of San Diego, San Marcos Landfill, by the San Diego Regional Board:

(1) In Order WQ 2001-01, the SWRCB remanded an ACL decision to the Regional Board for further consideration. The key issue was how many days the landfill had not been adequately covered. The State Board indicated (a) it would review an ACL decision that involved some abuse of discretion, (b) more specific findings were needed to justify what appeared to be an excessive assessment, and (c) a remand was appropriate where the Regional Board had not provided adequate justification for a calculation of the number of days of violations.

(2) After remand, another ACL was also petitioned to the SWRCB. In Order WQ 2002-0020, the SWRCB reduced the amount of the assessment attributable to the number of days of an inadequate cover, and stated (a) the Regional Board has the burden of proving each and every day of violation, (b) reliance on hearsay observation is not sufficient proof, and (c) an ACL must be supported by direct evidence, even though it is likely that more days of violations occurred than can be proven. Based on these factors, the State Board reduced the portion of the ACL attributable to the number of days of lack of adequate cover from $136,500 to $60,600, finding that only 200 days of violations were proven, not the 455 days on which the Regional Board based its ACL.

These precedential decisions place upon the Regional Board the burden of proving all of the elements required to establish an offense or violation for which the issuance of an ACL is appropriate, to justify the amount of the ACL itself, and to disprove the applicability of any legal defenses raised. To the extent the Regional Board cannot meet this burden, no assessment can be legally justified.

IV. SASM REQUESTS

Notwithstanding the above legal arguments made by SASM for the record, SASM has been and remains willing to settle this ACL by paying a reasonable penalty for the events that occurred. However, SASM respectfully requests that the fine either be decreased or the amount that can be put to SEPs be increased substantially.

A. Increase SEP Percentage

The ACL Complaint currently limits the SEP amount to 50% (*see* ACL Complaint at pg. 16) and the Prosecution Team up to this point have not been willing to adjust this amount. SASM believes that this 50% limitation is unfair and not required.

No law or regulation requires limiting SEPs to 50%. In fact, on October 15, 2008, the State Water Board issued a draft policy in which one of the options is a 50% limitation, but that policy has not yet been vetted through a public hearing process and should not be imposed prematurely. Moreover, that is only one of the options out for public comment, with the other alternative being that a SEP percentage can be any amount so long as the State Water Board is notified and can review the percentage on its own motion. These policies are not due for consideration by the State Water Board until February of 2009, and should not be implemented as underground regulations prior to their adoption.

Moreover, holding SEPs to 50% is inconsistent with Regional Board precedent. SASM was sent several SEP proposals by the Regional Board to be used as samples. SASM's proposed SEP percentage was not consistent with these previous cases. For example, South San Francisco's 2006 fine was set at $516,000, with $32,000 to be paid in cash to the Board and $484,000 to be satisfied through development and expense of a SEP. The SEP percentage in that case was almost 94%.

Rodeo's 2007 fine was set at $45,000, with $15,000 to be paid in cash to the State Water Pollution Cleanup and Abatement Account and $30,000 to be satisfied through SEP. The SEP percentage was 67%.

Sausalito's SEP project was for MMPs, so that percentage is set by statute. It should be noted, however, that even for SEPS under the MMP statute, SEPs are not limited to 50%, but may be 50% plus $15,000. *See* Water Code §13385(*l*)(1).

It defies the principles of equal protection under the law to treat similarly situated public entities differently for similar violations. For these reasons, SASM requests that its SEP percentage be set at 81.25% with $1.3 million going to SEPs and the remaining $300,000 to be paid as penalties. To the extent that this request is not granted and the SEP and penalty amount remain at $800,000 each, SASM requests that it be allowed to pay the penalty amount over 3-4 years, without additional interest being assessed.

B. ACL Penalty Coverage

SASM requests if the ACL Penalty is not reduced that the ACL cover all spills in the last five years including those mentioned in December of 2005, so that SASM can rest assured that additional penalties are not forthcoming. SASM also requests that the Board consider deferring some portion of any penalty so long as SASM complies with the EPA CO, or to allow SASM to pay the penalty over time without interest.

C. SEP Proposals

In lieu of some percentage of the ACL penalty, SASM proposes to undertake a SEP or SEPs, which remain subject to approval by the Regional Board. The primary SEP proposed will assist residents within the SASM service area, through loans, for up to 100% of the replacement cost of their leaking and failing sewer lateral connections up to $7,000 per connection. A portion of the SEP funds will also go for grants to low or fixed income households and for public education activities to support the lateral repair program. This program is intended to reduce the amount of infiltrating water (I&I) into the sewer system and reduce the influent to the SASM WWTP particularly in wet weather events.

We understand that based upon the State Water Board's enforcement policy criteria that SEPs should be an extension of SASM's commitment to improving the quality of the waters of the State, benefit the public at large, and that any SEP should represent a program that is far above what is required of SASM in its regular NPDES permit. SASM believes that this SEP project would accomplish that goal since SASM's permit does not regulate the satellite collection systems and SASM does not have any laterals attached to its portion of the collection system.

SASM has also visited the Board's web site to view other suggested SEP's within the Marin County and regional bay area. Limited programs are available within our specific region and, therefore, SASM proposes the following program. However, other potential SEP projects have been attached herein as **Exhibit A**, that SASM would also be willing to undertake should its primary proposal be denied.

Title: **Lateral Replacement Loan Program (LRLP)**

Purpose: To reduce I&I at its primary source and the potential for sanitary sewer overflows (SSOs) and excessive influent to the SASM WWTP by assisting residents of private buildings within the satellite collection systems attached to SASM in repairing and replacing leaking sewer lines that otherwise might go unrepaired.

Description: National studies have shown that many SSOs can be traced to poor lateral maintenance and repair by residents. Old pipes crack, can have open joints, or become misaligned resulting in I&I. In addition, tree roots or other materials (rags, oil and grease) traveling through the pipe get caught and back up the system. Clogs in a lateral can cause backups to occur and potentially can cause

spills into the street. The cost to repair laterals is expensive ($5000-$7000) and many residents opt to pay for regular cleaning or live with slow drains rather than replace lines that have opened to root intrusion and alignment problems. This program would provide loans up to 100% of the cost to replace the lateral up to $7,000 per connection as an incentive.

SASM proposes to use the flow monitoring data it will be gathering this winter (starting in December) to determine the main areas of concern. During this same time, SASM proposes to start a Public Education blitz informing the area residents about the concerns related to lateral sewers and the availability of funds to assist in repairs/replacement. SASM will then identify the "hot spots" to target for smoke/video inspections/repairs.

SASM intends to approach homeowners with leaky laterals and set up a financing plan with them. SASM prefers a loan program so that monies repaid can be used to fund additional lateral repairs in the future.

SASM will set up the contractors and proposes to begin repairs in Spring and Summer of 2009. The projects will continue until all problematic laterals are repaired or replaced.

Costs: SASM proposes that $1,000,000 is set aside under the SEP for lateral loans to be made over the next five years. An additional $200,000 would be set aside for grants to low income or fixed income residents who can demonstrate an inability to repay a loan.

An additional component to this program is community outreach and education that informs the public about I&I problems and how they can help resolve those issues. SASM proposes to put $100,000 in SEP funds to this effort.

Any remaining funds not spent at the end of five years will be put toward another SEP project requiring funding at that time that is approved by the Regional Board.

SASM sincerely appreciates the Board's consideration of its requests and would like to meet with the Prosecution Team again prior to the hearing to determine whether proceeding to the December 10th hearing is necessary.

Respectfully submitted,

DOWNEY BRAND LLP

Melissa A. Thorme

963230.1

cc: Stephen Danehy, SASM
Jack Govi, Legal Counsel

EXHIBIT A

SASM SEP PROPOSALS

1. Preferred SEP Project – Sewer Lateral Loan Program

SASM was asked by RWQCB staff to present six (6) SEP projects. SASM's preferred proposal is a Sewer Lateral Loan Program. Such a program is important as studies of older sanitary sewer collection systems show that pipes, connections and maintenance holes are increasingly falling into disrepair. Leaky pipes allow a significant amount of ground water and stormwater to enter and exit the sewers that during rain events, which can create huge impacts on the Wastewater Treatment Plant (WWTP) flows. Some national studies suggest that up to 50% of WWTP flows come from private sewer lateral pipes (the pipe that links the house or business to the public sewer lines).

Thus, while many sewer districts are now video-inspecting their collection systems, that data misses a large amount of privately owned pipe footage that also needs repair. This proposal from SASM proposes to create a revolving loan fund focused just on these private laterals using SEP resources generated from the RWQCB penalty proposed to be levied in December of 2008.

Using concepts generated from a pilot project by Tamalpais Community Services District (TCSD), SASM proposes that up to $1,000,000.00 be approved as a SEP to allow SASM to provide low interest loans of up to $7,000.00 to approximately 150 private properties located within the SASM sewage collection basin.

The program would propose receiving applications from within the 18,000 residential properties in the SASM WWTP service area on a first come, first served basis. Each applicant will be required to provide a video of their private sewer lateral. This work would be done by an approved bonded and licensed contractor with the correct equipment. The cost of this video ($200 – 400) would be folded into the loan amount if the property participates in the full lateral repair or replacement program. Video providers would provide a statement of qualifications to SASM to help create a list of approved vendors that would be provided to all participants.

Once the video is reviewed and the parameters of the repairs or replacement laid out, SASM would provide a list of certified contractors that would undertake the work so the property owners could get replacement quotations. SASM would hire an inspector to go over the work that needs to be done and follow the construction process so it is done correctly. The inspector would sign off on the job and provide that information to SASM. These bills would be paid by SASM and then posted for a five year payment plan on each property tax statement for collection. It is anticipated that the loans would be charged 5% interest, although lower or no interest loans could also be considered in special circumstances.

By focusing on a large number of properties in a fairly tight geographical area, there could be increased cost efficiency and lower overhead. Contractors knowing they might have a large number of repairs to do would provide lower per foot repair costs through the purchase of supplies on a quantity basis. In the case of the TCSD model, nearly 60% of all residential properties in the project work areas took advantage of the pilot project. Many of the other 40% had previously done repairs. It is estimated that 10% chose not to participate.

The program is easy to administer and tremendously helpful to residents, many of whom may not even know their lines are in bad shape and even leaking into their property. Starting with a list of all properties that have had spills in the last five years, SASM will create a potential applicant pool of nearly 400 properties.

SASM will also combine this program with $100,000 for an effective public awareness campaign and $200,000 for direct grants to very low or fixed income households that would suffer severe financial hardship in paying back even a low interest loan.

2. Arroyo Corte Madera Creek Aquatic Habitat Improvement Project

Purpose: Improve aquatic habitat by (1) reducing the frequency and severity of sewage spills into the lower creek and bay through flood reduction measures that reduce stormwater inflow into the sanitary sewer system and (2) eliminating barriers to fish passage. *See* additional description attached.

Cost: As shown in Exhibit A.2, the total cost is $2.8 million. SASM could contribute a portion of these costs depending on the ultimate percentage allowed for the SEP.

3. Coyote Creek Flood Management and Marsh Enhancement Project

Purpose:
- Improving management of the lower reach of Coyote Creek by reducing the need for ongoing maintenance dredging.
- Improving the habitat value of the wetland and upland areas of the project.
- See additional description and maps attached in Exhibit A.3.

Cost: SASM does not have complete cost data, but SASM could contribute a portion of these costs depending on the ultimate percentage allowed for the SEP.

4. Richardson Bay Water Quality Monitoring Program

Purpose: A TMDL for Pathogens in Richardson Bay was recently adopted. One of the sources was SSOs from surrounding sewage collection systems. The program will collect and generate data on the baseline health of the Bay waters and help provide information necessary to improve and protect that health. For more information, see Exhibit A.4.

Cost: $125,000.

5. Richardson Bay Audubon Center and Sanctuary Aramburu Island Restoration Project

Purpose: This project seeks to expand critical salt marsh habitat and restore native plant communities on Aramburu Island in Richardson Bay. For more information, see Exhibit A.5.

Cost: $1,975,000. SASM could contribute a portion of these costs depending on the ultimate percentage allowed for the SEP. SASM would also request that some of the penalty monies paid be requested back from the State Water Board Cleanup and Abatement Account to pay for this important project.

6. Other SEP Projects

Other SEP projects are listed on the RWQCB's SEP list. SASM would be willing to consider any of those projects in Marin County near the SASM facility. In addition, there is also a County Watershed Program which will provide a framework to integrate flood protection and environmental restoration to protect and enhance Marin's watersheds. Mill Valley is participating (*see* Exhibit A.6) and SASM could also contribute SEP funds to this project.

Project Number	ACMdP Flood 1, 2; Storm Drain 1; Fish Passage 1, 2
Project Name	Arroyo Corte Madera Creek Aquatic Habitat Improvement Project
Project Location	Arroyo Corte Madera del Presidio Creek – Mill Valley, CA
Purpose	Improve aquatic habitat by (1) reducing the frequency and severity of sewage spills into the lower creek and bay through flood reduction measures that reduce stormwater inflow into the sanitary sewer system and (2) eliminating barriers to fish passage.
Project Components	**ACMdP Flood 1**: Construct a low earthen levee up to 2 feet high (1) just downstream of the gage along the right bank adjoining the parking lot and (2) from the Valley Circle Bridge downstream to Camino Alto. This measure would keep flows up to the 5-year flood event in the channel. **ACMdP Flood 2**: Remove and replace the existing concrete weir structure at the gaging station with a structure that does not obstruct flow and the transport of bedload sediment. This measure would induce the natural scour and lowering of the bed along an approximately 250 foot reach where the existing structure has contributed to up to 2 feet of sediment deposition over the years. The scouring would lower the bed and thereby increase the conveyance capacity to the extent that flows up to the 5-year flood event would be kept in the channel. Lowering of the bed would improve outflow from the Montford storm drain, which regularly becomes clogged at its outlet by sediment deposited in the channel bed. Removal of the existing concrete weir structure would result in loss of pool habitat for resident and anadromous salmonids. Replacement pools, targeting Coho salmon in particular, would need to be constructed at suitable locations. The removed weir would also need to be replaced with a suitable grade control structure and the gaging station re-equipment and re-rated. **ACMdP 3:** Widen the channel over about a 150 foot constricted reach that includes two pedestrian bridges (one public and one private). Remove and replace with similar bridges with higher and longer spans. This measure would remove the channel constriction and the bridge obstructions and would keep flows up to the 5-year flood event in the channel. **Storm Drain 1**: Install an overflow storm drain

	connecting the Montford catch basin to the Reed Creek storm drain. This measure would provide a relief drain for excess runoff that would otherwise overload the Montford catch basin and flood the Montford-Miller intersection. **Fish Passage 1**: Install a notch along the bottom of the concrete culvert at Locust St. This measure would provide flow depth needed for fish passage during low flow conditions. **Fish Passage 2**: Remove and replace the Cascade Road culvert on Old Mill Creek with a new culvert. This measure would eliminate the existing barrier and provide flow depth and velocity needed for fish passage.
Capital Cost Estimate	**ACMdP Flood 1:** Construction $500,000 Design/permitting/R-o-W 100,000 Subtotal $600,000 **ACMdP Flood 2:** Demolition $ 20,000 Gage structure reconstruction 25,000 Gage re-equip/re-rate 25,000 Artificial pool creation 250,000 Design/permitting 110,000 Subtotal $430,000 **ACMdP Flood 3:** Remove/Replace Bridges $200,000 Widen channel 300,000 Site work (walkways, landscaping) 300,000 Design/permitting/R-o-W 250,000 Subtotal $1,050,000 **Storm Drain 1:** Construction $100,000 Design 20,000 Subtotal $120,000 **Fish Passage 1:** Construction $250,000 Design/permitting 50,000 Subtotal $300,000 **Fish Passage 2:** Construction $250,000 Design/permitting 50,000 Subtotal $300,000 Total $2,800,000
Implementation Issues	**ACMdP Flood 1**: • Levee would be built on private property in some

	locations; right-of-way required. • Integration with overall ACMdP Creek watershed management plan required. **ACMdP Flood 2**: • Removal/replacement of the gaging station would require approval from and coordination with MCDPW (owner and operator). • Toe protection may be necessary in the future to prevent undermining of the banks; exploratory geotechnical and structural investigation of adjacent building foundations required to assess risk and need for toe protection; progression of natural scour and lowering of the bed and would need to be closely monitored. •Potential to transfer flooding to downstream reaches needs to be evaluated; possible mitigation measure may include downstream levees along both banks from Valley Circle to Camino Alto. • Suitable locations and feasibility of constructing replacement pools needs to be evaluated. • Regulatory permits required from USACOE (ESA Sec. 7 consultation w/NMFS), CRWQCB/SF, CDFG. • Integration with overall ACMdP Creek watershed management plan required. **ACMdP Flood 3**: • Certain elements of this measure would occur on private property (e.g., private ped. bridge removal/replacement, channel widening, site work); private property owner approvals and right-of-way required. • Walkways and ped. bridge approaches would need to meet ADA requirements. • Regulatory permits required from USACOE (ESA Sec. 7 consultation w/NMFS), CRWQCB/SF, CDFG. • Integration with overall ACMdP Creek watershed management plan required. **Storm Drain 1**: • None **Fish Passage 1 and 2**: • Regulatory permits required from USACOE (ESA Sec. 7 consultation w/NMFS), CRWQCB/SF, CDFG. • Integration with overall ACMdP Creek watershed

	management plan required. • Fish Passage 1 occurs on private property but within drainage easement; R-o-W from private property owner may be required.
Project Precursors	**ACMdP Flood 1, 2, and 3:** • Informal consultation and concurrence on these projects should be obtained early from NMFS, CRWQCB, and CDFG. • Implementation should await completion of modeling portion of Floodplain Mapping Study, scheduled for March 2009. **Storm Drain 1:** • Implementation should await completion of project engineering feasibility study, scheduled for October 2008. **Fish Passage 1 and 2:** • Informal consultation and concurrence on these projects should be obtained early from NMFS, CRWQCB, and CDFG.
Project Benefits	• Reduction in flooding and flood damage. • Reduction in inflow into sanitary sewer system and concomitant reduction in overloading to wastewater treatment plant during storm events. • Reduction in the frequency and severity of storm-induced sewage spills to the lower creek and bay and a concomitant improvement to water quality and aquatic habitat. • Improvement in fish habitat in terms of fish passage and pools (particularly for Coho).
Goals/Objectives Addressed	• Flood control • Water quality • Aquatic habitat • Erosion control and sedimentation
Maintenance Activities	**ACMdP Flood 1** • Regular inspection and maintenance of levees. **ACMdP Flood 2:** • Monitoring of the scour and lowering of the channel bed and potential undermining of the banks until equilibrium is reached. **ACMdP Flood 3:** • None **Storm Drain 1:** • None **Fish Passage 1 and 2:** • None

Annual Maintenance Cost Estimate	**ACMdP Flood 1:** • $2,000/year **ACMdP Flood 2:** • $4,000/year
Notes	
References	• Stetson Engineers Inc., "Appraisal-Level Flood Study for Arroyo Corte Madera del Presidio Creek, Mill Valley, CA." July 2007. • Santina & Thompson, Inc., "Storm Sewer Study at Montford Ave./Miller Ave. – Draft." March 16, 1999. • Ross Taylor and Associates, "Marin County Stream Crossing Inventory and Fish Passage Evaluation, Final Report." July 2003.

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Coyote Creek Flood Management and Marsh Enhancement Project

This document is a summary of the proposed Coyote Creek Flood Management and Marsh Restoration Project being led by the Marin County Flood Control and Water Conservation District (the District). On behalf of the District, Philip Williams and Associates, Ltd. (PWA) has briefly documented the project background and the status of project planning to allow review and input by appropriate resources agencies.

PROJECT BACKGROUND

Coyote Creek drains a 3.5-square mile watershed in Tennessee Valley and discharges to Richardson Bay. Over the past 150 years the Coyote Creek system has been altered by floodplain development, loss of wetlands and flood control improvements. In 1964 the U.S. Army Corps of Engineers (USACE) implemented a flood control project designed to reduce flooding along the lower reach of Coyote Creek (USACE, 1959) (Figure 1.1). Since that time, the District has been responsible for maintaining the design conveyance capacity in Coyote Creek through channel dredging and levee maintenance.

To maintain flow conveyance the upper reaches of Coyote Creek, upstream of the Highway 1 Bridge, have been dredged every 7 to 10 years. The project reach downstream of the bridge (here refereed to as Coyote Creek Lower Reach) has only been dredged twice since it was constructed in 1964. As demonstrated by the dredging records, sediment deposition is a more significant problem upstream of Highway 1, and the need for dredging in that reach will continue. In 2004 Philip Williams and Associates, Ltd. (PWA) conducted a flood study to performed an updated peak flow analysis and evaluate the current capacity of the channel. As part of this study, PWA recommended evaluating the potential to increase natural channel scour by enhancing marshplain connectivity in the lower reach (PWA, 2005).

The purpose of this study is to evaluate options for combining wetlands enhancement with flood management objectives in Coyote Creek Lower Reach, creating a win-win for flood management and habitat restoration. The project area includes Coyote Creek Lower Reach (between Highway 1 and the trestle bridge) and the north and south basins of Bothin Marsh. The main project goals include:

- Improving management of the lower reach of Coyote Creek by reducing the need for ongoing maintenance dredging
- Improving the habitat value of wetland and upland areas in the project area.

HISTORY AND LANDSCAPE CHANGE

Historic maps and aerial photos describe changes to the creek and tidal wetlands over the past 150 years. As mapped in a relatively undisturbed state in 1850 the area now known as Bothin Marsh comprised open mudflats seaward of tidal marshes. By the late 1800's the Highway 1 road was built along the shores of Richardson Bay and at Tennessee Valley cut across the seaward edge of the vegetated marshes (Figure 2-1). Further seaward construction of the Northwest Pacific railroad truncated the mudflat resulting in accumulation of sediments deposited from Coyote Creek. The lower channel of Coyote Creek meandered through what is now the south basin of Bothin Marsh and discharged to the bay via a former railroad bridge (at the current location of the smaller Bay Trail bridge).

By 1946 the marsh between Highway 1 and the railway had advanced towards the bridge opening, defining the topography that broadly exists today; and by 1958 extensive urbanization had occurred inland and around Highway 1. In the early 1960's, the USACE instigated a flood control project to reduce flooding along the lower 7,100 feet of the Coyote Creek (USACE, 1959). The project entailed installing a concrete-lined channel for approximately 3000 feet upstream of Flamingo Road, and dredging the lowor 4,200 feet of earthen channel. Coyote Creek Lower Reach, downstream of Highway 1, was relocated to its current location, straightened and substantially enlarged. The marsh area to the north (south basin of Bothin Marsh) was partially drained by a flap gate, though subject to high tidal and fluvial flow from Coyote Creek. The site has also been subject to fill placement adjacent to the excavated coyote creek and areas adjacent to upland, as well as dumping of rubble. In the late 1970's the flap gate that drained the south basin of Bothin Marsh was replaced by a small bridge allowing tidal excursion to the site and re-establishing tidal wetlands. Over time the area adjacent to this bridge has evolved into a wetland that supports shorebird populations and is popular with the local community.

The north basin of Bothin Marsh lies outboard of the bay trail and up estuary from the south basin (Figure 1-1). This is not a natural wetland but a result of dredged material placement, which began in the early 1960s. A material containment berm was constructed across marsh and mudflat, and by 1963 was it was filled with dredged material from Shelter Bay and the intertidal channel to Mill Valley. The site was not connected to the tides until some time in the 1970's or 1980's, when a number of breaches opened up in the north side of the berm allowing some interior channels to form.

Around 1980 improvements were made to the railroad line to incorporate this pathway in the Bay Trail.

EXISTING BIOLOGICAL CONDITIONS

Much of Bothin Marsh lies within the range of intertidal elevations. While the wetlands surrounding the mouth of Coyote Creek have been impacted by human activity, they are not without ecological value. These ecological values vary spatially and offer a range of habitat types and opportunities for enhancement. In its current configuration the lower areas of the south basin of Bothin Marsh is

recognized by the local birding community to be of relatively high value. However, it is unclear at this stage as to whether these lower areas of mixed vegetated marsh and open mudflat and high channel density will maintain these ecological values over time or whether the site will change as sedimentation continues. Apart from a patch of Bird's Beak (*Cordylanthus maritimus*) the rear of the Bothin Marsh offers relatively low ecological value because of impacts of historically places fill and because of predator access.

Botanical Communities

In 2006 WRA mapped vegetation communities in Bothin Marsh based on existing plant community as described in the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). The vegetation communities present at the site are shown on Figure 3-1.

WRA also mapped potential wetlands and waters within the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and San Francisco Bay Conservation and Development Commission (BCDC), and sensitive biological communities, as defined by the California Environmental Quality Act (CEQA). All of the biological communities onsite, except for upland/levees, are considered sensitive communities under CEQA and are regulated by the Corps, RWQCB and BCDC. In addition, mudflats/tidal channels are also regulated by California Department of Fish and Game (CDFG).

Bird Communities

The south basin of Bothin Marsh is popular and recognized location for viewing shore bird populations.

Avocet Research Associates carried out surveys of Clapper Rail and Black Rail in 2006 and 2007 as part of a region-wide population assessment. A small population (4-5 pairs) of Clapper Rails were found to be resident in Bothin Marsh complex, but were only identified during the breeding season in the north basin (ARA, 2007). Individuals have been reported during winter months in the south basin. Availability of suitable quality channel habitat and predator access may be limiting population numbers. The north basin has a low channel density (few channel per unit area of marsh) but some of those appear suitable for habitat to support Clapper Rail. The south basin has a high density of channels but appear too shallow to support breeding populations of this species. The upland margins of the south basin provide access for mammalian predators, and rats are resident in rubble on site.

Black Rails were not detected in Bothin Marsh.

OPPORTUNITIES AND CONSTRAINTS

We have identified the following opportunities and constraints for habitat enhancement and flood management improvements.

Opportunities

1. Increase tidal prism flowing through Lower Coyote Creek and increase channel scour.
2. Utilize existing tidal prism in the south basin of Bothin Marsh.
3. Remove fill and restore tidal wetlands in the south basin of Bothin Marsh.
4. Remove fill and improve ecological value of wetlands in the south basin of Bothin Marsh.
5. Reduce dredging in Lower Coyote Creek and restore a natural channel edge.
6. Restore channel habitat in the south basin of Bothin Marsh.
7. Enhance high tide refugia and isolate from predators.
8. Improve circulation in habitat.
9. Phase project to maintain ecological value and flood management.

Constraints

1. Potential ecological impacts to high value areas of the south basin of Bothin Marsh.
2. Possible impacts of a phase lag on Coyote Creek tailwater flood conditions.
3. Maintaining location and access to power towers in Bothin Marsh (north and south basins).
4. Providing equipment access for future dredging.
5. Flood protection for adjacent lands.
6. Future habitat projections are unclear.
7. Endangered species (flowering Northern Californian Birds Beak, feeding Clapper Rails) at locations on site.

RESTORATION ALTERNATIVES

We have developed the following for conceptual alternatives (shown in Figures 4-1 to 4-5):

Alternative A – No Action (existing conditions)

Alternative B – Reconfigure channel outlet of south basin

Alternative B.1 – Reconfigure channel outlet and lower fill areas in south basin

Alternative C – Lower upland and fill areas in south basin

Alternative C – Lower upland and fill areas in south basin (more extensive area)

All alternatives seek to increase tidal prism in the lower reach of Coyote Creek to increase natural scour. Increased tidal prism is achieved by redirecting existing drainage and/or excavating high areas to marshplain elevation (or lower). Project benefits, such as increased tidal prism, project longevity, and potential for natural channel formation, would be increased by excavating below marshplain elevations (e.g. to mudflats). Generally, excavation areas are focused on rears areas of Bothin Marsh South to remove artificial fill, improve high tide refugia, and limit mammalian predator access.

Hydraulic Design Criteria

Coyote Creek Lower Reach is periodically dredged to attain the design channel dimension USACE,1959). This channel dimension is sufficiently large enough to convey the design flow discharge and provide the required freeboard (0.5 and 1.0 feet).

Restoring tidal wetlands offers the potential to maintain channel scour as a result of the daily flood and ebb of tidal waters from the restored wetland to the Bay. The existing tidal prism would need to be increased by approximately 40 acre-feet to sustain the design channel dimension without dredging.

Tidal wetlands restoration on fill areas is most appropriately achieved by excavating down to an elevation below that at which marsh vegetation establishes. Over time restored mudflat (~ elevation 0.0 feet NGVD) will build up to marshplain elevation (~ elevation 3.2 feet NGVD) with an associated channel network Consequently the available tidal prism will diminish towards a long term equilibrium volume as the marsh accretes. Table 1 provides estimates of initial and long-term (equilibrium) tidal prism for each alternative.

Table 1. Tidal Prism Created by Restoration Alternatives

	Area (Acres)	Initial Tidal Prism (Acre feet)	Long-term Tidal Prism (at equilibrium)(Acre feet)
Alternative A	NA	NA	NA
Alternative B	22	35.0	9.5
Alternative B'	30	56.1	13.5
Alternative C	7	23.4	2.6
Alternative C'	10	25.6	3.4
Target		**40**	**40**
	Optional Area (for additional tidal prism)		
Martins Landing	2	6.1	0.6
South channel (Area 5)	1	3.2	0.3

Note: Tidal prism values to be refined

Change In Habitat Extent

Table 2 describes the conceptual change in habitat quantities for each restoration alternative, including the potential additional option of restoring habitat on industrial land at Martins Landing. These values will be subject to refinement as design progresses. Over time created mudflat will accumulate sediment, and evolve into vegetated marsh with a channel network.

Table 2. Habitat Areas Created by Restoration Alternatives

	Mudflat	Vegetated Marsh	High Tide Refugia	Upland	Total Area (acres)
	<0.75 ft NGVD (acres)	0.75-3.2 ft NGVD (acres)	3.2-4.56 ft NGVD (acres)	>4.56 ft NGVD (acres)	
Alt. B					
Existing	0.05	0.31	0.27	0.04	0.67
Alternative	0.96	0.00	0.00	0.00	0.96
Change	0.91	-0.31	-0.27	-0.04	
ALT B-1					
Existing	0.06	2.10	3.86	2.43	8.45
Alternative	7.37	0.44	1.22	0.00	9.02
Change	7.31	-1.66	-2.64	-2.43	
ALT C					
	<0.75 ft NGVD (acres)	0.75-3.2 ft NGVD (acres)	3.2-4.56 ft NGVD (acres)	>4.56 ft NGVD (acres)	Total (acres)
Existing	0.00	1.87	3.86	2.43	8.16
Alternative	6.90	0.45	1.25	0.00	8.60
Change	6.90	-1.42	-2.61	-2.43	
ALT C-1					
	<0.75 ft NGVD (acres)	0.75-3.2 ft NGVD (acres)	3.2-4.56 ft NGVD (acres)	>4.56 ft NGVD (acres)	Total (acres)
Existing	0.00	3.39	4.76	2.56	10.71
Alternative	7.29	2.34	1.95	0.00	11.58
Change	7.29	-1.05	-2.81	-2.56	
Southern Restoration Region					
	<0.75 ft NGVD (acres)	0.75-3.2 ft NGVD (acres)	3.2-4.56 ft NGVD (acres)	>4.56 ft NGVD (acres)	Total (acres)
Existing	0.00	0.00	1.11	0.29	1.40
Alternative	1.17	0.41	0.08	0.00	1.66
Change	1.17	0.41	-1.03	-0.29	
Martins Landing					
Existing	0	0	0	0	0
Alternative	0	0	0	0	6.1[1]
Change	6.1	0	0	0	6.1

[1] Area of developed land

REFERENCES

ARA, 2007. *Lower Coyote Creek Flood Management and Marsh Enhancement Project: Evaluation of Current Conditions and Opportunities for Habitat Improvement.* Draft report to Marin County Flood Control and Water Conservation District. Avocet Research Associates.

PWA, 2005. *Reassessment of Coyote Creek Channel Management Requirements.* Prepared for Marin County Flood Control and Water Conservation District. Philip Williams and Associates, Ltd, San Francisco. Project Number 1721.00.

US Army Corps of Engineers (USACE). 1959. Detailed Project Report on Coyote Creek, Marin County, California. US Army Engineer District, San Francisco, CA.

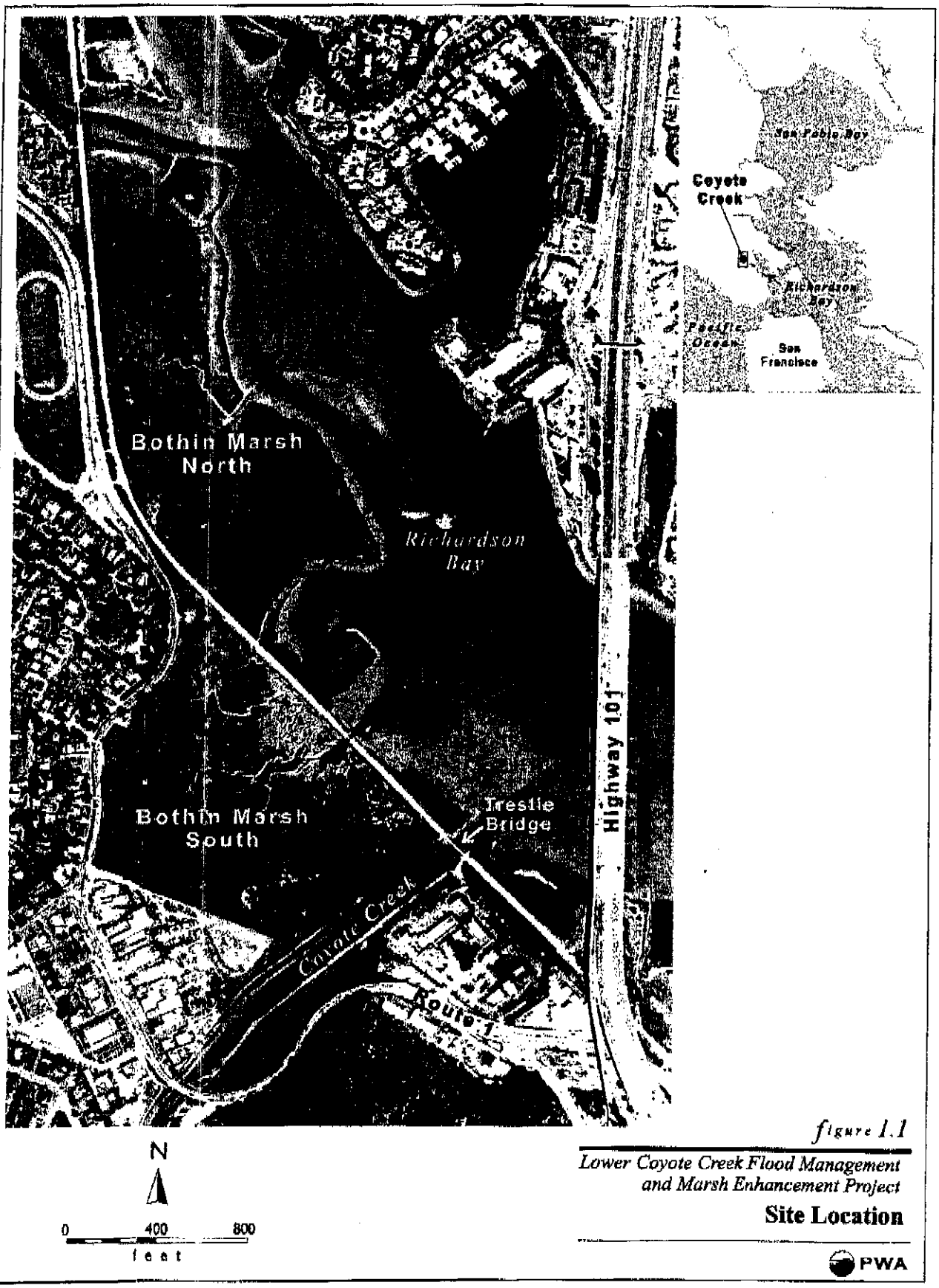


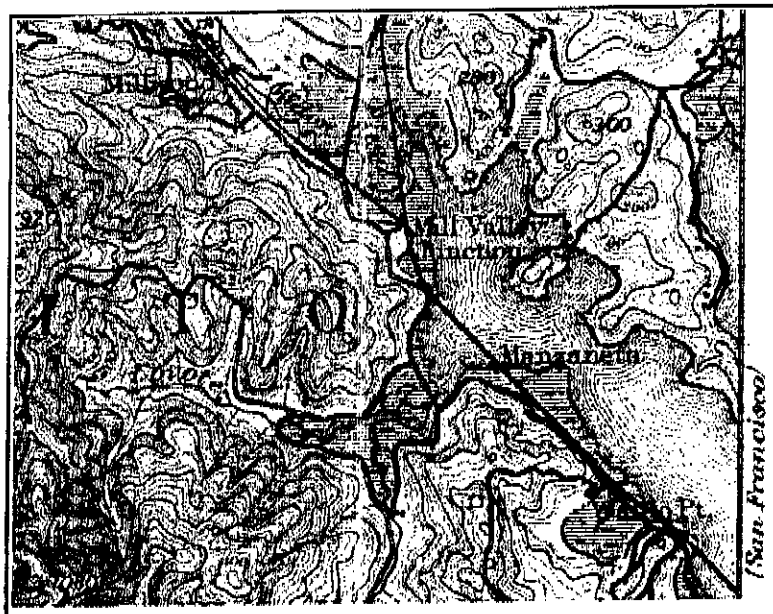
figure 1.1

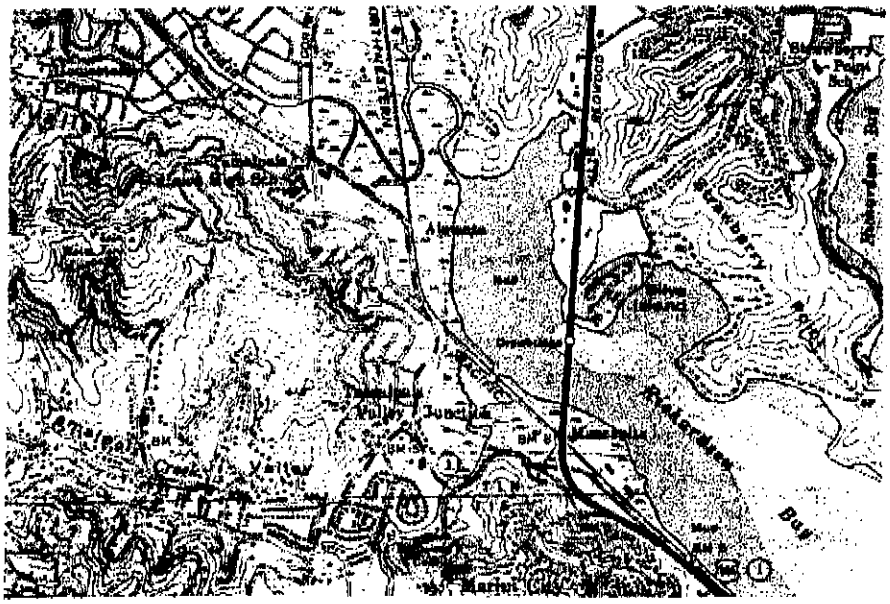
Lower Coyote Creek Flood Management and Marsh Enhancement Project

Site Location

PWA

PWA Ref# 1838





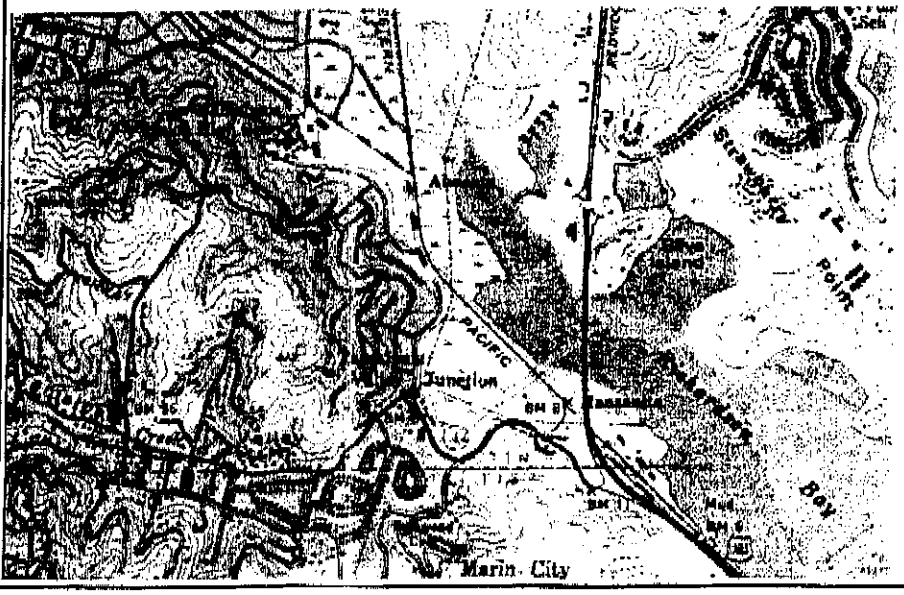


figure 2-1

Lower Coyote Creek Flood Management and Marsh Enhancement Project

Historic Change

PWA#1854.00

PWA

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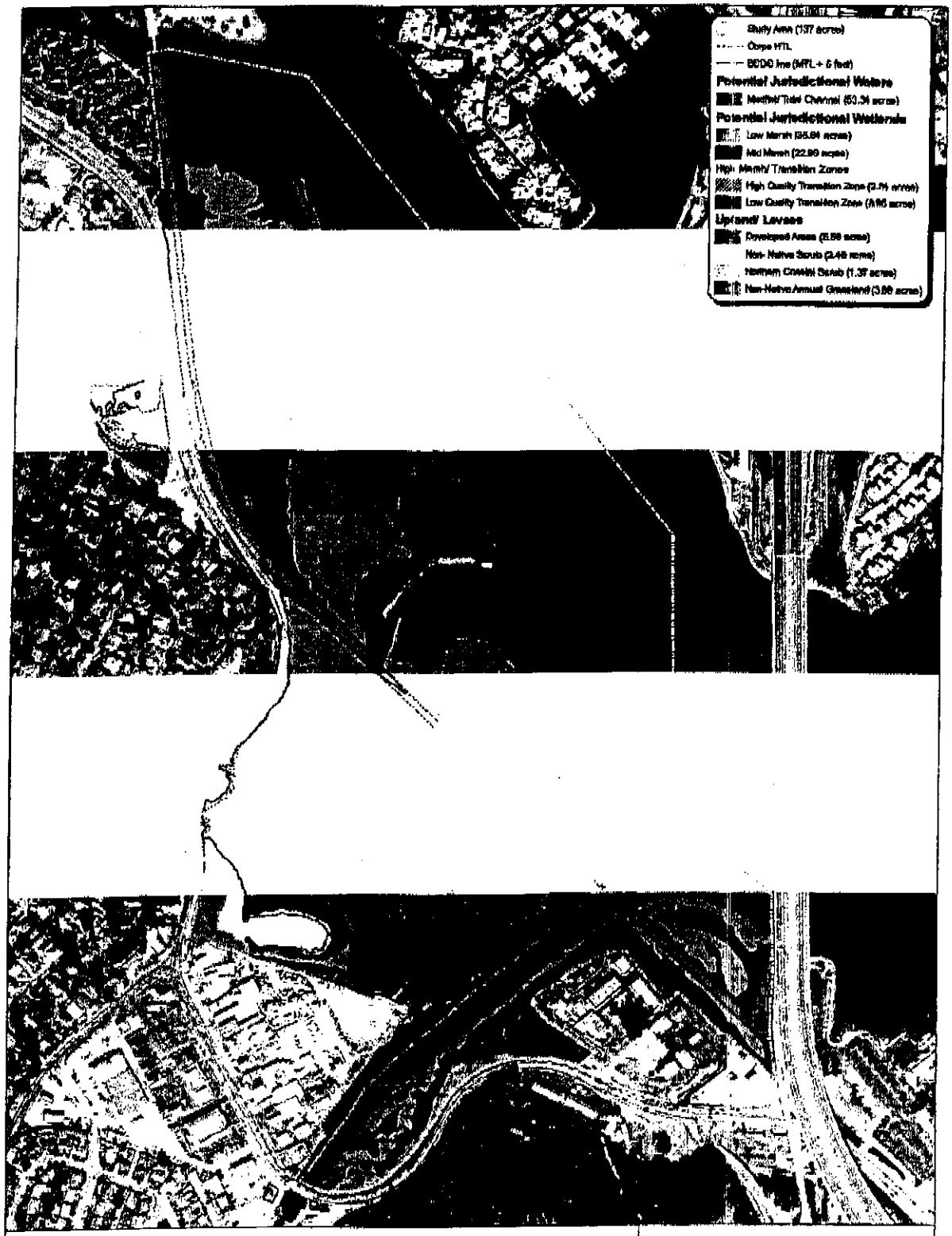


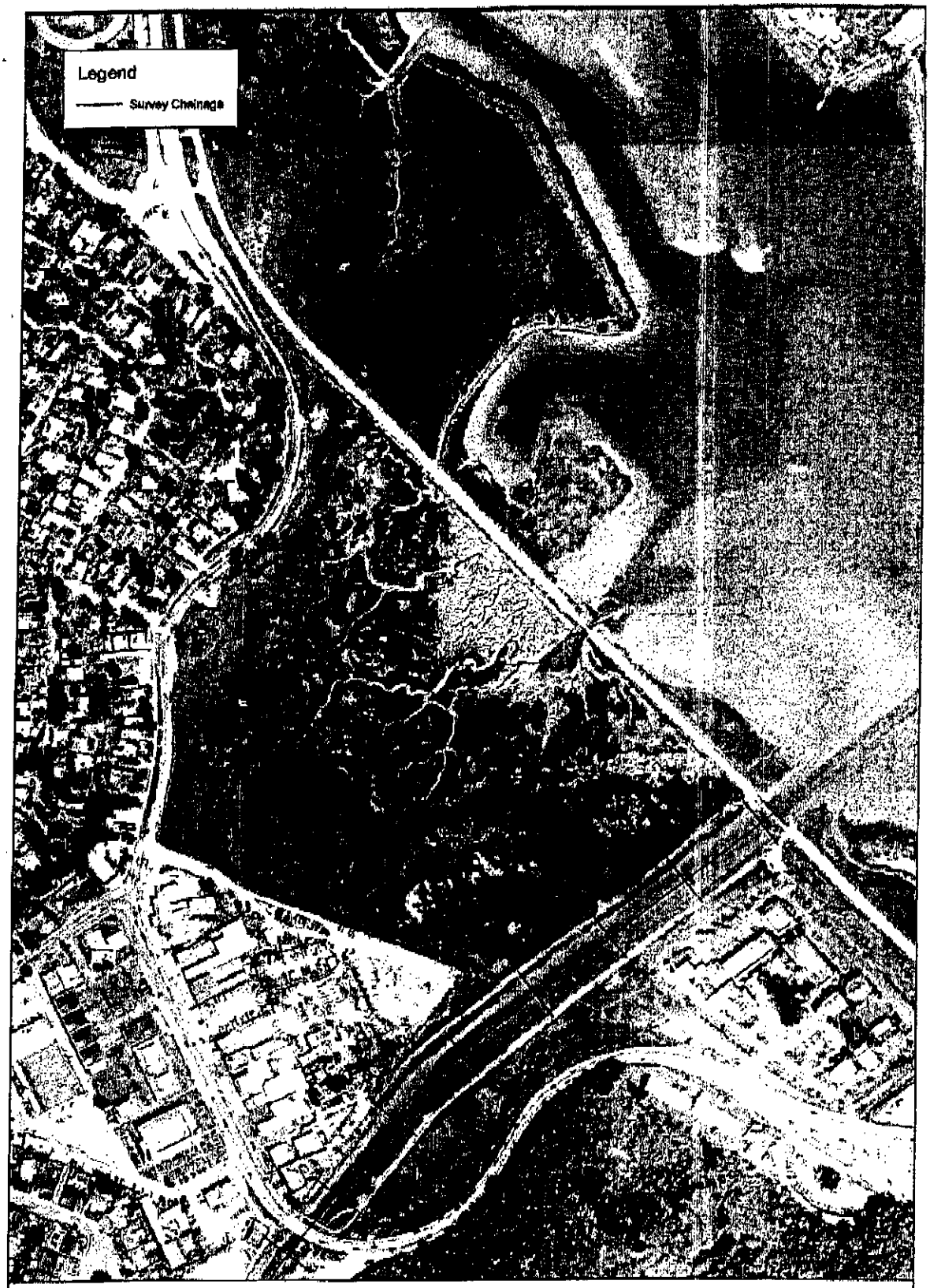
Figure 3-2. Biological Communities and Potential Jurisdictional Areas in Study Area

0 200 400 800
Feet

wra
ENVIRONMENTAL CONSULTANTS

Coyote Creek Flood Control Project
Mill Valley, California

Date: October 2008
Basemap: terraserver image, 2004
Map by: Michell Rochelle
Filepath: K:\ACAD2000\1401\GIS\ArcMap\Wetlands.mxd



Sources: Marin County

N

0 100 200 400 600 800 Feet

figure 4-1

Lower Coyote Creek Flood Management and Marsh Enhancement Project

Alternative A: No Action

Proj. = 1854

PWA

G:\1854_CoyoteCreek\Alternatives

Sources: Marin County

N

0 100 200 400 600 800 Feet

figure 4-2

Lower Coyote Creek Flood Management and Marsh Enhancement Project

Alternative B: Capture South Basin of Bothin Marsh

Proj. = 1854

PWA

G:\1854_CoyoteCreek\Alternatives

Sources: Marin County
Map Date: Revised August 21, 2007

figure 4-3

Lower Coyote Creek Flood Management and Marsh Enhancement Project
Alternative B.1: Capture South Basin of Bothin Marsh and Lower Fill Areas

Proj. = 1854

PWA

G:\1854_CoyoteCreek\Alternatives

Source: Marin County
Map Date: Revised August 21, 2007

figure 4-4

Lower Coyote Creek Flood Management and Marsh Enhancement Project

Alternative C: Lower Upland and Fill Areas

Proj. # 1854

PWA

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Source: Marin County
Map Date: Revised August 21, 2007

figure 4-5

Lower Coyote Creek Flood Management and Marsh Enhancement

Alternative C.1: Lower Upland and Fill Areas

Proj. = 1854

PWA

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Sewerage Agency of Southern Marin
Supplemental Environmental Project (SEP) Proposal

Project Name:	Richardson Bay Water Quality Sampling Program
Location:	Richardson Bay
Name of Contact:	To be determined, potentially Richardson Bay Audubon Society, Richardson Bay Regional Agency (RBRA) and Marin County Stormwater Prevention Program (MCSTOPP)
Phone Number:	To be determined
Category:	Pollution Prevention and Reduction
General Cost:	$125,000
Expected Completion Date:	Ongoing

Background

The San Francisco Regional Water Quality Control Board (Regional Water Board) issued Complaint No. R2-2008-0070 (Complaint) to the Sewerage Agency of Southern Marin (SASM) on August 11, 2008, for an administrative civil liability in the amount of $1,600,000. A total of $800,000 of these funds may be spent on a supplemental environmental project (SEP), provided the proposed SEP is acceptable to the Executive Officer.

Requirements

SEP proposals must conform to the requirements specified by the State Water Resources Control Board in Section IX of the Water Quality Enforcement Policy (WQEP) and by the Regional Water Board's Standard Criteria and Reporting Requirement for SEP.

Section IX.E of the WQEP states that the SEP must have an appropriate nexus between the violations and the SEP. The proposed SEP is related both geographically and in violation type. The complaint identified degradation of the surrounding receiving waters as a likely result of the discharge of dilute raw or partially treated sewage.

The Standard Criteria and Reporting Requirements for SEPs require that a SEP consist of measures that go above and beyond all legal obligations of SASM. Currently, SASM is under no obligation to sample Richardson Bay.

The Regional Water Board recently adopted Total Maximum Daily Loads (TMDLs) for Pathogens in Richardson Bay which sets water quality objectives and a framework for achievement of these objectives. Among the potential sources of pathogen contamination outlined in the TMDL report were SSOs from surrounding sewage collection systems and POTWs, urban runoff, houseboats, vessels and wildlife.

A significant impediment to achieving these goals is the lack of a comprehensive sampling program to determine the baseline health of the water body and generate ongoing data relating to the overall water quality in Richardson Bay and the ability to identify and quantify the actual sources of discharges that have the potential to degrade water quality. The proposed program help will provide the funding and information necessary to improve and protect the health of Richardson Bay.

PROPOSAL TO THE SEWERAGE AGENCY OF SOUTHERN MARIN

RICHARDSON BAY AUDUBON CENTER & SANCTUARY

ARAMBURU ISLAND RESTORATION PROJECT

OCTOBER 1, 2008

Project Overview

This project seeks to expand critical salt marsh habitat and restore native plant communities on Aramburu Island in Richardson Bay. With relatively little salt marsh habitat remaining in this region, this project will improve habitat for resident and migratory birds including species of concern (including California Clapper Rail, San Pablo Song Sparrow and Saltmarsh Yellowthroat), as well as mammals such as the Salt Marsh Harvest Mouse. The project will contribute to the regional restoration effort presented in the Baylands Ecosystem Habitat Goals report, which recommends the types and amounts of wetlands and associated ecosystems needed to support diverse and healthy wildlife and fish communities around San Francisco Bay. We propose to reduce the dry upland areas of Aramburu, creating channels and increasing tidal flooding. By increasing the area that is naturally flushed, the stress of regular seawater inundation will eradicate the non-native plants while benefiting native marsh plants well adapted to saltwater. Once restored, tidal inundation will prevent the re-establishment of non-native, upland species from existing seed banks and from neighboring areas.

Site description

The island proposed for restoration and enhancement is located in the northwest region of Richardson Bay (37.89N, 122.5 W) adjacent to two smaller islands, Pickleweed and Unnamed Islands (Figs. 1 & 2). All three islands were created by dredge spoils in the 1960's. Aramburu is the largest island at 7 ha/17 acres and is heavily invaded by nonnative plant species that cover approximately 60-70% of the island area. Pickleweed and Unnamed Island are smaller at just 1.4 ha and 0.2 ha, respectively, and are dominated by native salt marsh plants, with only a small amount of nonnative ice plant present. The three islands also differ in their topography, with the two smaller islands having a much lower profile that allows the majority of the area to be inundated by seawater during high tides. This tidal inundation is likely to be a major factor in preventing the establishment and spread of nonnative plant species on these islands, since most of the common nonnative invaders in the region cannot tolerate immersion in saltwater. In comparison, Aramburu Island has a higher topographic profile that includes a large upland area that does not get inundated even at the highest tides. This refuge from seawater has allowed a suite of highly invasive nonnatives to establish and spread on the island, relegating the native marsh species to narrow, low-lying margins of the island where tidal inundation still occurs. In addition to the problem of nonnative plants, erosion is also a problem for these islands, with stretches that are severely eroded, exacerbated by a nonnative, burrowing isopod (*Sphaeroma quoianum*).

Project Management and Funding

Marin County is the owner of the land to be restored. National Audubon Society (dba Richardson Bay Audubon Center) shall be project manager. Audubon will contract with either Phil Williams Associates or Wetlands and Water Resource Inc to design and oversee the project with Audubon. Permits will be requested as appropriate from BCDC, ACOE, RBRA and NOAA.

Funding is being requested from California Coastal Conservancy, Toyota Foundation, Marin Community Foundation and Tiffany Foundation.

Preliminary Budget

Description	Quantity	Unit Cost	Total Price
Planning	1	$60,000	$60,000
Permits		$30,000	$30,000
Mobilization	1	$110,000	$110,000
Earth Moving	22,000 CY	$71/CY	$1,560,000
Restoration		$50,000	$50,000
Long term monitoring	10 years	$15,000/yr	$150,000
Materials & Supplies			$15,000
TOTAL			**$1,975,000**

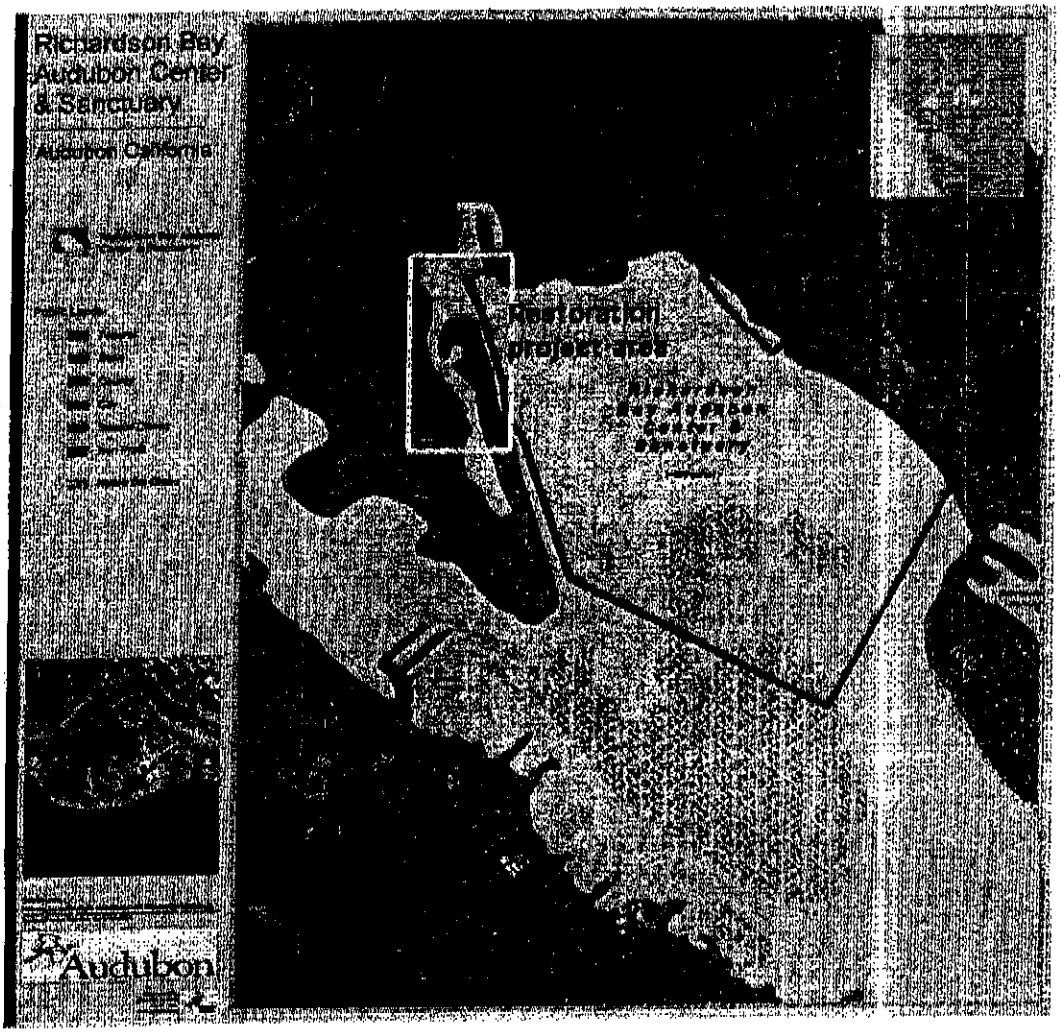

Fig. 1. Location of proposed project site in Richardson Bay.

Please feel free to contact Suzanne Olyarnik, Estuarine Ecologist at Richardson Bay Audubon, at solyarnik@audubon.org or 415-388-0717 if you have any questions.

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DEPARTMENT OF PUBLIC WORKS

P. O. Box 4186, San Rafael, CA 94913-4186 • 415/499-6528 • FAX 415/499-3799 • TTY 415/499-3232

Farhad Mansourian, RCE
Director

October 6, 2008

Mill Valley City Council
City Hall Council Chambers
26 Corte Madera Avenue
Mill Valley, CA 94941

Staff Report: Implementation of Countywide Watershed Program

Dear Council members:

RECOMMENDATIONS

1. Accept report from the Marin County Department of Public Works regarding the implementation of a Countywide Watershed Program including Mill Valley watersheds draining to Richardson Bay.
2. Authorize the City Manager to participate in the Watershed Program with a cost to the City that does not exceed $100,000.

SUMMARY

The Marin County Department of Public Works' Watershed Program provides a framework to integrate flood protection and environmental restoration with public and private partners to protect and enhance Marin's watersheds.

BACKGROUND

Benefits of a Watershed Approach

Marin County supports significant natural resources including a thousand miles of creek that sustain federally endangered populations of coho salmon and steelhead. Salmon are key indicators of watershed health. One of the goals of this program is to develop conceptual watershed work plans that integrate environmental restoration with solutions for flood protection. This program will incorporate the experience gained from the Ross Valley Watershed Program which was initiated in 2006. Partnerships with cities, towns and their respective Flood Zone Advisory Boards are critical to identifying and understanding watershed needs. There is an economy of scale provided by working together to identify environmentally restorative approaches to flood protection. Working at the watershed level ensures that environmental regulations are integrated into project scoping and development. This integrated approach to project

Program Deliverables
The County received a $168,210 grant from the State of California Department of Water Resources to support watershed planning activities within specific watersheds including the Arroyo Corte Madera del Presidio watershed. A contract was awarded in February 2008 to the consulting firm of Prunuske Chatham Inc. to assist Public Works staff with development of the following program deliverables:

Existing Conditions
Watershed descriptions will be developed that will describe physical settings, land use, flood protection, stormwater management, biology, water quality, water management, social and economic conditions, hydrology, geomorphology, resource management and restoration efforts.

Watershed Health Evaluations
Watershed health criteria would be developed and used to guide project selection and prioritization. The watershed health evaluation would rely on existing data sources and Geographic Information Systems (GIS) databases.

Multi-benefit Project Criteria and Guidelines
Criteria would be developed to evaluate and rank specific project contributions to flood protection and environmental restoration. A set of guidelines would be drafted that clearly outline an approach for describing, prioritizing, and implementing multi-benefit projects, including stream and wetland projects. An action list would be developed for each watershed.

Watershed Work Plans
A watershed work plan would be produced to outline the scope of projects and activities to support project implementation. The plan would address financing, environmental compliance and outreach strategies. The work plan would also identify what additional studies may be needed to support project design and implementation.

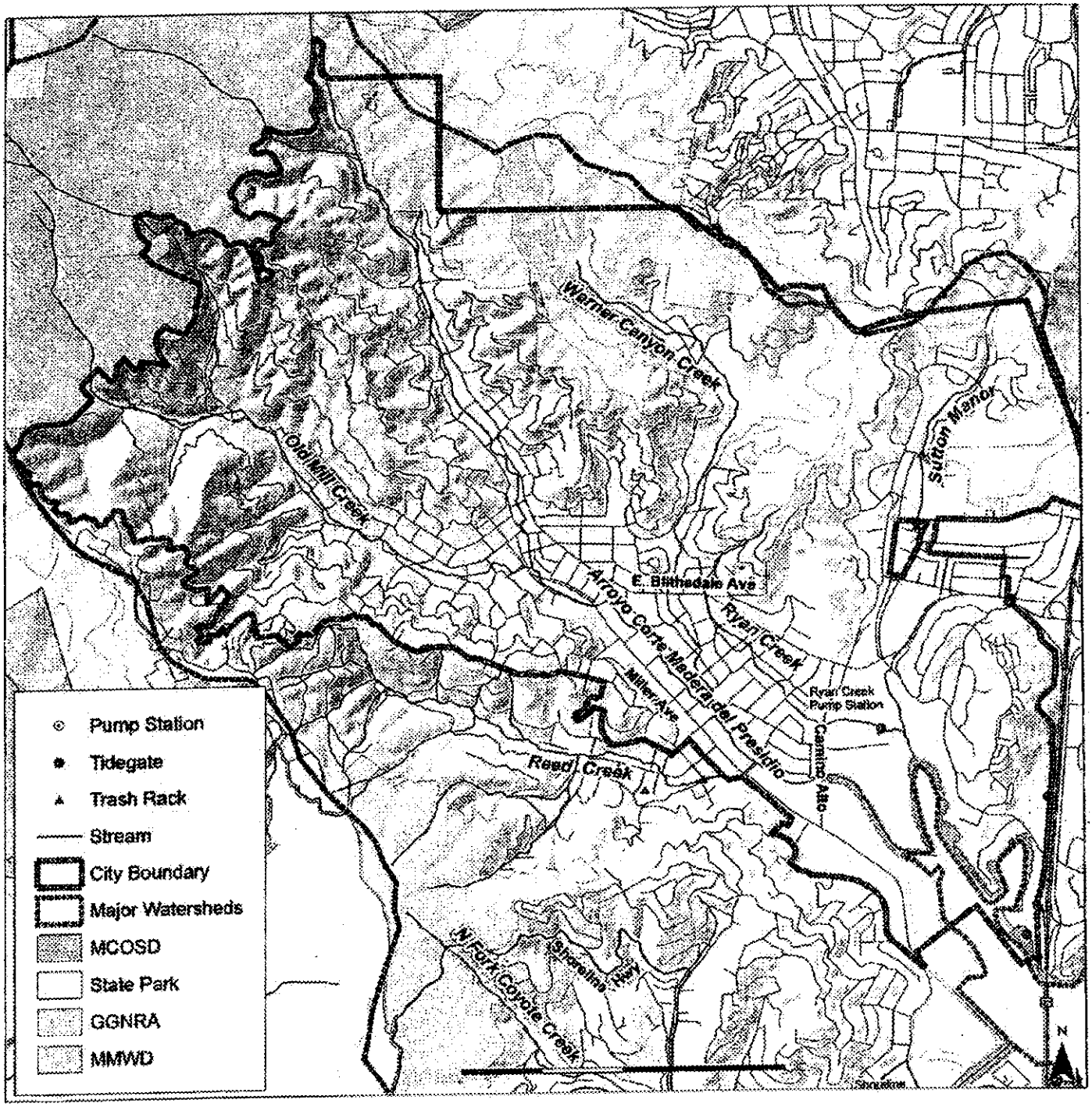
All these deliverables will be produced in a web accessible format and will be posted at www.marinwatersheds.org

Schedule
The final watershed work plans will be completed by December 2009.

Action by the Marin County Board of Supervisors

On April 29, 2008 the Marin County Board of Supervisors identified the implementation of a County-wide watershed management program as a top priority initiative. The Board authorized the Department of Public Works to begin implementation of a County-wide watershed program on May 5, 2008.

Richardson Bay Planning Area
The County's Watershed Program is in the process of summarizing existing conditions for Richardson Bay and the communities that drain to it including Mill Valley, Tamalpais Valley, Marin City, Bel Aire, Sausalito and Tiburon. The next step once funding is secured would be to focus on identifying flood solutions and environmental restoration opportunities for Mill Valley's major watersheds including Arroyo Corte Madera del Presidio, Ryan Creek, Sutton Manor and Coyote Creek watersheds. All of these


Pump Station
Tidegate
Trash Rack
Stream
City Boundary
Major Watersheds
MCOSD
State Park
GGNRA
MMWD
Warner Canyon Creek
Old Mill Creek
Sutton Manor
E. Blithedale Ave
Arroyo Corte Madera del Presidio
Ryan Creek
Miller Ave
Ryan Creek Pump Station
Camino Alto
Reed Creek
N. Fork Coyote Creek
Shoreline
Hwy 101
N

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P. O. Box 4186, San Rafael, CA 94913-4186 • 415/499-6528 • FAX 415/499-3799 • TTY 415/499-3232

Farhad Mansourian, RCE
Director

May 13, 2008

Board of Supervisors
3501 Civic Center Drive
San Rafael, CA 94903

SUBJECT: Implementation of Countywide Watershed Program

Dear Board Members:

RECOMMENDATIONS

1. Direct the Department of Public Works to begin the implementation of the Countywide Watershed Program
2. Approve positions and budget adjustments as detailed in staff report.

SUMMARY

The watershed program provides a framework to integrate flood protection, creek and wetland restoration, fish passage and water quality improvements with public and private partners to protect and enhance Marin's watersheds. This staff report describes the scope, public outreach process, deliverables and schedule for the implementation of a Countywide watershed program.

BACKGROUND:

Watershed Program Overview

On April 29, 2008 your Board identified the implementation of a Countywide watershed management program as one of the County's top priority initiative. The watershed program was conceptually authorized by your Board on July 18, 2006. On February 5, 2008, your Board executed a grant agreement with the State of California Department of Water Resources for $168,210. These funds were awarded to the County to support development of a watershed stewardship plan and a contract was awarded to Prunuske Chatham Inc. to begin preparation of the plan. At that meeting we stated that this work represents a preliminary phase and that staff would return at a future meeting to provide details regarding the comprehensive planning process and to describe scope and deliverables.

1) Policy advisory committee
2) Financial and Operations advisory committee
3) Technical working group

Policy Advisory committee
This committee would meet periodically during the planning process in order to provide input on the overall direction of the plan and to gage their community's interest in supporting future assessments and the funding of next steps. The Policy Advisory Committee would consist of a District County Supervisor(s), two city council representatives from each city/town in that watershed and two representatives from each of the respective Flood Zone Boards in each watershed. Partnerships with the cities and towns are critical to identifying and understanding watershed needs. Initial meetings will be used to determine the level of community support for watershed stewardship efforts and willingness to provide financial support for this process.

Financial and Operations advisory committee
The work of the Policy advisory committee would be supported by a Financial and Operations advisory committee. This committee would consist of a city manager from each of the cities and towns in that watershed and the County Public Works director. This group would evaluate and prioritize funding strategies to support the development of integrated watershed work plans. Collaboration and the availability of local matching funds are paramount to procuring State and Federal funding.

Technical Working Group
The Technical Working Group would consist of local, State and Federal agency representatives, public works directors and watershed groups. This group would work with staff and the consultants to provide input on issues and needs, watershed health, project priorities and deliverables.

Meetings will be convened within the first six months with the cities and towns to determine ability and willingness to provide financial support for this initial work program. In the unincorporated areas this process would be facilitated through the Flood Zone Advisory Boards and County Service Areas. Public opinion polls may be one of the tools used to gage the level of interest and financial support for watershed planning and project development. If no or minimal interest is realized, the Department will redirect its efforts to the other watersheds and will provide annual report to your Board on progress and recommended changes.

watershed stewardship.

- Outreach strategies and partnership opportunities to maintain public support.
- Sample project timelines that incorporate funding, design, permitting, construction, maintenance and monitoring tasks.
- Operations and maintenance considerations that can affect funding and environmental compliance.
- Assessment and monitoring programs to track watershed health, project implementation, and grant requirements for project effectiveness.
- Guidance on developing a list of organizational and funding resources for continued watershed involvement.

Draft and Final Watershed Stewardship Plan

A draft and final Watershed Plan will be produced that encompasses all the selected watersheds and that incorporates all the described plan elements. The plan will reflect integration with regional planning efforts such as the North Bay Watershed Association Integrated Regional Watershed Management Plan, the Tomales Bay Integrated Coastal Watershed Management Plan, and the Bay Area Integrated Regional Watershed Management Plan. The final plan will be produced in a web accessible format.

Schedule

The completion of the final watershed specific plans will be targeted for completion by December 2009. Our goal is to return to your Board with a schedule for watershed specific implementation programs including financing approaches in early 2010.

- Existing Conditions Review with North Bay Watershed Council- *May 29, 2008*
- Stakeholder meetings –*October-November 2008*
- Stakeholder meetings-*January-February 2009*
- Draft Watershed Stewardship Plan-*July 2009*
- Final Watershed Plans-*December 2009*

FISCAL IMPACT: The annual cost for the fixed term positions is $311,930.66. The total cost for three years is $935,792.00. The total program expenditure is $2,000,000. With your approval an existing accountant assistant position will be shifted from General Fund to Project Support position.

We anticipate that the costs will be incurred beginning FY 2008-09. If the County's fiscal conditions significantly worsen the department will bring a revised program scope for Board consideration.

Fund	Fund Center	Commitment Item	Expenditures Amount	Revenue Amount
10000 (General Fund)	4100995010 (CountyWide Watershed Stewardship)	5210100 (Professional Services)	$1,064,210	$1,000,000
10000 (General Fund)	4100995010 (CountyWide Watershed Stewardship)	5830262 (Intra-Fund Exp/ Land Dvlpmnt S&B)	$935,790	
10000 (General Fund)	4100995010 (CountyWide Watershed Stewardship)	4640322 (City Contribution)		$1,000,000

REVIEWED BY:

[ ]	Auditor Controller	[X]	N/A
[X]	County Counsel	[ ]	
[ ]	Human Resources	[X]	N/A

Respectfully submitted,

Farhad Mansourian,
Director

Attachment: Contract Map

Stephen Danehy

Exhibit B

From: Tong Yin [TYin@waterboards.ca.gov]
Sent: Monday, January 28, 2008 8:25 AM
To: Stephen Danehy
Subject: Re: Report of Overflow - Sewerage Agency of Southern Marin

Hi Steve,
Thanks for the report. I hope there will be an estimated overflow amount in the report to follow. Has the District performed any sampling during the event, if possible? If yes, the sampling should have included both partially treated wastewater and the receiving water sampling.

Tong Yin
(510) 622-2418

>>> "Stephen Danehy" <sdanehy@cityofmillvalley.org> 1/26/2008 11:37 AM
>>> >>>
Tong:

On the evening of Januray 15, 2008, at approximately 7:30pm, the Equalization Ponds at the Sewerage Agency of Southern Marin wastewater treatment plant exceeded their capacity. The paritally treated wastewater overflowed throught the emergency overflow and discharged to Richardson Bay. The ponds capacity was exceeded to high flows caused by the extreme weather condtions experienced throughout the day. At this writing I do not have final figures related to this event. I will have complete details avialable on Monday.

I wanted to get this reported to you as soon as possible. Formal wirtten reports will follow.

Sincerely,

Stephen J. Danehy
General Manager
Sewerage Agency of Southern Marin
Mill Valley, CA.

Exhibit C

Stephen Danehy

From: Stephen Danehy
Sent: Tuesday, February 05, 2008 12:22 PM
To: 'Tong Yin'
Cc: 'ltang@waterboards.ca.gov'
Subject: RE: Recall: Missing Report

Hi Tong,
As we discussed, 1/15 is a typo, and should read 1/25.
The overflow on 1/25 was a result of a strong storm which resulted in the controlled discharge of highly dilute raw wastewater from the equalization ponds. Instantaneous flow reached 44.43 mgd with sustained flows for and average daily flow of 11.62. The highest Recirculation Wet Well level was 12.8 feet (blending begins at 13.0 feet).

The overflow was not a planned event; it occurs by design once the capacity of the equalization ponds is exceeded.

Stephen J. Danehy
General Manager
Sewerage Agency of Southern Marin
415-388-2402-16
(sdanehy@cityofmillvalley.org)

-----Original Message-----
From: Tong Yin [mailto:TYin@waterboards.ca.gov]
Sent: Tuesday, February 05, 2008 10:48 AM
To: Stephen Danehy
Cc: Lila Tang; Bill Johnson
Subject: RE: Recall: Missing Report

Steve,

I found the hard copy in my files, dated 1/28, and received on 1/30. But it was for the 1/25 overflow. My understanding is the 1/25 overflow was a controlled overflow of screened raw wastewater, with a volume of 2.45 million gallons to Richardson Bay, but no sampling was able to be performed due to safety concerns. When was the decision to overflow from the equalization basins made, and did SASM notify us before it was going to happen?

It seems there was another overflow occurred on 1/15, as you indicated in your 1/26/08 email, which was a separate incident. If this really was the same overflow as the 1/25 one (is 1/15 a typo?), please correct it, otherwise, I have not got any details on this overflow.

Thanks,
Tong Yin

>>> "Stephen Danehy" <sdanehy@cityofmillvalley.org> 2/5/2008 10:34 AM
>>> >>>
Yes, That would be good.

Thanks!

Stephen J. Danehy
General Manager
Sewerage Agency of Southern Marin
415-388-2402-16
(sdanehy@cityofmillvalley.org)

SASM
SEWERAGE AGENCY OF
SOUTHERN MARIN

A Joint Powers Agency
- Almonte S.D.
- Alto S.D.
- City of Mill Valley
- Homestead Valley S.D.
- Richardson Bay S.D.
- Tamalpais S.D.

January 28, 2008

California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612-1404

Attention: Ms. Tong Yin

Subject: Report of Overflow on January 25, 2008
NPDES No. CA0037711

The subject report for the Sewerage Agency of Southern Marin Wastewater Treatment Plant is hereby submitted as required. This is a follow up to the telephone report made on January 26, 2008.

Discussion of Overflow

During a strong winter storm on January 25, 2008, the design capacity (32.7 mgd) of the wastewater treatment plant was exceeded (44.0 mgd) and a controlled by-pass of screened wastewater from the flow equalization ponds occurred at 6:00pm. Rainfall recorded that the wastewater treatment plant for the 24 hour period was 3.38 inches. The average daily flow for the plant on 1/25/08 was 11. 62 mgd.

The particulars are as follows:

Duration: January 25, 2008 from 6:00pm until about Midnight
Volume: Approximately 2,450,000 gallons
Nature: Dilute, screened wastewater
Point of Discharge: Richardson Bay east of the SASM Wastewater Treatment Plant, located at 450 Sycamore Ave, Mill Valley, CA 94941.
Impact: No visible evidence of sewage or of a fish kill. No know impact to the environment.

The overflow to Richardson Bay occurred in a controlled way in accordance with the approved Operation and Maintenance plan of the wastewater treatment plant. Samples of the overflow and immediate receiving area were not conducted due to safety concerns for staff in the extreme weather conditions.

Certification

I certify under penalty of law that this document and all attachments are prepared under direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Stephen J. Danehy
General Manager

SASM
SEWERAGE AGENCY OF
SOUTHERN MARIN

A Joint Powers Agency
- Almonte S.D.
- Alto S.D.
- City of Mill Valley
- Homestead Valley S.D.
- Richardson Bay S.D.
- Tamalpais S.D.

May 12, 2008

Dyan Whyte
Assistant Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: Response to April 25, 2008 Water Board Correspondence Related to Cleanup and Abatement Order (CAO No. R2-2008-0010) and March 12, 2008, 13267 Letter

Dear Ms. Whyte:

The Sewerage Agency of Southern Marin (SASM) submits the attached information in accordance with the requirements specified in CAO No. R2-2008-0010 ("CAO") and your letter dated April 25, 2008. A summary of the attached information is presented below.

Revised Audit Workplan

As requested in your April 25, 2008, letter, Larry Walker Associates (LWA) has revised its External Audit Workplan to incorporate the six satellite collection systems that contribute flows to the SASM wastewater treatment plant. As also requested in your April 25 letter, LWA has also expanded its scope to include wastewater treatment facility design, emergency response procedures, plant staffing/certification, detailed maintenance practices, laboratory sampling and analytical procedures, and finances of the wastewater treatment plant and collection systems. Given your request for an expanded scope, however, LWA notes in the attached Workplan that it cannot complete the work in the 60-days originally contemplated by the CAO. Because LWA states that it will take at least 180 days following approval of the revised Audit Workplan to complete the expanded audit and submit a final report, SASM hereby requests 180 days to complete the audit from the date of Regional Board approval of the Workplan. The revised Audit Workplan is included as Attachment A.

Statement of Qualifications for the Audit Team

LWA has assembled an audit team with substantial expertise and experience in completing each of the required audit tasks. The team includes experts in wastewater treatment plant design, electrical control systems, wastewater treatment plant operation, laboratory and sampling procedures, collection system operation and maintenance, and

26 Corte Madera Avenue - Mill Valley,California 94941 Tel: (415) 388-2402 Fax: (415) 381-8128

public agency financial assessments. The Statement of Qualification is included as Attachment B.

Timeline for Completion of the Equalization Pond Capacity Increase

As requested in the April 25, 2008 letter, Nute Engineering Inc. has updated the draft plan and timeline for storage capacity improvements to the Equalization Ponds. In general, improvements to the berms will restore the berms to the elevations established in 2000 plus add an additional 12 inches to the berms and increase the weir elevation by 12 inches. This improvement is designed to increase capacity of the ponds from approximately 1.7 million gallons to approximately 2.5 million gallons total.

Geotechnical work has already started, with soil boring completed on May 7, 2008. Final design and bid documents should be available in June, with construction to begin in early August. Pond improvements are scheduled to be complete by the end of September, 2008.

The Project Timeline, including all subtasks necessary to complete the pond upgrade, is included as Attachment C.

Sincerely,

Stephen J. Donehy
General Manager

Attachments:

Attachment A – Revised External Audit Workplan
Attachment B – Statement of Qualifications for External Audit Team
Attachment C – Timeline for Equalization Pond Capacity Increase