

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ADVISORY TEAM SUMMARY REPORT (Stephen A. Hill)
MEETING DATE: February 13, 2019

ITEM: 7A

SUBJECT: **CalAtlantic Group, Inc., Preserve Project, San Ramon, Contra Costa County –**
Consideration of Imposition of Administrative Civil Liability

CHRONOLOGY: The Board has not previously considered this item.

DISCUSSION: This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order (Settlement Agreement and Stipulated Order) (Appendix A) would impose an administrative civil liability of \$770,000 against CalAtlantic Group, Inc., (CalAtlantic) for alleged violations of the statewide NPDES general permit for stormwater discharges at construction sites. Half of the liability would be suspended upon completion of a supplemental environmental project; CalAtlantic would pay \$385,000 to the Regional Monitoring Program Fund for a study, “Quantifying Stormwater Flow and Sediment Flux to the Bay.”

CalAtlantic is developing the Preserve Project (formerly Faria Preserve), a 618-unit residential development in the City of San Ramon. CalAtlantic enrolled under the construction stormwater general permit, which regulates stormwater management practices and stormwater discharges at construction sites. Stormwater from the Preserve Project discharges to the headwaters of San Ramon Creek, which drains to Suisun Bay through the cities of Walnut Creek and Concord.

Generally, the Executive Officer, under the direction and control of the Board, acts on settlements for civil liability reached by the Board’s prosecution staff and a discharger, like the Settlement Agreement and Stipulated Order. In this case, however, the settlement is being brought to the Regional Water Board for consideration because the Interim Executive Officer is the head of the prosecution team who executed the settlement. Accordingly, in order to maintain separation of functions on this enforcement matter, the advisory team, led by Stephen A. Hill and Yuri Won as counsel, request that the Board consider adopting the Settlement Agreement and Stipulated Order imposing administrative civil liability. Adopting it would approve the settlement reached by the parties and be an order of the Board imposing civil liability without a hearing. Applicable law allows an agency to formulate and issue a decision by settlement without conducting an adjudicatory hearing. (Gov. Code, § 11415.60.)

The prosecution team consists of Thomas Mumley, Lisa McCann, Keith Lichten, Bill Johnson, Brian Thompson, Jack Gregg, and Jerry Xu. Laura Drabandt, an attorney from the State Water Resources Control Board’s Office of Enforcement, represents the prosecution team. The prosecution team alleges five permit violations during the 2016/2017 wet season: three for inadequate stormwater management practices and two for unauthorized sediment discharges. Prosecution staff circulated the Settlement

Agreement and Stipulated Order for public comments for 30 days. No comments were received, and we expect this item to remain uncontested. The Board has two options: (1) it can approve and adopt the Settlement Agreement and Stipulated Order or (2) it can reject the settlement. If the Board rejects the settlement, the prosecution team and CalAtlantic expect to proceed to a contested evidentiary hearing at a future date.

If the Board decides to approve the Settlement Agreement and Stipulated Order, the advisory team recommends that page 9 of the Settlement Agreement and Stipulated Order be amended as follows (in redline/strikeout) to reflect that the Board is approving the order, not the Executive Officer, and to add an order certification section:

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

Bruce H. Wolfe

Date

Executive Officer

California Regional Water Quality Control Board, San Francisco Bay Region

I, Thomas E. Mumley, Interim Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a settlement agreement and stipulated order for administrative civil liability adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 13, 2019.

Thomas E. Mumley

Interim Executive Officer

California Regional Water Quality Control Board

San Francisco Bay Region”

RECOMMEN-
DATION:

Adoption of the Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order

SMARTS:

WDID No. 2 07C376186

APPENDICES:

A. Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order

Appendix A
Settlement Agreement and Stipulation for Entry of
Administrative Civil Liability Order

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

In the matter of:

**CALATLANTIC GROUP, INC.,
CONTRA COSTA COUNTY**

**Violations of Construction
Stormwater General Permit
(NPDES No. CAS000002, Order No.
2009-0009-DWQ)**

**SETTLEMENT AGREEMENT AND
STIPULATION FOR ENTRY OF
ADMINISTRATIVE CIVIL LIABILITY
ORDER**

PROPOSED

Section I: INTRODUCTION

This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order (Stipulated Order) is entered into by and between San Francisco Bay Regional Water Quality Control Board (Regional Water Board) prosecution staff and CalAtlantic Group, Inc. (CalAtlantic) (collectively Parties), and is presented to the Regional Water Board or its delegate for adoption as an Order by settlement pursuant to Government Code section 11415.60. This Stipulated Order resolves all the violations alleged herein by the imposition of administrative civil liability against CalAtlantic for **\$770,000**.

Section II: RECITALS

1. CalAtlantic owns the Preserve Project (formerly the Faria Preserve) (Site), a residential development in the City of San Ramon. The Site is open space east of Bollinger Canyon Road, west of Interstate 680, north of Deerwood Road, and south of Las Trampas Ridge. CalAtlantic is developing 618 residential units and associated amenities at the Site, including a community park and an educational facility.
2. The Site is located within the headwaters of San Ramon Creek, part of the Walnut Creek watershed, which eventually drains through the cities of Walnut Creek and Concord and then into Suisun Bay.
3. On May 4, 2016, CalAtlantic submitted a notice of intent to obtain coverage for the Site under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, NPDES Permit No. CAS000002, most recently issued through Order No. 2009-0009-DWQ and amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ (Permit). The Permit regulates stormwater management practices and discharges at sites authorized to discharge pursuant to the Permit.
4. Prosecution staff alleges the following violations, discussed further in Exhibit A:
 - a. CalAtlantic failed to provide effective soil cover for inactive areas and all finished slopes, open space, and completed lots as required by Permit Attachment D, section D.2.

- b. CalAtlantic failed to use sediment basins, at a minimum, designed according to the method provided in "CASQA's Construction BMP Guidance Handbook"¹ as required by Permit Attachment D, section E.2.
 - c. CalAtlantic failed to maintain effective perimeter controls to sufficiently control sediment discharges from the Site as required by Permit Attachment D, section E.1.
 - d. CalAtlantic failed to minimize or prevent pollutants in stormwater discharges through the use of controls, structures, and management practices that achieve best conventional pollutant control technology for conventional pollutants when it discharged sediment-laden and/or high-pH stormwater in violation of Permit Attachment D, section A, subsection 1.b.
 - e. CalAtlantic failed to prevent stormwater discharges and/or authorized non-stormwater discharges containing pollutants from causing or contributing to exceeding the receiving water turbidity water quality objectives in the San Francisco Bay Basin Water Quality Control Plan (Basin Plan) section 3.3.19 on January 12, 13, 16, 17, 19, 20, 23, 24, and 25, and February 7, 10, 13, 16, 17, 21, 22, and 23, 2017, in violation of Permit section VI.C.
5. To resolve the alleged violations in Section II, paragraph 4, by consent and without further administrative proceedings, the Parties have agreed to the imposition of an administrative civil liability of \$770,000 against CalAtlantic. This administrative civil liability is less than the \$854,200 proposed by Regional Water Board prosecution staff based on the penalty calculation methodology in the State Water Resources Control Board's Water Quality Enforcement Policy (Enforcement Policy) (effective May 2010), as shown in Exhibit A. During settlement discussions, prosecution staff agreed to reduce the proposed liability by approximately 10 percent due, in part, to litigation risks as allowed by Enforcement Policy section VI.B, Settlement Considerations. To maximize the amount of suspended liability that may be allocated to a Supplemental Environmental Project (SEP), prosecution staff agree to not seek staff costs as part of the 10 percent reduction in liability. Payment of \$385,000 to the State Water Pollution Cleanup and Abatement Account is due no later than 30 days following the Regional Water Board or its delegate executing this Stipulated Order. The remaining \$385,000 in penalties shall be suspended upon completion of CalAtlantic's payment funding the SEP described in Section III, paragraph 9.b.i.
 6. The Parties have engaged in settlement negotiations and agreed to settle this matter without administrative or civil litigation, and to present this Stipulated Order to the Regional Water Board or its delegate for adoption as a Stipulated Order by settlement pursuant to Government Code section 11415.60.
 7. Regional Water Board prosecution staff contends that the resolution of the alleged violations is fair and reasonable and fulfills its enforcement objectives; that no further action or injunctive relief is necessary or warranted concerning the violations, except as provided in this Stipulated Order; and that this Stipulated Order is in the public's best interest.

¹ *California Stormwater Quality Association Stormwater Best Management Practice Handbook Construction*, available at <https://www.casqa.org/resources/bmp-handbooks/construction>.

Section III: STIPULATIONS

The Parties incorporate the foregoing Recitals and stipulate to the following:

8. **Administrative Civil Liability:** CalAtlantic hereby agrees to the imposition of an administrative civil liability of **\$770,000** to resolve the alleged violations as set forth in Section II, paragraph 4, as follows:

- a. No later than 30 days after the Regional Water Board or its delegate signs this Stipulated Order, CalAtlantic shall submit a check for **\$385,000** made payable to the "State Water Pollution Cleanup and Abatement Account," with reference to the Order number on page one of this Stipulated Order, to the following address:

State Water Resources Control Board Accounting Office
Attn: ACL Payment
P.O. Box 1888
Sacramento, CA 95812-1888

CalAtlantic shall provide a copy of the check via e-mail to the State Water Resources Control Board, Office of Enforcement (Laura.Drabandt@waterboards.ca.gov), and the Regional Water Board (Brian.Thompson@waterboards.ca.gov).

- b. The Parties agree that the remaining **\$385,000** of the administrative civil liability shall be paid to the Regional Monitoring Program, care of the San Francisco Estuary Institute, for implementation of a SEP named "Quantifying Stormwater Flow and Sediment Flux to the Bay," as follows:
- i. \$385,000 (SEP Amount) shall be paid in the manner described in Paragraph 8.b.ii herein, solely for use toward the SEP Fund for the "Quantifying Stormwater Flow and Sediment Flux to the Bay" project. The funding of this project under this agreement will fund the upgrade of an urban watershed runoff model to better estimate stormwater runoff. The goal of this project is to fill critical flow and sediment data gaps needed to calibrate urban watershed runoff models. The project has two elements: (1) a planning element to refine needs and to design the monitoring network; and (2) a monitoring and reporting element. A complete description of this project is provided in Exhibit B, incorporated herein by reference.
- ii. No later than 30 days after the Regional Water Board or its delegate signs this Stipulated Order, CalAtlantic shall submit a check for \$385,000 made payable to the "Regional Monitoring Program," referencing this Regional Water Board stipulated order number, and mail the check to:

Regional Monitoring Program
c/o San Francisco Estuary Institute
4911 Central Avenue
Richmond, CA 94804

CalAtlantic shall provide a copy of the check via e-mail to the State Water Resources Control Board, Office of Enforcement

(Laura.Drabandt@waterboards.ca.gov), and the Regional Water Board
(Brian.Thompson@waterboards.ca.gov).

9. **SEP:** The Parties agree that CalAtlantic's payment of the SEP Amount to SFEI is a SEP, and that the SEP Amount will be treated as a permanently suspended administrative civil liability for purposes of this Stipulated Order. CalAtlantic's SEP obligations will be satisfactorily completed upon the San Francisco Estuary Institute's written notification to Regional Water Board staff and the Discharger. The written notification shall acknowledge that the Regional Monitoring Program received the SEP Amount from the Discharger and the payment will be spent as described in Section III, paragraph 9.b.i, and Exhibit B in accordance with the terms of this Stipulated Order. The San Francisco Estuary Institute's annual and quarterly financial reports to the Regional Water Board shall be considered a final post-project accounting of expenditures.
10. **SEP Oversight Costs:** SFEI will oversee SEP implementation in lieu of Regional Water Board staff oversight and will report solely to the Regional Water Board. CalAtlantic shall not have any implementation or oversight role for the SEP; rather, all its obligations with respect to the SEP will be completed upon SFEI's receipt of the SEP Amount and SFEI's written notification described in Paragraph 9. SFEI has agreed to voluntarily cover any SEP-related oversight costs. Oversight costs are not included in the SEP Amount.
11. **Publicity Associated with SEP:** Whenever CalAtlantic or its agents or subcontractors publicize one or more elements of the SEP, it shall be stated in a prominent manner that the project is undertaken as part of a settlement to a Regional Water Board enforcement action against CalAtlantic.
12. **Regional Water Board is Not Liable:** Neither the Regional Water Board members nor Regional Water Board staff, attorneys, or representatives shall be held as parties to or guarantors of any contract entered into by CalAtlantic or its directors, officers, employees, agents, representatives, or contractors in carrying out activities pursuant to this Stipulated Order.
13. **Compliance with Applicable Laws:** CalAtlantic understands that payment of administrative civil liability in accordance with the terms of this Stipulated Order and/or compliance with the terms of this Stipulated Order is not a substitute for compliance with applicable laws, and that continuing violations of the type alleged herein may subject it to further enforcement, including additional administrative civil liability.

14. Party Contacts for Communications related to this Stipulated Order:

For the Regional Water Board:

Brian Thompson
San Francisco Bay Regional Water
Quality Control Board
1515 Clay Street, 14th Floor
Oakland, CA 94612
Brian.Thompson@waterboards.ca.gov
(510) 622-2422

For CalAtlantic:

CalAtlantic Group, Inc.
Attn: Division President/President Land
2603 Camino Ramon, Ste. 525
San Ramon, CA 94583
Brian.Olin@lennar.com
(925) 242-0811

With copy to:

CalAtlantic Group, Inc.
Attn: Legal Department
700 NW 107th Ave., Ste. 400
Miami FL 33072
Rob.Nicks@lennar.com
(281) 875-1000

15. **Attorneys' 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.
16. **Matters Addressed by this Stipulated Order:** Upon the Regional Water Board's or its delegate's adoption, this Stipulated Order represents a final and binding resolution and settlement of the alleged violations as of the effective date of this Stipulated Order. The provisions of this paragraph are expressly conditioned on the full payment of the administrative civil liability and SEP Amount by the deadlines specified in Section III, paragraph 9.b.
17. **Public Notice:** CalAtlantic understands that this Stipulated Order must 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 Stipulated Order to the Regional Water Board or its delegate for adoption, Regional Water Board prosecution staff may unilaterally declare this Stipulated Order void and decide not to present it to the Regional Water Board or its delegate. CalAtlantic agrees that it may not rescind or otherwise withdraw its approval of this proposed Stipulated Order.
18. **Addressing Objections Raised During Public Comment Period:** The Parties agree that the procedure contemplated for public review of this Stipulated Order and the Regional Water Board's or its delegate's adoption of this Stipulated Order is lawful and adequate. The Parties understand that the Regional Water Board or its delegate has the authority to require a public hearing on this Stipulated Order. If procedural objections are raised or the Regional Water Board requires a public hearing prior to the Stipulated Order becoming effective, the Parties agree to meet and confer concerning any such objections and may agree to revise or adjust the procedure and/or this Stipulated Order as necessary or advisable under the circumstances.

19. **Interpretation:** This Stipulated Order shall be construed as if the Parties prepared it jointly. Any uncertainty or ambiguity shall not be interpreted against any one Party. The Parties are represented by counsel in this matter.
20. **Modification:** The Parties shall not modify this Stipulated Order by oral representation made before or after its execution. All modifications must be in writing, signed by all Parties, and approved by the Regional Water Board or its delegate.
21. **If the Stipulated Order Does Not Take Effect:** If the Stipulated Order does not take effect because the Regional Water Board or its delegate does not approve it, or because the State Water Resources Control Board or a court vacates it in whole or in part, 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 or used for any purpose including but not limited to the following:
 - a. Objections related to prejudice or bias of any of Regional Water Board members or their advisors or any other objections that are premised in whole or in part on the fact that 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 this Stipulated Order and, therefore, may have formed impressions or conclusions prior to any contested evidentiary hearing on the violations alleged herein 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 that this period has been extended by these settlement proceedings.
21. **Waiver of Hearing:** CalAtlantic has been informed of the rights Water Code section 13323, subdivision (b), provides and hereby waives its right to a hearing before the Regional Water Board prior to the Stipulated Order's adoption. However, if the settlement is not adopted, and if the matter proceeds to the Regional Water Board or State Water Resources Control Board for a hearing, CalAtlantic does not waive the right to a hearing before an order is imposed.
22. **Waiver of Right to Petition or Appeal:** CalAtlantic hereby waives its right to petition the Regional Water Board's adoption of the Stipulated 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. This explicit waiver of rights includes potential future decisions by the Regional Water Board or its delegate directly related to this Stipulated Order, including but not limited to time extensions, SEP completion, and other terms contained in this Stipulated Order.
23. **Covenant Not to Sue:** CalAtlantic covenants not to sue or pursue any administrative or civil claims against the State of California, any State agency, or their officers, board members,

employees, representatives, agents, or attorneys arising out of, or relating to, any matter expressly addressed by this Stipulated Order or the SEP.

24. **No Admission of Liability/No Waiver of Defenses:** In settling this matter, CalAtlantic does not admit to liability or to the truth of the findings or allegations made by Regional Water Board prosecution staff, or admit to any of the findings in this Stipulated Order or its attachments, or admit to any violations of the Clean Water Act, the Permit, any Regional Water Board order, or any other federal, State, or local laws or ordinances, but recognizes that this Stipulated Order may be used as evidence of resolution of a prior enforcement action consistent with Water Code section 13327 and the Enforcement Policy. By entering this Stipulated Order, CalAtlantic does not waive any defenses or arguments related to any new enforcement action that may be brought by the Regional Water Board in the future.
25. **Necessity for Written Approvals:** All Regional Water Board approvals and decisions under the terms of this Stipulated Order shall be communicated to CalAtlantic in writing. No oral advice, guidance, suggestions, or comments from Regional Water Board employees or officials regarding submissions or notices shall be construed to relieve CalAtlantic of its obligation to obtain any final written approval this Stipulated Order requires.
26. **Authority to Bind:** Each person executing this Stipulated Order in a representative capacity represents and warrants that he or she is authorized to execute this Stipulated Order on behalf of, and to bind, the entity on whose behalf he or she executes the Stipulated Order.
27. **No Third Party Beneficiaries:** This Stipulated Order is not intended to confer any rights or obligations on any third party, and no third party shall have any right of action under this Stipulated Order for any cause whatsoever.
28. **Severability:** This Stipulated Order is severable; if any provision is found to be invalid, the remainder shall remain in full force and effect.
29. **Counterpart Signatures, Facsimile and Electronic Signature:** This Stipulated 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. Furthermore, this Stipulated Order may be executed by facsimile or electronic signature, and any such facsimile or electronic signature by any Party hereto shall be deemed to be an original signature and shall be binding on such Party to the same extent as if such facsimile or electronic signature were an original signature.
30. **Effective Date:** This Stipulated Order shall be effective and binding on the Parties upon the date the Regional Water Board or its delegate enters the Order incorporating the terms of this Stipulated Order.

IT IS SO STIPULATED.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION, PROSECUTION STAFF**

Date: December 19, 2018

By: 

Thomas Mumley
Assistant Executive Officer

CalAtlantic Group, Inc.

Date: DECEMBER 21, 2018

By: 

Name: BRIAN OLIN

Title: VICE PRESIDENT

ORDER OF THE REGIONAL WATER BOARD

1. This Stipulated Order incorporates the foregoing Sections I through III by this reference as if set forth fully herein.
2. In accepting this Stipulation, the Regional Water Board has considered, where applicable, each of the factors prescribed in Water Code section 13385, subdivision (e), and has applied the penalty calculation methodology set forth in the Enforcement Policy (effective May 2010), which is incorporated by reference herein. The Regional Water Board's consideration of these factors and application of the penalty calculation methodology is based on information Regional Water Board prosecution staff obtained in investigating the allegations set forth in the Stipulated Order or otherwise provided to the Regional Water Board.
3. This is an action to enforce the laws and regulations administered by the Regional Water Board, which therefore finds issuance of this Stipulated Order exempt from the provisions of the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) in accordance with section 15321, subdivision (a)(2), Title 14, of the California Code of Regulations.
4. The Executive Officer of the Regional Water Board is authorized to refer this matter directly to the Attorney General for enforcement if CalAtlantic fails to perform any of its obligations under this Stipulated Order.

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

Bruce H. Wolfe
Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region

Date

Attachments: Exhibit A - Factors in Determining Administrative Civil Liability
Exhibit B - Study Description for Supplemental Environmental Project (SEP) Fund

EXHIBIT A

Factors in Determining Administrative Civil Liability

CALATLANTIC GROUP, INC. VIOLATIONS OF CONSTRUCTION STORMWATER GENERAL PERMIT AND CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AT PRESERVE PROJECT (FORMERLY FARIA PRESERVE) SUBDIVISION 9342, SAN RAMON, CONTRA COSTA COUNTY

The State Water Resources Control Board Water Quality Enforcement Policy (Enforcement Policy) establishes a methodology for assessing administrative civil liability.² Use of the methodology addresses the factors required by California Water Code (Water Code) sections 13327 and 13385, subdivision (e). Each factor in the State Water Resources Control Board's Water Quality Enforcement Policy (Enforcement Policy) (effective May 2010) and its corresponding category, adjustment, and amount for the alleged violation is presented below. The Enforcement Policy should be used as a companion document in conjunction with this administrative civil liability assessment since the penalty methodology and definition of terms are not replicated herein. The Enforcement Policy is at:

http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf

ALLEGED VIOLATIONS

CalAtlantic Group, Inc. (CalAtlantic) allegedly violated the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Permit), NPDES Permit No. CAS000002, most recently issued through Order No. 2009-0009-DWQ, and amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ (Permit), and the federal Clean Water Act section 401 (33 U.S.C § 1341) by failing to implement adequate erosion and sediment controls, and discharging sediment-laden stormwater into waters of the State and United States, at the Preserve Project, formerly the Faria Preserve, located at Subdivision 9342 in the City of San Ramon (Site). This penalty assessment addresses four Permit violations and one violation of the water quality certification issued under Clean Water Action section 401 that occurred during the 2016/2017 rainy season in which administrative liability may be imposed under Water Code section 13385. The penalty assessment for each violation is presented in the following pages.

The calculated total administrative civil liability, prior to applying settlement considerations, for the alleged violations is \$854,200, including \$18,700 in staff costs.

² On April 4, 2017, the State Water Resources Control Board adopted Resolution 2017-0020 adopting the 2017 Water Quality Enforcement Policy, which the Office of Administrative Law then approved on October 5, 2017. However, this administrative civil liability methodology uses the Enforcement Policy that became effective in May 2010 since the alleged violations occurred while that policy was in effect.

Violation 1 (Non-Discharge Violation) Inadequate Soil Cover in Inactive Areas

CalAtlantic violated Permit Attachment D, section D.2 by failing to install adequate soil cover on approximately 98 acres³ of inactive area disturbed by construction from October 14, 2016, through March 8, 2017, for a total of 146 days of violation. Regional Water Board staff observed this violation during each of its Site inspections on October 14, 16, 21, and 28, and December 15, 2016, and on March 8, 2017.

CalAtlantic is subject to administrative civil liability for this violation pursuant to Water Code sections 13385(a)(2) and 13385(c)(1). The proposed liability is \$626,300 based on the following factors in the Enforcement Policy.

Penalty Factor	Assessed Value	Discussion
Per Day Factor	0.3	<p>Moderate Potential for Harm – The Permit identifies sediment as the primary stormwater pollutant of concern at construction sites. More than half of this Site lacked soil cover to minimize erosion and sediment in stormwater runoff, which caused a substantial potential for harm. Regional Water Board staff observed this violation during Site visits on October 14, 16, 21, and 28, and December 15, 2016, and on March 8, 2017, as well as in imagery of the Site from August 28, 2016, and March 11, 2017.⁴ The assessed value (0.3) is on the lower end of moderate.⁵ This assessed value reflects a moderate potential for harm on days that it rained and a low potential for harm during dry weather.</p> <p>Moderate Deviation from Requirements – The intended effectiveness of the requirement to have soil cover over inactive, disturbed areas of the Site to reduce sediment erosion (Permit Attachment D, section D.2) was only partially achieved because, at best, soil cover protected less than half of the disturbed area of the Site during the 146 days of violation.</p>
Adjustment for Multiple Day Violations	No	No Adjustment – There is no downward adjustment for multiple days of violation.
Initial Liability	\$438,000	The initial liability is calculated as follows: Per day factor (0.3), multiplied by the maximum per-day liability (\$10,000), multiplied by the number of days of violation (146).
Culpability	1.3	Penalty Increase – Regional Water Board staff provided notice of inadequate erosion controls verbally during seven inspections (starting

³ The total acreage was determined by overlaying the September 8, 2016, update to ENGEO's Erosion and Sediment Control Plan map on a satellite image of the Site. The acreage lacking BMPs was determined by overlaying the March 1, 2017, Faria Preserve Site BMP Progress Map submitted by ENGEO to the Regional Water Board on March 27, 2017, on a satellite image of the Site, and recording the areas lacking BMPs within the total acreage. The areas lacking BMPs matched visual observations from the Regional Water Board inspection on March 8, 2017.

⁴ Google Earth Pro historical maps. Accessed on June 27, 2017.

⁵ See Table 3 – Per Day Factor on page 16 in the Enforcement Policy effective May 2010.

Penalty Factor	Assessed Value	Discussion
		with an August 17, 2016, site visit before the 2016/2017 rainy season ⁶), in a letter on October 14, 2016, and in an email on October 17, 2016, yet the same violation was again observed both two, four, and seven months later. ENGEO, CalAtlantic's stormwater consultant, also provided notice of soil cover requirements in its September 8, 2016, erosion and sediment control plan and its October 21, 2016, response letter to the Regional Water Board.
Cleanup and Cooperation	1.1	<p>Penalty Increase – CalAtlantic granted Regional Water Board staff access to the Site for inspections and provided information when requested, although it was not always timely.</p> <p>On May 24, 2017, Regional Water Board staff requested copies of the Site best management practice (BMP) inspection reports from September 2016 through March 2017 from ENGEO. ENGEO staff said it could provide these documents with permission from CalAtlantic. On June 2, 2017, Regional Water Board staff sent a reminder email to ENGEO and CalAtlantic. On June 27, 2017, Regional Water Board staff sent another reminder email to ENGEO and CalAtlantic, reminding them that ENGEO had promised to send the documents by June 16, 2017. On July 11, 2017, Regional Water Board staff again requested BMP documents from ENGEO and CalAtlantic at a meeting. ENGEO sent the Site BMP inspection reports to the Regional Water Board on July 19, 2017.</p> <p>At the July 11, 2017, meeting, Regional Water Board staff also asked ENGEO and CalAtlantic staff for copies or photos of the BMP installation maps from the construction trailer and any earlier copies or records of this map, both by July 21, 2017, and ENGEO staff agreed. ENGEO staff provided these documents on August 23, 2017.</p>
History of Violations	1.0	No Adjustment – CalAtlantic does not have a history of similar violations.
Base Liability	\$626,340	Each applicable factor relating to the discharger's conduct is multiplied by the initial liability of \$438,000 to determine the Base Liability .

⁶ It first rained on October 14, 2016, with 0.62 inches. California Data Exchange Center – Query Tools. Accessed March 2, 2017. <http://cdec.water.ca.gov/cgi-progs/queryCSV>. Danville Library (station ID DVB) daily incremental precipitation, inches (sensor number 45).

Violation 2 (Non-Discharge Violation) Inadequate Sediment Basins

CalAtlantic violated Permit Attachment D, section E.2 by failing to construct adequate sediment basins at the Site from October 14, 2016, through October 28, 2016, for a total of 15 days of violation. Regional Water Board staff observed this violation during inspections on October 14, 21, and 28, 2016.

CalAtlantic is subject to administrative civil liability for this violation pursuant to Water Code sections 13385(a)(2) and 13385(c)(1). The proposed liability is \$53,600 based on the following factors in the Enforcement Policy.

Penalty Factor	Assessed Value	Discussion
Per Day Factor	0.25	<p>Moderate Potential for Harm – Since the sediment basins were not completed and had no erosion controls on their inlet, outlet, and slopes at the time of the first rainfall of the season (starting on October 14, 2016⁷), they likely added sediment pollution to the discharges from the Site. Additionally, sediment basins are ineffective at removing fine-grained soil particles, as described in the <i>California Stormwater Quality Association Stormwater Best Management Practice Handbook Construction</i> (CASQA's Construction BMP Guidance Handbook) section SE-2. Therefore, the use of these incomplete sediment basins to minimize sediment pollution posed a substantial potential for harm.</p> <p>Minor Deviation from Requirements – The intended effectiveness the requirement to construct sediment basins in accordance with CASQA's Construction BMP Guidance Handbook section SE-2 (Permit Attachment D, section E.2) remained generally intact. The basins generally conformed to CASQA design criteria but were not completed in time for the first rainfall of the 2016/2017 rainy season. Protections to inlet, outlet, and slopes were missing, as documented in an April 27, 2017, Regional Water Board inspection report. The assessed value (0.25) is the middle of the range for a minor deviation from requirements.</p>
Adjustment for Multiple Day Violations	No	No Adjustment – There is no downward adjustment for multiple days of violation.
Initial Liability	\$37,500	The initial liability is calculated as follows: Per day factor (0.25), multiplied by the maximum per-day liability (\$10,000), multiplied by the number of days of violation (15).
Culpability	1.3	Penalty Increase – Regional Water Board staff pointed out sediment basin inadequacies to Site personnel during three inspections leading up to and through the start of the 2016/2017 rainy season, and documented violations in a letter on October 14, 2016. ENGEO responded on behalf

⁷ It first rained on October 14, 2016, with 0.62 inches. California Data Exchange Center – Query Tools. Accessed March 2, 2017. <http://cdec.water.ca.gov/cgi-progs/queryCSV>. Danville Library (station ID DVB) daily incremental precipitation, inches (sensor number 45).

Exhibit A - Administrative Civil Liability Factors
CalAtlantic Group, Inc.

Penalty Factor	Assessed Value	Discussion
		of CalAtlantic in a letter on October 21, 2016, stating that slopes of the temporary basins would be hydroseeded or covered with erosion control fabric and that the sediment basins would be used in conjunction with erosion controls and other BMPs. During a follow-up inspection on October 28, 2016, Regional Water Board staff again observed inadequate sediment basins.
Cleanup and Cooperation	1.1	<p>Penalty Increase – CalAtlantic granted Regional Water Board staff access to the Site for inspections and provided information when requested, although it was not always timely.</p> <p>On May 24, 2017, Regional Water Board staff requested copies of the Site BMP inspection reports from September 2016 through March 2017 from ENGEO. ENGEO staff said it could provide these documents with permission from CalAtlantic. On June 2, 2017, Regional Water Board staff sent a reminder email to ENGEO and CalAtlantic. On June 27, 2017, Regional Water Board staff sent another reminder email to ENGEO and CalAtlantic, reminding them that ENGEO had promised to send the documents by June 16, 2017. On July 11, 2017, Regional Water Board staff again requested the documents from ENGEO and CalAtlantic at a meeting. ENGEO sent the Site BMP inspection reports to the Regional Water Board on July 19, 2017.</p>
History of Violations	1.0	No Adjustment – CalAtlantic does not have a history of similar violations.
Base Liability	\$53,625	Each applicable factor relating to the discharger's conduct is multiplied by the initial liability of \$37,500 to determine the Base Liability .

Violation 3 (Non-Discharge Violation) Inadequate Perimeter Controls

CalAtlantic violated Permit Attachment D, section E.1 by failing to adequately maintain perimeter controls for 17 days. Regional Water Board staff observed 7 instances of perimeter control violations (described below) during 5 inspections on October 14, 16, 17, 21, and 28 (covering 16 days total), and observed another day of violation on December 15, 2016. Each perimeter control violation was repaired within 1 to 13 days based on photographs ENGEO provided.

- **Instances 1 and 2** - Sediment-laden stormwater and/or sediment flowed over the sides of the stormwater conveyance ditch above sampling point S-1 on October 14 and 17, 2016. Based on ENGEO's photographs, repairs were made by October 15 and 24, 2016, respectively.
- **Instance 3** - The drop inlet on sampling point S-1 was clogged and overtopped by sediment-laden stormwater on October 14, 2016, and then had holes punched through the protective filter fabric covering the drop inlet on October 28, 2016. Based on ENGEO's photographs, repairs were made by October 27 and 29, 2016, respectively.
- **Instance 4** - Sediment-laden stormwater flowed under perimeter controls installed around the Central Creek Channel on October 16, 2016. Based on ENGEO's photographs, repairs were made by October 26, 2016.
- **Instance 5** - Sediment-laden stormwater overtopped sampling point S-3 on October 16 and 21, 2016. Based on ENGEO's photographs, repairs were made by October 24, 2016.
- **Instance 6** - Sediment-laden stormwater overtopped sampling point S-5 on October 21, 2016. Based on Regional Water Board staff photographs, repairs were made by October 28, 2016.
- **Instance 7** - Sediment-laden stormwater and/or sediment overtopped sampling point S-1 and perimeter controls installed around the Central Creek Channel on December 15, 2016. The dates of repairs to these perimeter controls are uncertain. This assessment assumes a minimum response time of 1 day.

CalAtlantic is subject to administrative civil liability for this violation pursuant to Water Code sections 13385(a)(2) and 13385(c)(1). The proposed liability is \$56,100 based on the following factors in the Enforcement Policy.

Penalty Factor	Assessed Value	Discussion
Per Day Factor	0.3	Moderate Potential for Harm – Regional Water Board staff observed failed perimeter controls and accumulations of sediment from the Site that passed these perimeter controls on eight inspections from October to December 2016. Sediment control techniques are intended to capture any soil that erodes when erosion control techniques are ineffective. Perimeter controls are intended to capture soil that has passed all other erosion and sediment controls, serving as the last measure of defense

Penalty Factor	Assessed Value	Discussion
		<p>against offsite discharges and downstream impacts.⁸ The failures of the perimeter controls resulted in discharges of sediment and sediment-laden stormwater to the Central Creek Channel and to other unnamed waters draining to San Ramon Creek and Bollinger Canyon Creek.</p> <p>Minor Deviation from Requirements – Permit Attachment D, section E.1 requires that dischargers establish and maintain effective perimeter controls to sufficiently control sediment discharges from their sites. Regional Water Board staff observed that some perimeter controls were partially missing, overtopped, and/or bypassed during the inspections on October 14, 16, 17, 21, and 28, and December 15, 2016. The assessed value is on the upper end of minor since a moderate deviation from requirement is more appropriate on days when multiple instances of perimeter control failures were observed together.</p>
Adjustment for Multiple Day Violations	No	No Adjustment – There is no downward adjustment for multiple days of violation.
Initial Liability	\$51,000	The initial liability is calculated as follows: Per day factor (0.3), multiplied by the maximum per-day liability (\$10,000), multiplied by the number of days of violation (17).
Culpability	1.1	Penalty Increase – Regional Water Board staff notified CalAtlantic about failing perimeter controls during at least two inspections, on October 14 and 21, 2016, at the start of the 2016/2017 rainy season.
Cleanup and Cooperation	1.0	No Adjustment – CalAtlantic granted Regional Water Board staff access to the Site for inspections. Regional Water Board staff found that the perimeter controls during the March 8, 2017, inspection were improved.
History of Violations	1.0	No Adjustment – CalAtlantic does not have a history of similar violations.
Base Liability	\$56,100	Each applicable factor relating to the discharger's conduct is multiplied by the initial liability of \$51,000 to determine the Base Liability .

⁸ See also the Permit's Fact Sheet, section II.J.1.f.

Violation 4 (Discharge Violation) Observed Sediment-Laden Discharges

CalAtlantic violated Permit Attachment D, section A.1.b. by discharging sediment-laden stormwater from the Site on October 14, 16, 21, and 28, and December 15, 2016, and on March 8, 2017, for a total of 6 days of violation. Regional Water Board staff observed inadequate erosion and sediment controls, and sediment-laden discharges, on these dates. On December 15, 2016, staff measured the discharge volume to be approximately 47,500 gallons.

CalAtlantic is subject to administrative civil liability for this violation pursuant to Water Code section 13385(a)(2) and 13385(c)(1). The proposed liability is \$75,100 based on the following factors in the Enforcement Policy.

Penalty Factor	Assessed Value	Discussion
Potential for Harm (Factor 1)	2	Below Moderate Potential for Harm – According to Regional Water Board inspection observations and data from ENGEO’s March 7, 2017, report, sediment-laden and elevated-pH stormwater were discharged offsite when erosion and sediment controls were inadequate to minimize pollution. Turbidity was measured at levels up to 331 NTU ⁹ and pH was measured as high as 9.4 at some discharge locations. Turbidity and pH were not elevated at all discharge points, and the overall data suggest that harm to beneficial uses was minor.
Degree of Toxicity (Factor 2)	2	Moderate Toxicity – Sediment is the primary stormwater pollutant at construction sites (Permit Finding I.A.11). It reduces sunlight reaching aquatic plants, clogs fish gills, smothers aquatic habitat and spawning areas, impedes navigation, and transports other pollutants, such as nutrients, metals, and oils and greases. Elevated pH may cause decreased reproduction, reduced biodiversity, decreased growth, and damage to skin, gills, olfactory organs, and eyes. ¹⁰
Susceptible to Cleanup	1	No – Less than 50 percent of the discharge was cleaned up or abated.
Per Gallon and Per Day Factor	0.100	Moderate Deviation from Requirement – The requirement to minimize pollution through controls, structures, and management practices was only partially achieved because protective measures were either inadequately installed or missing (e.g., soil cover as discussed in violation 1, sediment basins as discussed in violation 2, and perimeter controls as discussed in violation 3).
Adjustment for High Volume Discharges	No	No Adjustment – There is no downward adjustment for high volume discharges.
Initial Liability	\$52,500	The initial liability is calculated as follows: Per day factor (0.100), multiplied by the maximum per day liability (\$10,000), multiplied by the

⁹ NTU = nephelometric turbidity units

¹⁰ CADDIS Volume 2. Sources, Stressors and Responses: pH. United States Environmental Protection Agency. <https://www.epa.gov/caddis-vol2/caddis-volume-2-sources-stressors-responses-ph>. Accessed March 14, 2017.

Exhibit A - Administrative Civil Liability Factors
CalAtlantic Group, Inc.

Penalty Factor	Assessed Value	Discussion
		number of days of violation (6) plus per gallon factor (0.100), multiplied by the maximum per gallon liability (\$10), multiplied by the number of gallons of discharged (47,500) minus 1,000 gallons not cleaned up (46,500).
Culpability	1.3	Penalty Increase – Regional Water Board staff provided notice of turbid discharges or the potential for turbid discharges, including verbal communication during seven inspections, in a letter on October 14, 2016, and in an email on October 17, 2016.
Cleanup and Cooperation	1.1	<p>Penalty Increase – CalAtlantic granted Regional Water Board staff access to the Site for inspections and provided information when requested, although it was not always timely.</p> <p>On May 24, 2017, Regional Water Board staff requested copies of the Site BMP inspection reports from September 2016 through March 2017 from ENGEO. ENGEO staff said it could provide these documents with permission from CalAtlantic. On June 2, 2017, Regional Water Board staff sent a reminder email to ENGEO and CalAtlantic. On June 27, 2017, Regional Water Board staff sent another reminder email to ENGEO and CalAtlantic, reminding them that ENGEO had promised to send the documents by June 16, 2017. On July 11, 2017, Regional Water Board staff again requested the documents from ENGEO and CalAtlantic at a meeting. ENGEO sent the Site BMP inspection reports to the Regional Water Board on July 19, 2017.</p> <p>At the July 11, 2017, meeting, Regional Water Board staff also asked ENGEO and CalAtlantic staff for copies or photos of the BMP installation maps from the construction trailer and any earlier copies or records of this map, both by July 21, 2017, and ENGEO staff agreed. ENGEO staff provided these maps on August 31, 2017.</p>
History of Violations	1.0	No Adjustment – CalAtlantic does not have a history of similar violations.
Base Liability	\$75,075	Each applicable factor relating to the discharger's conduct is multiplied by the initial liability of \$52,500 to determine the Base Liability .

Violation 5 (Discharge Violation) Reported Sediment-Laden Discharges

CalAtlantic violated Permit section VI.C by exceeding the turbidity water quality objectives in San Francisco Bay Basin Water Quality Control Plan (Basin Plan) section 3.3.19 on January 12, 13, 16, 17, 19, 20, 23, 24, and 25, and February 7, 10, 13, 16, 17, 21, 22, and 23, 2017, for a total of 17 days of violation. During these 17 days, when the upstream turbidity was more than 50 NTU, the turbidity increased by more than 10 percent from the sediment-laden stormwater discharge, and when the upstream turbidity was less than 50 NTU, the turbidity increased to more than 10% above 50 NTU from the sediment-laden stormwater discharge. ENGEO measured turbidity both upstream and downstream of the Site during qualifying rain events on these days (ENGEO March 7, 2017, report).

CalAtlantic is subject to administrative civil liability for this violation pursuant to Water Code sections 13385(a)(2) and 13385(c)(1). The proposed liability is \$24,300 based on the following factors in the Enforcement Policy.

Penalty Factor	Assessed Value	Discussion
Potential for Harm (Factor 1)	2	Below Moderate – The increase in turbidity in surface water crossing through the construction site ranged from 110 to 300 percent on 8 days (January 12, 19, 20, and 23, and February 7, 10, 17, and 21), when upstream turbidity was greater than 50 NTU, compared to the Basin Plan water quality objective to limit increases in turbidity to 10 percent above natural turbidity. Moreover, the turbidity increased to more than 10 percent above 50 on 9 days (January 13, 16, 17, 24, and 25, and February 13, 16, 22, and 23) when upstream turbidity was less than or equal to 50 NTU.
Degree of Toxicity (Factor 2)	3	Moderate Toxicity – Sediment is the primary stormwater pollutant at construction sites (Permit Finding I.A.11). It reduces sunlight reaching aquatic plants, clogs fish gills, smothers aquatic habitat and spawning areas, impedes navigation, and transports other pollutants such as nutrients, metals, and oils and greases.
Susceptible to Cleanup	1	No – Less than 50 percent of the discharge was cleaned up or abated.
Per Gallon and Per Day Factor	0.100	Moderate Deviation from Requirement – The requirement to limit increases in natural turbidity to 110 percent (for ambient water with turbidity greater than or equal to 50 NTU) or 5 NTU (for ambient water with turbidity less than 50 NTU) was partially compromised.
Adjustment for High Volume Discharges	No	No Adjustment – There is no downward adjustment for high volume discharges.
Initial Liability	\$17,000	The initial liability is calculated as follows: Per day factor (0.100), multiplied by the maximum per-day liability (\$10,000), multiplied by the number of days of violation (17).

Exhibit A - Administrative Civil Liability Factors
CalAtlantic Group, Inc.

Penalty Factor	Assessed Value	Discussion
Culpability	1.3	Penalty Increase – There were multiple notifications by Regional Water Board staff about turbid discharges or the potential for turbid discharges, including verbal communication during seven inspections, in a letter on October 14, 2016, and in an email on October 17, 2016.
Cleanup and Cooperation	1.1	<p>Penalty Increase – CalAtlantic granted Regional Water Board staff access to the Site for inspections and provided information when requested, although it was not always timely.</p> <p>On May 24, 2017, Regional Water Board staff requested copies of the Site BMP inspection reports from September 2016 through March 2017 from ENGEO. ENGEO staff said it could provide these documents with permission from CalAtlantic. On June 2, 2017, Regional Water Board staff sent a reminder email to ENGEO and CalAtlantic. On June 27, 2017, Regional Water Board staff sent another reminder email to ENGEO and CalAtlantic, reminding them that ENGEO had promised to send the documents by June 16, 2017. On July 11, 2017, Regional Water Board staff again requested the documents from ENGEO and CalAtlantic at a meeting. ENGEO sent the Site BMP inspection reports to the Regional Water Board on July 19, 2017.</p> <p>At the July 11, 2017, meeting, Regional Water Board staff also asked ENGEO and CalAtlantic staff for copies or photos of the BMP installation maps from the construction trailer and any earlier copies or records of this map, both by July 21, 2017, and ENGEO staff agreed. ENGEO staff provided these maps on August 31, 2017.</p>
History of Violations	1.0	No Adjustment – CalAtlantic does not have a history of similar violations.
Base Liability	\$24,310	Each applicable factor relating to the discharger's conduct is multiplied by the initial liability of \$17,000 to determine the Base Liability .

Adjustments for All Violations

Total Base Liability	\$835,500	The Base Liability for each violation is added to determine the Total Base Liability . It is rounded to the nearest hundred dollars.
Ability to Pay and Continue in Business	No adjustment	The Enforcement Policy provides that if there is sufficient information to assess the violator's ability to pay the total base liability or to assess the effect of the total base liability on the violator's ability to continue in business, then the liability may be adjusted downward if warranted. There is sufficient information in the public record on file to support a finding of an ability to pay and continue to stay in business, and CalAtlantic is not disputing the matter. ¹¹ A downward adjustment is therefore unwarranted.
Economic Benefit	Not greater than proposed liability	CalAtlantic realized an economic benefit by avoiding costs associated with erosion (violation 1) and sediment controls (violations 2 and 3) that resulted in sediment-laden discharges (violations 4 and 5). This economic benefit was calculated using the U.S. Environmental Protection Agency's Economic Benefit Model (BEN), version 5.8.0. ¹² The calculated economic benefit plus 10 percent is not greater than the proposed liability and therefore does not warrant an adjustment pursuant to the Enforcement Policy.
Staff Costs	Increase \$18,700	The staff costs incurred during the development of this enforcement case were \$18,700, which includes the following: \$9,000 (158 hours x \$57.00 hourly rate for Water Resource Control Engineer) + \$5,800 (58 hours x \$100.00 hourly rate for Senior Engineering Geologist) + \$2,200 (20 hours x \$110.00 hourly rate for Supervising Water Resource Control Engineer) + \$1,700 (13 hours x \$133.00 hourly rate for Assistant Executive Officer)
Maximum Liability	\$4,345,200	Water Code section 13385 allows up to \$10,000 for each day in which the violation occurs, and \$10 for each gallon exceeding 1,000 gallons discharged and not cleaned up. The maximum liability is based on 47,500 gallons minus 1,000 gallons for violation 4 and 201 days for violations 1 to 5.
Minimum Liability	\$591,000	The statutory minimum liability that may be assessed is the economic benefit: \$536,500. To comply with the Enforcement Policy, the minimum liability is the economic benefit plus ten percent: \$591,000 (rounded).
Final Liability	\$854,200	The final liability amount is the total base liability after adjusting for ability to pay, economic benefit, other factors, and maximum and minimum liabilities.

¹¹ U.S. Army Corps of Engineers 404(b)(1) Alternative Analysis, prepared by Olberding Environmental, Inc.

¹² Elder, B., "Economic Benefit Analysis – Faria Preserve," Memo to Prosecution Team, November 7, 2018.

EXHIBIT B

Study Description for Supplemental Environmental Project Fund for the San Francisco Bay Regional Monitoring Program

Basic Information

Project Name: Quantifying Stormwater Flow and Sediment Flux to the Bay

Project Budget: \$385,000

San Francisco Estuary Institute (SFEI) Contacts:

- Technical: Lester McKee, lester@sfei.org, (415) 847-5095
Alicia Gilbreath, alicia@sfei.org, (510) 746-7308
- Financial: Jennifer Hunt, jennifer@sfei.org, (510) 746-7347

Study Description

The goal of this project is to fill critical flow and sediment data gaps needed to calibrate urban watershed runoff models. The project has two elements: 1) a planning element to refine needs and to design the monitoring network; and 2) a monitoring and reporting element.

Urban runoff is the largest controllable pathway for a range of pollutants that impair beneficial uses in San Francisco Bay and its tributaries. Major efforts are underway to find pollution sources, estimate their relative importance, select and optimize placement of management practices, and use models to forecast water quality improvements that will result from management practice implementation over the coming decades. However, these forecasting efforts remain hampered by a lack of urban stormwater flow and sediment data to support the refined calibration of the dynamic simulation models being used, and the nature of episodic stormwater flows that differ among the microclimates of the Bay Area.

Element 1 of this project will involve the following: 1) define stormwater flow and sediment data needs and gaps, and develop a sampling framework (number of watersheds, desired watershed characteristics) to address those needs and gaps, 2) generate a draft master list of potential sampling sites, 3) complete a reconnaissance of the potential sites, 4) prioritize a final list of sites, and 5) purchase and install equipment. The existing Small Tributaries Loading Strategy Team of the RMP will provide the oversight to support these planning needs. Monitoring will begin in the wet season following the completion of the planning phase and continue for two years.

Element 2 of this project will generate flow and sediment information for 100 percent urban watersheds around the Bay margin that are representative of unique microclimates based on decisions made during the completion of Element 1. This element will involve the following: 1) complete field work at a minimum of four locations; 2) complete quality assurance of the data; 3) prepare summary documents of the project outcomes; and 4) make the finalized data permanently publicly available.

Compliance with SEP Criteria

This study complies with the following SEP criteria:

- It supports development and implementation of a monitoring program and/or study of surface water quality or quantity and/or the beneficial uses of the water.
- It has a nexus to both the nature and the location of the violations. The violations were associated with management practices to control stormwater runoff and discharges into streams based on monitoring and sampling data. The SEP will improve understanding of how these activities should be implemented at a more fine-tuned level, within Bay Area microclimates. The SEP will include urban runoff studies in the East Bay hills, where the violations occurred.

This study goes above and beyond applicable discharger obligations because of the following:

- This project is a study above and beyond what is required in permits or orders issued by the Regional Water Board or what can be accomplished with the dischargers' required monetary contributions to the RMP.

Study Milestones and Performance Measures

Study results will be made available through the RMP website. Reporting products will include the following: a) an RMP technical report, due December 2021; b) a summary factsheet for managers describing the results and their implications, due December 2021; and c) project data made available through the RMP website by December 2021.

Project Budget and Reports to Water Board

Pursuant to the October 2015 Supplement to the Memorandum of Understanding (MOU) between SFEI and the Regional Water Board, SFEI is responsible for identifying in each annual work plan and annual budget for the RMP those studies or elements, or portions of a study or element, that are to be funded by SEP funds. SFEI will keep a copy of accounting records of SEP fund contributions and expenditures separately from regular RMP funds. In its annual and quarterly financial reports to the Regional Water Board, SFEI will separately itemize SEP fund contributions and expenditures by each SEP funder.

SFEI will provide notice to the Regional Water Board within one month after receiving funds from a discharger for the SEP and the notice will state SFEI's agreement to use the funds received as described herein.

Publicity

Pursuant to the 2015 MOU, SFEI will indicate on its RMP website, and annual and other reports, that funding for the study is the result of a settlement of a "San Francisco Bay Water Board" enforcement action.