

**SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD**

In the matter of: )

**NOVATO SANITARY DISTRICT** )

**Order No. R2-2012-0012**

**Administrative Civil Liability** )

**Settlement Agreement and Stipulation for**

**Complaint No. R2-2010-0102** )

**Entry of Order; Order**

**Sanitary Sewer Overflows and** )

**Other Discharges in Violation** )

**of Requirements** )

**Section I: Introduction**

This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order ("Stipulation and Order") is entered into by and between the Assistant Executive Officer of the San Francisco Bay Regional Water Quality Control Board ("Regional Water Board"), on behalf of the Regional Water Board Prosecution Team ("Prosecution Team"), and the Novato Sanitary District ("Settling Respondent") (collectively "Parties") and is presented to the Regional Water Board for adoption as an Order, by settlement, pursuant to Government Code section 11415.60.

**Section II: Recitals**

1. The Settling Respondent owns and operates a wastewater collection system in Marin County, California. The collection system collects and transports wastewater originating from a primarily residential service area with a population of about 56,000, including the City of Novato and adjacent areas, and transports the flow to the Novato wastewater treatment plant for treatment and discharge to the intertidal mud flats of San Pablo Bay. The collection system consists of 221 miles of sewer lines, served by 35 wastewater pump stations. The Novato and Ignacio wastewater treatment plants and the collection system are subject to the requirements set forth in Regional Water Board Order No. R2-2004-0093, which also serves as National Pollutant Discharge Elimination System ("NPDES") permit number CA0037958, State Water Resources Control Board ("State Water Board") Order No. 2006-003 DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems ("General WDR") and its subsequent amendments, and the Water Quality Control Plan for the San Francisco Bay Basin ("Basin Plan").

2. On September 15, 2010, the Assistant Executive Officer of the Regional Water Board issued Administrative Civil Liability Complaint No. R2-2010-0102 ("Complaint"), alleging that 22 sanitary sewer overflows ("SSOs") occurred from the Settling Respondent's collection system between September 24, 2007, and February 28, 2010, resulting in the discharge of untreated wastewater to waters of the United States. The Complaint sought \$287,500 in administrative civil liability.

3. The Parties have engaged in settlement negotiations and agree to settle the matter without administrative or civil litigation and by presenting this Stipulation and Order to the Regional Water Board for adoption as an order by settlement, pursuant to Government Code section 11415.60. In addition to the violations alleged in the Complaint, this Stipulation and Order, if approved by the Regional Water Board, would resolve additional violations described in Paragraph 4, below. The Prosecution Team believes that the resolution of the alleged violations is fair and reasonable and fulfills its enforcement objectives, that no further action is warranted concerning the specific violations alleged except as provided in this Stipulation and Order, and that this Stipulation and Order is in the best interest of the public.

4. To resolve by consent and without further administrative proceedings the violations alleged in the Complaint and the violations described below (collectively, the "Alleged Violations"), the Parties have agreed to the imposition of \$344,000 in administrative civil liability against the Settling Respondent, which includes \$50,720 for Regional Water Board staff costs. Attachment A and the Complaint further describe how each liability amount was determined using a factors analysis consistent with section 13385 and the State Water Resources Control Board Water Quality Enforcement Policy (May 2010) ("Enforcement Policy"). In addition to the \$344,000, the Settling Respondent agrees to pay \$10,240.72 to the California Department of Fish and Game for its costs in investigating events from January 2010. The total settlement amount is thus \$354,240.72. Settling Respondent shall make payment of \$203,862 to the State Water Resources Control Board Cleanup and Abatement Account, and a separate payment of \$10,240.72 to the Fish and Wildlife Pollution Account/DFG, no later than 30 days following the Regional Water Board executing this Order. The remaining \$140,138 in civil liability shall be suspended upon completion of two Supplemental Environmental Projects ("SEPs") described in Attachments B and C of this Order

a. To resolve the violations alleged in Complaint No. R2-2010-0102 for 22 SSOs, the Parties have agreed to the imposition of \$239,000 against the Settling Respondent, (not including \$18,000 in staff costs, addressed in Attachment A), pursuant to Water Code section 13385(a)(2). This amount is reduced from the amount recommended in the Complaint after the Settling Respondent provided additional information on its lower lateral projects and proof of its employees' California Water Environment Association certifications.

b. The Prosecution Team alleges that two SSOs occurred, on October 24, 2010, for approximately 18,889 gallons at the Bahia Pump Station, and January 1, 2011, for approximately 2,500 gallons at Michelle Circle. The Parties have agreed to the imposition of \$35,475 against the Settling Respondent for these two SSOs, plus staff costs, pursuant to Water Code section 13385(a)(2).

c. The Prosecution Team alleges that a discharge from the Novato wastewater treatment plant exceeded the effluent limit for total suspended solids

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prescribed in Order No. R2-2004-0093 on one occasion over March 17-19, 2007. The Parties have agreed to the mandatory minimum penalty imposition of \$3,000 for this event, plus staff costs, pursuant to Water Code section 13385(h)(1).

- d. The Prosecution Team alleges that unauthorized discharges of approximately 44,000 gallons of chlorinated effluent discharged to land near the Novato wastewater treatment plant over October 13-14, 2007. The Parties have agreed to the imposition of \$8,377 for these events, plus staff costs, pursuant to Water Code section 13385(a)(1).
- e. The Prosecution Team alleges that an unauthorized sludge spill of approximately 5,854 gallons discharged to land from a pipe between the Novato wastewater treatment plant and the sludge ponds over January 4-6, 2011. The Parties have agreed to the imposition of \$7,428 for this event, plus staff costs, pursuant to Water Code section 13385(a)(1). In addition, the Settling Respondent agrees to pay \$10,240.72 separately to the California Department of Fish and Game to reimburse the Department for its costs in investigating this event, pursuant to Government Code section 11415.60.

### **Section III: Stipulations**

The Parties stipulate to the following:

5. **Administrative Civil Liability:** The Settling Respondent hereby agrees to pay administrative civil liability totaling \$344,000 as set forth in Paragraph 4 of Section II herein. In addition, the Settling Respondent shall pay the California Department of Fish and Game \$10,240.72 for costs the department accrued in investigating the January 4-6, 2011, discharge.

6. **Supplemental Environmental Projects:** The parties agree that this resolution includes two supplemental environmental projects (SEPs) as provided for as follows:

#### **a. Definitions**

"Cleanup and Abatement Account" – the State Water Pollution Cleanup and Abatement Account.

"Implementing Party" – An independent third party(ies) with whom the Settling Respondent has contracted or otherwise engaged to implement the SEP.

"Oversight Party" – An independent third party with whom the Settling Respondent has contracted or otherwise engaged to oversee the SEP.

"Milestone Requirement" – A requirement with an established time schedule for meeting/ascertaining certain identified measurements of completed work. Upon the

timely and successful completion of each milestone requirement, an amount of liability will be permanently suspended or excused as set forth in the Description of the SEP below.

"SEP Completion Date" – The date in which the SEP will be completed in its entirety.

**b. Administrative Civil Liability and Costs of Enforcement**

**1. Total Civil Liability**

The Settling Respondent shall be subject to administrative civil liability in the total amount of \$344,000. This includes the amount of \$50,720 for the costs incurred by the Regional Water Board staff to investigate and prosecute the administrative civil liability enforcement action. The civil liability also includes the cost of two SEPs for the total of \$140,138. The cost of the SEPs will be referred to as the SEP Amount and will be treated as a Suspended Administrative Civil Liability.

**2. Payment and Costs**

Payment of \$203,862 shall be made within 30 days of execution of the Stipulated Order by the Regional Water Board. Payment shall be submitted to the San Francisco Bay Regional Water Quality Control Board, Attn: Brian Thompson, 1515 Clay Street, Suite 1400, Oakland, CA, 94612. The Regional Water Board shall process the payment for deposit in to the State Water Pollution Cleanup and Abatement Account.

**3. Funding of Special Environmental Projects**

Settling Respondent agrees to fund the SEPs as described further in Section III, Paragraph 6, and Attachments B and C, incorporated herein.

**c. Description of the SEPs**

**1. Simmons Slough Wetland Enhancement Project**

The goal of this project is to enhance wetland habitat by removing invasive species and revegetating 4.3 acres with native plants at the southernmost end of the Marin Audubon Society's Simmons Slough property. \$43,470 of the total SEP Amount will fund tasks including mowing and removing invasive plants, planting native plants and seeds, post-planting maintenance, and monitoring. The SEP is to be implemented by the Marin Audubon Society, with the San Francisco Bay Estuary Partnership providing project oversight. The Settling Respondent (or the Implementing Party) shall provide the final report, including vegetation monitoring, by ~~February 29, 2016~~ February 29, 2016. Detailed plans including milestones, budget, and performance measures are provided in Attachment B.

BBJ [Signature]  
AUGUST 31

**2. Bahia Tidal Pond Enhancement and Marsh Monitoring Project**

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This project has two components to enhance a tidal pond habitat, first by revegetating its berms, and then by monitoring the revegetated pond berms and a nearby tidal marsh restoration project that was completed in 2008. \$96,668 of the total SEP Amount is allocated to completing the two components. The SEP is to be implemented by the Marin Audubon Society on 60 acres it owns along the Petaluma River and adjacent to the Settling Respondent's Bahia Pump Station, with the San Francisco Bay Estuary Partnership providing project oversight. The Settling Respondent (or the Implementing Party) shall provide the final report, including vegetation monitoring, by ~~January 31~~, **JULY 29**, 2016. Detailed plans including milestones, budget, and performance measures are provided in Attachment C. Bef [Signature]

- a. The goal of the tidal pond revegetation component is to enhance the habitat around an approximately 5-acre pond by revegetating a 2.3 acre area around the edge of the pond.
- b. The goal of the monitoring component is to complete Year 3 monitoring of hydrodynamics of the 2008 Tidal Marsh Restoration Project, and to monitor the transition zone habitat adjacent to the pond habitat revegetation in the first component of the SEP to inform future restoration efforts. Tasks include bathymetric surveys of internal and external sloughs at Central and West Bahia, Black John Slough, and the Petaluma River, aerial and ground trothing analysis, avian and vegetation survey analysis, and maintenance.

**d. Representations and Agreements Regarding SEPS**

**1. Representation of the Implementing Party**

As a material consideration for the Regional Water Board's acceptance of this Stipulated Order, the Settling Respondent represents that the Marin Audubon Society, as the Implementing Party, shall utilize the funds provided to it by the Settling Respondent to implement the SEPs in accordance with the Project Milestones and Budget set forth in Attachments B and C. The Settling Respondent understands that its promise to implement the SEPs, in their entirety and in accordance with the schedules for implementation, is a material condition of this settlement of liability between the Settling Respondent and the Regional Water Board.

**2. Agreement of Settling Respondent to Implement the SEPs**

The Settling Respondent represents that: 1) it will spend the SEP Amount as described in this Stipulated Order; 2) it will provide certified, written reports to the Regional Water Board consistent with the terms of this Stipulated Order detailing the implementation of the SEPs, and 3) within 30 days of the completion of the SEPs, it will provide written certification, under penalty of perjury, that the Settling Respondent followed all applicable environmental laws and regulations in the implementation of the SEP

including but not limited to the California Environmental Quality Act, the federal Clean Water Act and the Porter-Cologne Act. The Settling Respondent agrees that the Regional Water Board has the right to require an audit of the funds expended by it to implement the SEP.

**e. Publicity Associated with SEP**

Whenever the Settling Respondent or its agents or subcontractors or the Implementing Party publicizes one or more elements of the SEP, they shall state in a **prominent manner** that the project is being undertaken as part of the settlement of an enforcement action by the Regional Water Board against the Settling Respondent.

**f. Submittal of Progress Reports**

Settling Respondent and/or the Implementing Party shall provide reports of progress to the Regional Water Board as described in Attachments B and C. Settling Respondent and/or the Implementing Party shall permit inspection of the SEPs by Regional Water Board staff at any time without notice.

**g. Audits and Certification of Environmental Project**

1. Certification of Expenditures

*bbf*  
~~AUGUST 31~~ *bbf* *TEW*

*TEW*  
*bbf*  
JULY 29  
On or before ~~February 29, 2016~~, for the Simmons Slough Wetland Enhancement Project, and ~~January 31, 2016~~, for the Bahia Tidal Pond Enhancement and Marsh Monitoring Project, the Settling Respondent shall submit a certified statement by responsible corporate officials representing the Settling Respondent and the Implementing Party documenting the expenditures by Settling Respondent and the Implementing Party during the completion period for the SEPs. The expenditures may be external payments to outside vendors or contractors implementing the SEPs. In making such certification, the officials may rely upon normal company project tracking systems that capture employee time expenditures and external payments to outside vendors such as environmental and information technology contractors or consultants. The Settling Respondent shall provide any additional information requested by the Regional Water Board staff which is reasonably necessary to verify the Settling Respondent's SEP expenditures.

2. Certification of Performance of Work

*bbf*  
~~AUGUST 31~~ *bbf* *TEW*

*TEW*  
*bbf*  
JULY 29  
On or before ~~February 29, 2016~~, for the Simmons Slough Wetland Enhancement Project, and ~~January 31, 2016~~, for the Bahia Tidal Pond Enhancement and Marsh Monitoring Project, the Settling Respondent (or the Implementing Party on behalf of the Settling Respondent) shall submit a report, submitted under penalty of perjury, stating that the SEPs have been completed in accordance with the terms of this Stipulated Order. Such documentation may include photographs, invoices, receipts, certifications,

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and other materials reasonably necessary for the Regional Water Board to evaluate the completion of the SEPs and the costs incurred by the Settling Respondent.

3. Certification that Work Performed on the SEPs Met or Exceeded  
Requirements of CEQA and Other Environmental Laws

DECEMBER 3, 668 *TE*

*TE* *668*  
*DECEMBER 3* On or before ~~September 1, 2012~~, for the Simmons Slough Wetland Enhancement Project, and ~~November 1, 2012~~ for the Bahia Tidal Pond Enhancement and Marsh Monitoring Project, the Settling Respondent (or the Implementing Party on behalf of the Settling Respondent) shall submit documentation, under penalty of perjury, stating that the SEP meets or exceeds the requirements of CEQA, if applicable, and or other environmental laws. The Settling Respondent (or the Implementing Party on behalf of the Settling Respondent) shall, before the SEP implementation date, consult with other interested State agencies regarding potential impacts of the SEP. Other interested State agencies include, but are not limited to, the California Department of Fish and Game. To ensure compliance with CEQA where necessary, the Settling Respondent and/or the Implementing Party shall provide the Regional Water Board with the following documents from the lead agency:

- a) Categorical or statutory exemptions;
- b) Negative Declaration if there are no "significant" impacts;
- c) Mitigated Negative Declaration if there are potential "significant" impacts but revisions to the project have been made or may be made to avoid or mitigate those potential significant impacts;
- d) Environmental Impact Report (EIR) if there are "significant" impacts.

4. Third Party Audit

If the Regional Water Board staff obtains information that causes staff to reasonably believe that the Settling Respondent or Implementing Party has not expended money in the amounts claimed by the Settling Respondent or Implementing Party, or has not adequately completed any of the work in the SEPs, the Regional Water Board staff may require, and the Settling Respondent shall submit, at its sole cost, a report prepared by an independent third party acceptable to the Regional Water Board staff providing such party's professional opinion that Settling Respondent and/or the Implementing Party has expended money in the amounts claimed by the Settling Respondent. In the event of such an audit, the Settling Respondent and the Implementing Party agree that they will provide the third-party auditor with access to all documents which the auditor requests. Such information shall be provided to the Regional Water Board Staff within three months of the completion of the Settling Respondent's SEP obligations.

h. Regional Board Acceptance of Completed SEP

Upon the Settling Respondent's satisfaction of its obligations under this Stipulated Order, the completion of the SEPs and any audits, the Regional Water Board staff shall request that the Regional Water Board issue a "Satisfaction of Order." The issuance of

the Satisfaction of Order shall terminate any further obligations of the Settling Discharger and/or the Implementing Party under this Stipulated Order.

**i. Failure to Expend All Suspended Administrative Civil Liability Funds on the Approved SEP**

In the event that Settling Respondent is not able to demonstrate to the reasonable satisfaction of the Regional Water Board staff that it and/or the Implementing Party has spent the entire SEP Amount for the completed SEPs, Settling Respondent shall pay the difference between the Suspended Administrative Civil Liability and the amount Settling Respondent can demonstrate was actually spent on the SEP, as an administrative civil liability.

**j. Failure to Complete the SEP**

If the SEP is not fully implemented within the SEP Completion Period required by this Stipulated Order or there has been a material failure to satisfy a Milestone Requirement, the Regional Board staff shall issue a Notice of Violation. As a consequence, Settling Respondent shall be liable to pay the entire Suspended Liability or, some portion thereof less the value of the completion of any Milestone Requirements. Unless otherwise ordered, Settling Respondent shall not be entitled to any credit, offset, or reimbursement from the Regional Water Board for expenditures made on the SEP prior to the date of the "Notice of Violation" by the Regional Water Board. The amount of the Suspended Liability owed shall be determined by the Executive Officer or the Executive Officer's delegate. Upon notification of the amount assessed for failure to fully implement the SEP(s), the amount assessed shall be paid to the State Water Pollution Cleanup and Abatement Account within thirty days. In addition, the Settling Respondent shall be liable for the Regional Water Board's reasonable costs of enforcement, including but not limited to, legal costs and expert witness fees. Payment of the assessed amount will satisfy the Settling Respondent's obligations to implement the SEP(s).

**7. Water Board is Not Liable:** Neither the Regional Water Board members nor the Regional Water Board staff, attorneys, or representatives shall be liable for any injury or damage to persons or property resulting from acts or omissions by Settling Respondent or the Implementing Party, its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Stipulated Order, nor shall the Regional Water Board, its members or staff be held as parties to or guarantors of any contract entered into by Settling Respondent, its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Stipulated Order. The Settling Respondent and the Implementing Party covenant not to sue or pursue any administrative or civil claim or claims against any State Agency or the State of California, or their officers, employees, representatives, agents, or attorneys arising out of or relating to any matter expressly addressed by this Stipulated Order or the SEPs.

8. **Compliance with Applicable Laws:** The Settling Respondent understands that payment of administrative civil liability in accordance with the terms of this Stipulation and Order or compliance with the terms of this Stipulation and Order is not a substitute for compliance with applicable laws, and that continuing violations of the type of Alleged Violations may subject it to further enforcement, including additional administrative civil liability.

9. **Attorney's Fees and Costs:** Except as otherwise provided herein, each Party shall bear all attorneys' fees and costs arising from the Party's own counsel in connection with the matters set forth herein.

10. **Matters Addressed by Stipulation:** Upon adoption by the Regional Water Board as an Order, this Stipulation and Order represents a final and binding resolution and settlement of the Alleged Violations contained in this Stipulation and Order ("Covered Matters"). The provisions of this paragraph are expressly conditioned on the full payment of the administrative civil liability by the deadlines specified in Section II, Paragraph 4.

11. **Public Notice:** The Respondents understand that this Stipulation and Order will be noticed for a 30-day public review and comment period prior to consideration by the Regional Water Board, or its delegate. If significant new information is received that reasonably affects the propriety of presenting this Stipulation and Order to the Regional Water Board, or its delegate, for adoption, the Assistant Executive Officer may unilaterally declare this Stipulated Order void and decide not to present it to Regional Water Board, or its delegate. The Settling Respondents agree that it may not rescind or otherwise withdraw its approval of this Stipulation and Order.

12. **Addressing Objections Raised During Public Comment Period:** The Parties agree that the procedure contemplated for adopting the Order by the Regional Water Board and review of this Stipulation and Order by the public is lawful and adequate. In the event procedural objections are raised prior to the Stipulation and Order becoming effective, the Parties agree to meet and confer concerning any such objections, and may agree to revise or adjust the procedure as necessary or advisable under the circumstances.

13. **Interpretation:** This Stipulation and Order shall be construed as if the Parties prepared it jointly. Any uncertainty or ambiguity shall not be interpreted against any one Party. The Settling Respondent is represented by counsel in this matter.

14. **Modification:** This Stipulation and Order shall not be modified by any of the Parties by oral representation made before or after its execution. All modifications must be in writing, signed by all Parties and approved the Regional Water Board, or its delegate.

15. **If Order Does Not Take Effect:** In the event that this Order does not take effect because it is not approved by the Regional Water Board, or its delegate, or is

vacated in whole or in part by the State Water Resources Control Board or a court, the Parties acknowledge that they expect to proceed to a contested evidentiary hearing before the Regional Water Board to determine whether to assess administrative civil liabilities for the underlying alleged violations, unless the Parties agree otherwise. The Parties agree that all oral and written statements and agreements made during the course of settlement discussions will not be admissible as evidence in the hearing. The Parties agree to waive any and all objections based on settlement communications in this matter, including, but not limited to:

- a. Objections related to prejudice or bias of any of the Regional Water Board members or their advisors and any other objections that are premised in whole or in part on the fact that the Regional Water Board members or their advisors were exposed to some of the material facts and the Parties' settlement positions as a consequence of reviewing the Stipulation and Order, and therefore may have formed impressions or conclusions prior to any contested evidentiary hearing on the Complaint in this matter; or
- b. Laches or delay or other equitable defenses based on the time period for administrative or judicial review to the extent this period has been extended by these settlement proceedings.

16. **Waiver of Hearing:** The Settling Respondent has been informed of the rights provided by California Water Code section 13323, subdivision (b), and hereby waives its right to a hearing before the Regional Water Board prior to the adoption of the Stipulation and Order.

17. **Waiver of Right to Petition:** The Settling Respondent hereby waives its right to petition the Regional Water Board's adoption of the Order for review by the State Water Resources Control Board, and further waives its rights, if any, to appeal the same to a California Superior Court and/or any California appellate level court.

18. **Settling Respondent's Covenant Not to Sue:** The Settling Respondent covenants not to sue or pursue any administrative or civil claim(s) against any State Agency or the State of California, their officers, Board Members, employees, representatives, agents, or attorneys arising out of or relating to any Covered Matter.

19. **Necessity for Written Approvals:** All approvals and decisions of the Regional Water Board under the terms of this Stipulation and Order shall be communicated to the Settling Respondent in writing. No oral advice, guidance, suggestions or comments by employees or officials of the Regional Water Board regarding submissions or notices shall be construed to relieve the Settling Respondent of its obligation to obtain any final written approval required by this Stipulation and Order.

20. **Authority to Bind:** Each person executing this Stipulation and Order represents and warrants that he or she is authorized to execute this Stipulation and Order on behalf of and to bind the entity on whose behalf he or she executes the Stipulation and Order.

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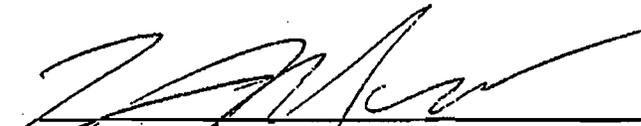
21. **Effective Date:** The obligations under Section II, Paragraph 4 of this Stipulation and Order are effective and binding on the Parties upon the date the Regional Water Board enters the Order.

22. **Severability:** The terms of this Stipulation and Order are severable; should any provision be found invalid the remainder shall remain in full force and effect.

23. **Counterpart Signatures:** This Stipulation and Order may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document.

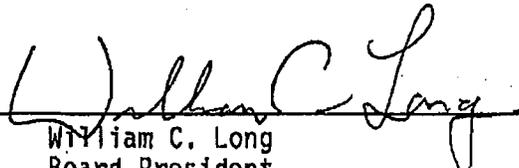
**IT IS SO STIPULATED.**

California Regional Water Quality Control Board Prosecution Team  
San Francisco Bay Region

By:   
Thomas E. Mumley, Assistant Executive Officer

Date: May 18, 2012

Novato Sanitary District

By:   
NAME William C. Long  
TITLE Board President

Date: May 16, 2012

**Order of the Regional Water Board**

24. This Order incorporates the foregoing Stipulations and Attachments A, B and C.

25. In accepting the foregoing Stipulations, the Regional Water Board has considered, where applicable, each of the factors prescribed in Water Code section 13385(e). The Regional Water Board's consideration of these factors is based upon information obtained by the Regional Water Board' staff in investigating the Alleged Violations or otherwise provided to the Regional Water Board. In addition to these factors, this settlement recovers the costs incurred by the staff of the Regional Water Board for this matter.

26. This is an action to enforce the laws and regulations administered by the Regional Water Board. The Regional Water Board finds that issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, sections 21000 et seq.), in accordance with section 15321(a)(2), Title 14, of the California Code of Regulations.

**IT IS HEREBY ORDERED**, pursuant to California Water Code section 13323 and Government Code section 11415.60, on behalf of the California San Francisco Bay Regional Water Quality Control Board.

\_\_\_\_\_  
Bruce H. Wolfe  
Executive Officer

\_\_\_\_\_  
Date

**ATTACHMENT A**

**LIABILITY METHODOLOGY PREPARED BY THE PROSECUTION STAFF**

## LIABILITY METHODOLOGY

On November 17, 2010, the State Water Resources Control Board (State Water Board) adopted Resolution No. 2009-0083 amending the Water Quality Enforcement Policy (Enforcement Policy). The Enforcement Policy was approved by the Office of Administrative Law and became effective on May 20, 2010. The Enforcement Policy establishes a methodology for assessing administrative civil liability. Use of the methodology addresses the factors in California Water Code section 13385.

The policy can be found at:

[http://www.waterboards.ca.gov/water\\_issues/programs/enforcement/docs/enf\\_policy\\_final11709.pdf](http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final11709.pdf)

The proposed stipulated administrative civil liability is based on the use of that methodology.

### **Complaint No. R2-2010-0102**

On September 15, 2011, the Assistant Executive Officer of the Regional Water Board issued Administrative Civil Liability Complaint No R2-2010-0102 ("Complaint"), alleging that 22 sanitary sewer overflows ("SSOs") occurred from the Settling Respondent's collection system between September 24, 2007, and February 28, 2010, resulting in the discharge of untreated wastewater to waters of the United States. The Complaint sought \$287,500 in administrative civil liability based on use of the Enforcement Policy liability methodology, and contains an explanation for how the methodology was used.

This liability was reduced by \$30,500 after receiving additional information from the Settling Respondent about its private lateral rehabilitation program and proof of California Water Environment Association certification. The adjusted liability for Complaint R2-2010-0102, including staff costs of \$18,000, is \$257,000. .

### **Additional Events Not Included in Complaint No. R2-2010-0102**

This Settlement Agreement and Stipulation for Entry of Order and Proposed Order ("Stipulation and Order") resolves the following events in addition to the 22 SSOs addressed in the Complaint.

- **Bahia Pump Station and Michele Circle Events** – SSO, at the Bahia Pump Station on October 31, 2010, and another SSO at Michelle Circle on January 1, 2011
- **March 2007 Event** – Treatment plant discharge exceeding effluent limit for total suspended solids on one occasion between March 17-19, 2007
- **October 2007 Event** - Unauthorized discharge of treated, chlorinated effluent on October 13 and 14, 2007
- **January 2011 Event** - Unauthorized discharge of digester sludge from January 4-6, 2011

The total liability to resolve these discharges as part of a global settlement with the Complaint is \$344,000. The following provides the basis for this liability assessment.

### **Base Liability Assessments**

The total base liability for the Bahia Pump Station and Michele Circle Events, the October 2007 Event, and the January 2011 Event is \$51,280.

- A base liability of \$35,475 is assessed for the Bahia Pump Station and Michele Circle Events based on the penalty factor assessments presented in Table 1.
- A base liability of \$8,377 is assessed for the October 2007 Event based on the penalty factor assessments presented in Table 2.
- A base liability of \$7,428 is assessed for the January 2011 Event based on the penalty factor assessments presented in Table 3.

A Mandatory Minimum Penalty of \$3,000 is assessed for the March 2007 Event for exceeding the permit limit for Total Suspended Solids (TSS) one time. The Novato Sanitary District cleaned an inactive secondary digester during March 2007 to prepare it for demolition. The digester was pressure washed, filtered for large debris, and wash-water carrying the remaining digester sludge was processed through the treatment plant. The TSS level prior to starting the cleaning operations was at a concentration of 8.8 mg/L (on March 2, 2007). Once cleaning operations began, TSS concentrations increased slightly in the range of 14 to 20 mg/L (on March 7 through 9 and 14, respectively) but remained within permit limits. Unknown to Settling Respondent staff at the time, the addition of solids from digester decommissioning caused accumulated rags in a floating layer of solids in an enclosed sludge thickener to be released into the system and start jamming pumps. This in turn impacted the system's ability to waste sludge, which on March 15 resulted in even higher elevated TSS levels through to March 21. The TSS concentrations were 46.7, 64, and 55 mg/L on March 15, 16, and 21, respectively. Based on the series of events, and the level of increase in TSS, had another sample or samples been collected starting on Saturday March 17 to Tuesday March 21, it or they would also have elevated TSS levels. Taken together with either week's reported concentrations, at least one weekly average value was above the weekly maximum concentration allowed by the permit (46 mg/L).<sup>1</sup>

### **Other Liability Factors Considered**

An upward adjustment of \$32,720 is proposed to the base liability based on consideration of the following liability factors:

- Ability to Pay and Ability to Continue in Business

No change is recommended based on an evaluation of this liability factor. The evaluation of this factor is the same as what is discussed in Complaint R2-2010-0102.

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<sup>1</sup> Data was reported in the Discharger's required monthly monitoring reports contained in the Discharger's public files.

- **Economic Benefit**

No change is recommended based on an evaluation of this liability factor. There is an economic benefit of \$230,671 associated with the Bahia Pump Station and Michele Circle Events for delayed costs of necessary upgrades, duplicative to what is discussed in complaint R2-2010-0102. Economic benefit associated with the October 2007 Event could involve delayed costs for replacing a switch if it was determined to be outdated and the second discharge event would have been caught had Settling Respondent staff stayed to observe and ensure the same failure did not occur. These overall costs are not considered significant (less than \$1,000). Economic benefit is not applicable to the January 2011 Event.

- **Other Factors as Justice may Require**

The base liability is increased by \$32,720 to cover staff costs for each event not covered in the Complaint (see the Complaint for a discussion on staff costs associated with the 22 SSOs alleged within it). This cost includes time to review files, interview current and former Novato Sanitary District employees and contractors, conduct site visits, engage in settlement discussions between September 2010 and October 2011, and prepare documents and correspondence.

- **Minimum and Maximum Penalties**

No adjustment is needed based on minimum and maximum penalties allowable by law. The proposed liability is greater than the economic benefit (plus 10 percent) gained (\$254,738), and it is less than the maximum penalties allowable by law (listed in Complaint R2-2010-0102 and Tables 1 through 3).

**Final Liability Assessment:** The total liability to resolve the Alleged Violations in a global settlement is \$344,000. Including reimbursement of \$10,240.72 for staff costs incurred by the Department of Fish and Game, the amount of the liability increases to \$354,240.72.

**TABLE 1**  
**Liability Factors Assessed for**  
**Bahia Pump Station and Michelle Circle Events**

<b>Maximum Liability</b>	<b>Factor</b>	<b>Explanation</b>
Days of Discharge	2	An SSO occurred at the Bahia Pump Station on October 31, 2010, and there was an SSO at Michele Circle on January 1, 2011.
Gallons Discharged	19,500	The reported volumes of the discharges are 19,000 gallons (Bahia Pump Station) and 2,500 gallons (Michele Circle). The total reported volume of discharge for these events is 21,500 gallons -2,000 (Water Code § 13385(c)(2))
Max Per Day Liability Max Per Gallon Liability	\$10,000 \$10	Water Code § 13385(c)(1) and (2)
Total Maximum Liability	\$215,000	(2 Days x \$10,000) + (19,500 x \$10)

<b>Per Gallon/Day Assessment</b>	<b>Factor</b>	<b>Explanation</b>
Harm/Potential Harm for Discharge violations	2	There are similar circumstances for these violations as in complaint R2-2010-0102.
Degree of Toxicity	3	
Susceptibility to Cleanup or Abatement	0	
Deviation from Requirement	Major	
Per Gallon/Day Factor	0.150	Value from Table 1 and 2 for Potential for Harm score of 3 and a major Deviation from Requirement.

<b>Conduct Factors</b>	<b>Multiplier</b>	<b>Explanation</b>
Culpability	1.0	There are similar circumstances for these violations as in complaint R2-2010-0102.
Cleanup and cooperation	1.0	
Prior History of Violations	1.1	

**TABLE 2**  
**Liability Factors Assessed for**  
**October 2007 Event**

Maximum Liability	Factor	Explanation
Days of Discharge	2	Two discharge events occurred during the evenings of October 12-13 and 13-14, 2007. There is evidence of system failure on the 12 <sup>th</sup> and 13 <sup>th</sup> . Discharges from the facility occurred at a later time after basins and drains were overwhelmed. Discharges are assessed on the 13 <sup>th</sup> and 14 <sup>th</sup> .
Gallons Discharged	43,062	An estimated volume of 22,031 discharged each night for a total of 44,062 gallons -1,000 (Water Code § 13385(c)(2))
Max Per Day Liability Max Per Gallon Liability	\$10,000 \$10	Water Code § 13385(c)(1) and (2)
Total Maximum Liability	\$450,620	(2 Days x \$10,000) + (43,062 x \$10)

Per Gallon/Day Assessment	Factor	Explanation
Harm/Potential Harm for Discharge violations	0	The discharge occurred during the dry season in a remote portion of a mostly dry wetland. The harm caused to beneficial uses is considered negligible.
Degree of Toxicity	2	The material was fully treated, secondary effluent with a chlorine concentration estimated to be around 3 mg/L (approximately 2 orders of magnitude above water quality criteria of 0.013 mg/L).
Susceptibility to Cleanup or Abatement	1	Less than 50% of the discharge was considered susceptible to cleanup or abatement.
Deviation from Requirement	Moderate	Discharges of untreated or partially treated sewage or chlorine used for disinfection are prohibited (R2-2004-0093). The discharge was fully treated with some chlorine residual.
Per Gallon/Day Factor	0.013	Value from Table 1 and 2 for Potential for Harm score of 3 and a moderate Deviation from Requirement.

Conduct Factors	Multiplier	Explanation
Culpability	1.1	No significant fault was determined for the first discharge event (~1.0). Actions were not taken by the discharger which could have prevented the second event (~1.2)
Cleanup and cooperation	1.3	Notification of the discharge was poor (">1,000 gallons"), and there was not an adequate report on the discharge until enforcement action was taken.
Prior History of Violations	1.0	A history of this type of discharge was not noted

**TABLE 3**  
**Liability Factors Assessed for**  
**January 2011 Event**

Maximum Liability	Factor	Explanation
Days of Discharge	3	A discharge of digester sludge from a digester sludge pipeline occurred on January 4-6, 2011.
Gallons Discharged	1,815	A reported 8,670 gallons discharged and with ~5,855 cleaned up = 2,815 gallons -1,000 (Water Code § 13385(c)(2))
Max Per Day Liability	\$10,000	Water Code § 13385(c)(1) and (2)
Max Per Gallon Liability	\$10	
Total Maximum Liability	\$48,150	(3 Days x \$10,000) + (1,815 x \$10)

Per Gallon/Day Assessment	Factor	Explanation
Harm/Potential Harm for Discharge violations	2	Impacts to water quality were observed and documented (bacteria, ammonia, dissolved oxygen, etc. analysis) by Department of Fish & Game personnel. The overall harm to beneficial uses is considered minor.
Degree of Toxicity	2	Digester sludge contains elevated levels of bacteria and may contain metals and other constituents of environmental concern. The material poses a moderate risk.
Susceptibility to Cleanup or Abatement	1	Material remaining at the site is not considered susceptible to cleanup.
Deviation from Requirement	Major	Discharges of untreated or partially treated sewage are prohibited (R2-2010-0074).
Per Gallon/Day Factor	0.150	Value from Table 1 and 2 for Potential for Harm score of 5 and a major Deviation from Requirement.

Conduct Factors	Multiplier	Explanation
Culpability	1.1	There is culpability for the discharge associated with a faulty joint (not glued) on the sludge discharge pipeline and inadequate records of pipeline plans/cleanouts.
Cleanup and cooperation	0.85	Notification and response to the spill was good, and there was good cooperation with State agencies (Regional Water Board and Department of Fish and Game).
Prior History of Violations	1.1	This is a history of spills associated with the pipelines and digester sludge operations.

**ATTACHMENT B**

**SIMMONS SLOUGH WETLAND ENHANCMENT PROJECT**

March 21, 2012

Project Name: Simmons Slough Wetland Enhancement Project



Project Developed by: Marin Audubon Society (MAS)

Project to be Performed by: MAS

Contact: Barbara Salzman  
415-924-6057  
[bsalzman@att.net](mailto:bsalzman@att.net)

Compliance with SEP Criteria:

This project is not subject to CEQA because the acreage of the area to be revegetated is 4.3 acres, which is fewer than the five acres that triggers CEQA.

1. Benefit to Water Quality and Beneficial Uses

This SEP will address the following beneficial uses:

- Estuarine Habitat (EST): The SEP will enhance estuarine wetland habitat on which many species birds and other wildlife depend.
- Wildlife Habitat (WILD): The SEP will preserve habitat for many species of migratory waterfowl and shorebirds that use the seasonal wetlands during migration and months they overwinter in the bay area.
- Preservation of Rare and Endangered Species (RARE): It is possible the project could benefit the endangered red-legged frog. No surveys have been performed, but improved habitat by this project and an enhancement project on another section of the property may attract and benefit this species.

2. SEP is not an Obligation of Discharger

The SEP contains only measures that go above and beyond applicable obligations of the discharger. The District is not required to develop, implement, or fund the SEP by any permit or order, or any local, state or federal law.

3. No Fiscal Benefit to Water Board

The District's contribution to the SEP does not provide any fiscal benefit to the Water Board's functions, its members, or its staff. No Water Board staff, members or functions thereof will financially or otherwise directly benefit from this SEP.

#### 4. Nexus between Violation and SEP

The SEP has a nexus to the violation as the 145-acre Simmons Slough property is located in the Novato Creek watershed where a break in a pipe resulted in the discharge of digested sludge from the District's wastewater treatment plant facility last winter. The sewage was discharged directly onto the area that is proposed for restoration with this project.

##### Description of Project:

#### 1. The goal(s) of the SEP and detailed plans for achieving the goal(s):

The goal of the SEP is to enhance wetland habitat by removing invasive species and revegetating 4.3 acres with native plants at the southernmost end of MAS's Simmons Slough property. Currently the area is vegetated with invasive species, primarily cocklebur. The area will be cleared of the existing invasive plants and planted with native wetland grasses. As the site is wet enough to support cocklebur, a species that tolerates a fairly long ponding time, wetland plants will be used for the revegetation.

After clearing, creeping (clonal) vegetation, primarily sedges and rushes, will be planted. The plantings will gradually spread and coalesce into relatively contiguous native plant habitats. The species and planting patterns for this property have been recommended by plant ecologist Peter Baye, Ph.D., who prepared *The Revegetation Plan for Simmons Slough*.

The species that will be planted include some or all of the following species, depending on availability: alkali bulrush (*Scirpus robustus*), basket sedge (*Carex barbarae*), meadow sedge (*Carex praegracilis*), wire rush (*Juncus arcticus*), common rush (*Juncus patens*), meadow barley (*Hordeum brachyantherum*), and common spikerush (*Elocharis macrostachya*). Manna grass (*Glyceria*) or semaphore-grass (*Pleuropogon*) seed may be sown in the fall.

Marin Audubon Society's propagation beds will supply the basket sedge at no cost to the SEP. Other native species will be purchased from a local native plant nursery according to availability.

Cocklebur will be removed as soon as the site has dried out and before the seeds mature. Cocklebur will either be removed mechanically, by a commercial landscaping firm MAS has used in the past, or by the Conservation Corps North Bay (CCNB) using mechanical means if possible, or hand labor. The CCNB uses teams of 10 young people who are in an education and job skills training program offered by that agency. The CCNB teams will work with our volunteers to remove invasive plants,

sow seeds and plant native plants. Plants will be planted densely in irregular groupings with an ultimate goal of 50 to 60 percent native vegetation coverage. That may take five or more years. Mulch will be placed on the planted areas.

Monitoring will be conducted to ensure the habitat restoration and enhancements are evolving as designed and, in case they are not, to identify problems as soon as possible so they can be remediated. Problems, such as with plant survival or watering needs, will be addressed as identified by monitoring. A draft and final monitoring report will be produced.

Monitoring and maintenance will be performed at least twice a year for the first year, and at least annually thereafter until the native plants have become established. Established means that the native plants survive and function to prevent, or keep in check, invasion by non-native plant species and provide habitat for native wildlife. Native plants that do not survive will be replaced.

Baseline, pre-planting monitoring will be done, photo points set for photographic monitoring, and photos of baseline conditions will be taken. MAS will continue to monitor and maintain the property as long as we own the site. Monitoring will be conducted by The Watershed Nursery and by MAS volunteers and will consist of walking the site, estimating the percent cover of planted creeping-clonal and herbaceous species as well as estimating and identifying non-native species. Photographs will be taken at established photo points.

MAS volunteers and CCNB workers will conduct necessary maintenance activities, particularly weeding of invasive plants that may colonize the newly-planted area. Maintenance will also include watering with a water truck, if needed, replacing plants that do not survive, and placing mulch.

## 2. Key personnel involved in SEP

Barbara Salzman  
Jude Stalker  
Lowell Sykes  
Diana Benner, The Watershed Nursery (project consultant)  
Peter Baye, Ph.D.

## 3. Plans to continue and/or maintain the SEP beyond the SEP-funded period

Maintenance activities beyond the SEP-funded period will be conducted by MAS volunteers. MAS is responsible for maintenance on this property which

it owns. Any additional funds needed to hire crews to perform maintenance activities will be funded by member donations and grants that will be sought and obtained by MAS.

4. Documented support for the SEP  
N/A

Project Milestones and Budget:

Budget

Mow invasive plants	5,500
Remove mowed plants, plant native plants or sow seed, place mulch around newly-planted plants (CCNB)	15 600
Purchase plants/seeds	3,300
Purchase mulch	6,000
Watering	3,000
Post planting maintenance	4,000
Monitoring	4,000
Overall subtotal	\$ 41,400
Administration: insurance, accounting, etc. (5%)	\$ 2,070
GRAND TOTAL	\$ 43,470

Time Schedule /Milestones

Remove invasive plants	December 2012
Planting of native plants and rhizomes	December 2012- March 2013
Monitoring & Maintenance Reports	July 31 and December 31, 2013, 2014 and 2015
Quarterly Reports	January 31, April 30, July 31 and October 31 for years 2013, 2014, 2015, and January 31 and April 30, 2016.
Submit Final Report	August 2016

Provided funding is approved by spring 2012, there should be sufficient time to order and grow plant stock for planting in fall/winter 2012-2013.

Any unspent funds will be turned over to the State Cleanup and Abatement Account.

### Project Performance Measures:

MAS will monitor the new plantings and perform the maintenance necessary to achieve a significant increase in the native plants on the site by three years post-planting. We would expect a 50-60% increase in native plant coverage over a three year period, compared to the coverage of native species at the present time.

Variations in winter rains, however, will influence survival rate, with very low survival rates in low rainfall years. We have added funding for water supply (spraying with a water truck) during the first summer, if needed. Should weather conditions be particularly unfavorable, we would want to renegotiate the performance measures. Accordingly, we have added funds for monitoring and to guarantee post-project maintenance and replacement if necessary.

Given the extent of the non-native species on the site and the size of the project area, exact counts and calculating exact percent cover may be infeasible. Estimates of percent cover of planted creeping-clonal and herbaceous species as well as estimates and identification of non-native (self-recruiting) species will be used and provided in reports. The project will be determined to be successful if the installed species are persisting and spreading within the project site after three years.

### Reports to the Water Board:

Quarterly reports of activities and progress of plantings will be provided to the Regional Water Board, the State Board's Division of Financial Assistance and the San Francisco Estuary Partnership on January 31, April 30, July 31 and October 31 of 2013, 2014, and 2015 and January 31 and April 30 of 2016.

The final report documenting completion of the SEP and how performance measures were met along with a copy of the accounting records of expenditures also will be submitted to these entities by August 2016.

### Third Party Oversight Organization:

The San Francisco Estuary Partnership

**ATTACHMENT C**

**BAHIA TIDAL POND ENHANCEMENT AND MARSH MONITORING PROJECT**

March 21, 2012

Project Name: Bahia Tidal Pond Enhancement and Marsh Monitoring Project

Project Developed by: Marin Audubon Society (MAS)

Project to be performed by: MAS

Contact: Barbara Salzman  
415-924-6057  
[bsalzman@att.net](mailto:bsalzman@att.net)



Compliance with SEP Criteria:

CEQA is not applicable to this project because the area being revegetated is only 2.3 acres, fewer than the 5-acre trigger for CEQA review.

1. Benefit to Water Quality and Beneficial Uses

This SEP will address the following beneficial uses:

- Estuarine Habitat (EST) – The SEP will enhance estuarine wetland habitat on which many species of fish, birds and other wildlife depend;
- Preservation of Rare and Endangered Species (RARE) – The SEP will preserve habitat for the endangered California Clapper Rail that inhabit many marshes in and around the Bahia marshes;
- Wildlife Habitat (WILD) – The SEP will enhance habitat for many species of migratory waterfowl and shorebirds that use the tidal pond and diked seasonal wetlands during migration and months they overwinter in the bay area.

2. The SEP is not an Obligation of the District

The SEP contains only measures that go above and beyond applicable obligations of the discharger. The District is not required to develop, implement, or fund the SEP by any permit or order, or any local, state or federal law. District funding has never been contemplated for this project nor has it been included in prior District budgets.

3. No Fiscal Benefit to Water Board

The SEP does not provide any fiscal benefit to the Water Board's functions, its members, or its staff.

#### 4. Nexus between Violation and SEP

The SEP has nexus to the violation as the SEP is located on the property where approximately 18,000 gallons of sewage were spilled from the District's Bahia Pump Station in October 2010.

#### Description of Project:

##### 1. The goal(s) of the SEP and detailed plans for achieving the goal(s)

This project has two components: a) Revegetation to enhance a tidal pond habitat and b) Monitoring of the revegetated pond berms and the tidal marsh restoration project that was completed in 2008.

- a) Pond Revegetation: The goal of the SEP is to enhance the habitat around an approximately five-acre pond located on approximately 60 acres owned by MAS. The pond is located along the Petaluma River adjacent to the District's Bahia Pump Station and was not part of the tidal marsh restoration project MAS implemented in 2008.

The revegetation will take place on a 2.3 acre area around the edge of the pond. The pond is subject to muted tidal action through two small breaches (each about 2 feet wide and 3 feet deep) in the berm which separates the pond from the outer marsh. These breaches were excavated with hand labor to address an odor problem due to anaerobic conditions. Prior to that, the tidal inundation was less frequent and resulted from overtopping of the low berms at high tides.

The tidal pond is unvegetated except for pickleweed and salt grass growing along its edges. The transition zone on the berm adjacent to the marsh fringe is vegetated primarily with invasive species such as star thistle and wild radish.

The SEP will enhance pond habitat and water quality by removing invasive non-native species and planting native plant species in the transition zone. MAS's propagation beds will supply the native grass (*Lemus triticoides*) rhizomes at no charge to the project. Native plant species that will be purchased and planted include coast live oak (*Quercus agrifolia*), coyote bush (*Baccharis pilularis*), California sage (*Artemesia californica*), western goldenrod (*Euthamia occidentalis*) and sticky monkeyflower (*Mimulus aurantiacus*). Protective covers will be placed around plants (primarily oaks) that are at risk from browsing by animals. Plants will be purchased from a local native plant nursery and planted. Only a small number of oaks (no more than five) will be planted because trees provide perch sites for raptors that prey on shorebirds and Clapper Rails that inhabit at the adjacent tidal marsh. Planting will occur

during the rainy months, November through March, preferably earlier in the season.

MAS will hire the Conservation Corps North Bay (CCNB) crews of 10 plus one supervisor to work with our volunteers to clear the non-native plants from the planting area and plant rhizomes and plants of native shrubs, grasses and trees. Mulch will be placed around the newly planted area. Approximately 700 plants and 2,000 rhizomes of creeping wildrye will be planted.

b) The SEP monitoring component will include:

- 1) Year 3 monitoring of hydrodynamics of the 2008 Tidal Marsh Restoration Project. Wetlands and Water Resources' engineers will perform the following tasks: bathymetric surveys of internal and external sloughs at Central and West Bahia, Black John Slough and the Petaluma River; marsh plain transects and breach cross sections; aerial photo analysis and ground truthing for vegetative spread on mudflats and high marsh, and patterns of invasive non-native vegetation colonization on transition zones. Avian surveys will be conducted by volunteers, but funding is included for professional analysis of the survey results. Vegetation surveys will be conducted by The Watershed Nursery. Survey and photo locations will be consistent with Year 1 monitoring that has been completed. This monitoring will begin within one month of approval of this funding and will be completed within one year.
- 2) The project will include monitoring of the transition zone habitat adjacent to the pond habitat that will be planted by this SEP project. Monitoring is necessary to ensure the habitat restoration and enhancements are evolving as designed and, in case they are not, to identify problems as soon as possible so they can be remediated. This monitoring will be performed by The Watershed Nursery and MAS volunteers.

Monitoring and maintenance will be performed at least twice a year for the first year and once a year thereafter by which time we expect most of the native plants to be established. MAS, as the owner of the property, will continue monitoring and routine maintenance beyond the SEP time frame in perpetuity. Any problems that may be identified through monitoring will be addressed as part of the maintenance program.

We will record and assess using photo documentation and presence-absence determinations. Baseline monitoring will be conducted, photopoints will be established and photos of baseline conditions will

be taken prior to implementation of the project. Monitoring will be performed twice a year by MAS volunteers and the Watershed Nursery, probably more frequently on an informal basis. Monitoring will continue for three years with reports to the SEP agencies

Monitoring will be conducted by walking the site and observing hard to reach sites with binoculars, estimating and recording percent cover of planted creeping colonial and herbaceous species as well as estimating and identifying non-native species.

Routine maintenance will be performed in conjunction with the monitoring and will include removal of non-native species, checking and replacing drywater, watering and placing additional mulch if needed. Weeding will be done by hand or mower. MAS has not used herbicides to date and would only use them in extreme circumstances

A draft and final monitoring report will be produced.

2. Key personnel involved in SEP

Barbara Salzman  
Jude Stalker  
Lowell Sykes  
Stuart Siegel, Wetlands and Water Resources  
Diana Benner, The Watershed Nursery

3. Plans to continue and/or maintain the SEP beyond the SEP-funded period

Maintenance activities beyond the SEP-funded period will be conducted by MAS volunteers. MAS owns this property and is responsible for maintaining vegetative habitat on its sites. Maintenance activities are conducted by MAS volunteers and contract workers we hire. Ongoing maintenance activities will include removing invasive non-native plants, planting to replace plants that do not survive or for diversity, watering and mulching. Any additional funds needed for to hire crews to perform maintenance activities will be funded by member donations and grants obtained by MAS.

4. Documented Support for the SEP

N/A

Project Milestones and Budget:

Budget:

Bahia Tidal Pond Enhancement

Removal of non-native plants, plant, protect and mulch native plants (CCNB)	\$11,900
Plant rhizomes (CCNB)	6,897
Purchase native plants (700)	3,430
Dri-water gel packs	3,388
Purchase mulch	5,000
Remove Invasive plants post-planting	<u>6,000</u>
 Total	 \$ 36,615

<b>Monitoring</b>	
Engineering (performed by WWR)	25,950
Tidal Marsh Project Revegetation	10,000
Revegetation of SEP pond	4,500
Avian	2,500
Report and project Mgt.	<u>12,500</u>
	\$ 55,450
 Overall subtotal	 \$ 92,065
Administration: insurance, accounting, etc. (5%)	4,603
 GRAND TOTAL	 \$ 96,668

**Milestones**

- Remove invasive species – Just before planting December 2012
- Plant native plants and rhizomes - December 2012 through March 2013
- Submit quarterly progress reports – January 31, April 30, July 31 and October 31 for years 2013, 2014, 2015 and January 31 and April 30 , 2016.
- Complete Tidal Marsh Monitoring – December 2012
- Complete Tidal Marsh Monitoring Report – January 31, 2013
- Revegetation Monitoring Reports – January 31 and July 31, 2013, 2014, and 2015; and January 31, 2016.
- Complete Pond Vegetative Monitoring – June 2016
- Final Report for Pond Revegetation and Tidal Marsh Monitoring – July, 2016.

Any unspent funds will be turned over to the State Cleanup and Abatement Account.

**Project Performance Measures:**

- a) Performance measure for the Monitoring of the Tidal Marsh Restoration will be the successful completion of the necessary surveys and data analysis, and publication of the results in a Monitoring Report with recommendations for improving similar restoration projects in the future.
- b) Success of the tidal pond revegetation will be measured by the percent cover of native plant species compared to non-native vegetation prior to removal of invasive plants and post-revegetation in 2015. MAS will monitor the new plantings and perform the required maintenance to achieve a significant increase in the cover of native as compared to non-native plant species. Our objective is to increase the cover by native species by 50-60% after the native species are planted and have several years to establish compared to the cover by native species at the present time.

Variations in winter rainy season would influence survival rate, with very low survival rates in low rainfall years. We have added funding for water supply (water gel packs for shrub species) during the first winter. Should weather conditions be particularly unfavorable, we would want to renegotiate the performance measures. In addition, survival rate will be influenced by the soil types on the site which are bay mud and Novato conglomerate. These soils are not ideal for growth of upland plants.

Given the extent of non-native vegetation through the project reach and the size and topography of the project area, exact counts and percent cover prescriptions may not be feasible. We will record and assess plant survival of native plants planted, using photo documentation and presence-absence determinations. The enhancement plantings should be determined successful if installed species are persisting and spreading along the project site after three years.

#### Reports to the Water Board:

Quarterly reports will be provided to the Regional Water Board, the State Board's Division of Financial Assistance and the San Francisco Estuary Partnership on January 31, April 30, July 31 and October 31, 2013, 2014, 2015, and January 31, April 30 of 2016.

The final report documenting completion of the SEP and how performance measures were met along with a copy of the accounting records of expenditures also will be submitted to these entities on July 31, 2016.

#### Third Party Oversight Organization:

The San Francisco Estuary Partnership

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