

Exhibit A

MEMORANDUM OF AGREEMENT

CENTRAL COAST REGIONAL AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE DISCHARGERS MONITORING PROGRAM

This Memorandum of Agreement (AGREEMENT), dated, for reference purposes only, December 1, 2012, is made by and between the MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY, hereinafter referred to as "AGENCY," a Joint Powers Authority (JPA) organized under the laws of the State of California, and the following entities, each of which is hereinafter referred to as "DISCHARGER" or collectively as "DISCHARGERS":

CITY OF PACIFIC GROVE, a municipal corporation of the State of California;
CITY OF MONTEREY, a municipal corporation of the State of California;
CITY OF CARMEL-BY-THE-SEA, a municipal corporation of the State of California;
COUNTY OF MONTEREY, a political subdivision of the State of California;
COUNTY OF SAN MATEO, a political subdivision of the State of California;
COUNTY OF MARIN, a political subdivision of the State of California;
PEBBLE BEACH COMPANY, a California general partnership;
THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY,
THROUGH ITS HOPKINS MARINE STATION, a trust with corporate powers under the laws of the State of California;
MONTEREY BAY AQUARIUM, a 501(c)(3) a nonprofit incorporated in the State of California
CALIFORNIA DEPARTMENT OF TRANSPORTATION (Caltrans), an executive department of the State of California

The AGENCY and the above-mentioned entities may also hereinafter be collectively referred to as "PARTIES" or individually as "PARTY."

RECITALS:

- A. The California Ocean Plan ("Ocean Plan") prohibits the discharge of both point and nonpoint source waste into Areas of Special Biological Significance ("ASBS"), unless the State Water Resources Control Board ("SWRCB") grants an exception.
- B. The DISCHARGERS have been determined to have direct or indirect storm water discharges into the Carmel Bay ASBS, the Pacific Grove ASBS, the Año Nuevo ASBS, the James V. Fitzgerald ASBS, and the Duxbury Reef ASBS.
- C. The SWRCB has adopted "Special Protections for Selected Storm Water and Nonpoint Source Discharges into Areas of Special Biological Significance," dated March 20, 2012, and adopted Resolutions No. 2011-0050/0051, on October 18, 2011. These documents are hereinafter referred to simply as the "Special Protections," and the "Mitigated Negative

Declarations”(MNDs). These Special Protections and MNDs contain monitoring requirements with which each of the DISCHARGERS are required to comply commencing in the winter of 2012-2013.

- D. In and for the mutual interest of the DISCHARGERS, the DISCHARGERS wish to develop and implement a Regional Monitoring Program by entering into this AGREEMENT for the purpose of cooperating to efficiently and economically comply with the Special Protections and MNDs monitoring requirements.

NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

Section 1. Incorporation of Recitals

- 1.1 The foregoing Recitals are incorporated into this AGREEMENT.

Section 2. Central Coast Regional ASBS Dischargers Monitoring Program

- 2.1 There is hereby established the Central Coast Regional ASBS Dischargers Monitoring Program (“Program”) that is intended to fulfill the DISCHARGERS’ respective discharge monitoring and obligations set forth in Section IV of the Special Protections and the MND’s.

Section 3. Effective Date and Term

- 3.1 The effective date of this AGREEMENT shall be the date it is duly executed by all of the DISCHARGERS.
- 3.2 This AGREEMENT shall terminate on June 30, 2015 unless extended, or terminated earlier, pursuant to Section 8.3 or 8.4, by the DISCHARGERS.

Section 4. Management Committee

- 4.1 A Management Committee consisting of one representative of each of the DISCHARGERS is hereby created to provide for overall coordination, review, and budget oversight with respect to the Program.
- 4.2 The Management Committee shall: provide technical oversight, direct and guide the Program, review and approve the Program Budget, select consultant(s) or outside contractor(s), and establish timelines and budgets for completion of Program tasks. The Management Committee shall consider Special Protections monitoring and MND monitoring compliance issues as its primary objective in approving Program tasks and corresponding budgets compliance with Section IV of the Special Protections and Monitoring requirements of the MNDs.
- 4.3 The Management Committee Bylaws (Exhibit A) shall govern the Management Committee and its meetings.
- 4.4 Meetings of the Management Committee shall be subject to the California Brown Act (Government Code section 54950 et seq.).

Section 5. Administrator

- 5.1 There is hereby created the position of Administrator to administer and implement this AGREEMENT and to carry out the responsibilities assigned to the Administrator herein and as outlined in Responsibilities of Administrator (Exhibit B).
- 5.2 AGENCY shall serve as the initial Administrator for the Program.
- 5.3 AGENCY may withdraw as the Administrator upon the provision of ninety days' (90) days written notice to the Management Committee. Such notice of withdrawal shall be effective to terminate AGENCY's rights and obligations under this AGREEMENT. The Management Committee may replace the AGENCY and select a new Administrator upon the provision of ninety days (90) written notice to AGENCY. Any new entity that may become the Administrator must assent to the terms of this AGREEMENT. In either event, any outstanding compensation due Administrator shall be paid. Work assignments shall be made to the Administrator by the Management Committee and not by individual DISCHARGERS.
- 5.4 Other than as provided for in the Program, the Administrator shall not be responsible for providing program management services related to individual DISCHARGER permit programs.
- 5.5 The Administrator shall be paid from Program Funds in accordance with the adopted Program Budget for providing the services described herein.
- 5.6 The Administrator shall be the treasurer of the Program Funds. The Administrator, in accordance with generally-accepted accounting principles, shall keep the Program Funds segregated from any other funds administered by the Administrator, shall credit the Program with appropriate interest income earned on Program Funds in each fiscal year, and shall not expend any funds except in accordance with the annual budget approved by the Management Committee, or as otherwise directed by the Management Committee.

Any unauthorized expenditures, including, but not limited to, expenditures in excess of the annual projected budget, made by Administrator shall be payable by the Administrator or AGENCY.
- 5.7 In conjunction with preparing the proposed Program Budget each year, the Administrator will include a proposed Administration component of the Program Budget and present it to the Management Committee for its approval. The Administration component that is approved by the Management Committee shall be the maximum amount of funds the Administrator may expend without receiving additional funding approval from the Management Committee.
- 5.8 Within 30 days from the close of the Fiscal Year (July 1 to June 30), the Administrator shall cause an independent annual audit of the accounts and records by a Certified Public Accountant in Compliance with California Government Code section 6505 and Generally Accepted Accounting Principles.
- 5.9 The Administrator shall be reimbursed by the Program Fund, at actual cost, for any direct cost incurred to administer this AGREEMENT and carry out the Program. Direct costs are defined in the Program Budget Guidelines and Cost Share (Exhibit C).

5.10 In the event that the Administrator withdraws as Administrator, or in the event that the Management Committee wishes to select a new Administrator, a DISCHARGER may serve as a successor Administrator. Any DISCHARGER willing to serve as successor Administrator may be nominated by another DISCHARGER. Selection of an Administrator shall be by majority vote of the Management Committee.

Section 6. Program Budget, Program Fund, and Annual Assessments

- 6.1 The Management Committee shall adopt a budget for each winter storm season (the "Program Budget"). The Program Budget shall be prepared and administered as described in the attached Program Budget Guidelines and Cost Share (Exhibit C).
- 6.2 Not later than sixty (60) days after the receipt of an invoice by the Administrator, the DISCHARGERS shall each pay an annual assessment ("Annual Assessment") into a fund ("Program Fund") maintained by the Administrator for the purpose of paying Program expenses. The Annual Assessment for each DISCHARGER shall be detailed and reflected in the Program Budget. The Annual Assessment for each DISCHARGER shall be determined as set forth in the Program Budget Guidelines and Cost Share (Exhibit C). Should any DISCHARGER fail to pay the Annual Assessment within sixty (60) days after being invoiced by the Administrator, the DISCHARGER's participation in this AGREEMENT shall be terminated, and the terminated DISCHARGER will bear the full responsibility for its compliance with the monitoring requirements of the Special Protections commencing on the date its participation is terminated. In such event the DISCHARGER shall forfeit its contributed share of Program Funds, if any.
- 6.3 The Program Fund shall be maintained and managed in trust by the Administrator solely for purposes of the Program. The Management Committee shall determine the type of account in which the Program Fund shall be deposited. All Program expenditures required to implement the approved Special Protections Scope of Work shall be paid out of the Program Fund. The Administrator shall be authorized to make expenditures for the purchase of services or materials allocated in the Program Budget. Where a purchase for a necessary, but unapproved, expenditure for services or materials is required, the Program Administrator may make such a purchase, in an amount not-to-exceed \$5,000, where the purchase must be made before a meeting of the Management Committee can be convened. Such purchases may not be made more than twice per fiscal year. Expenditures greater than \$5,000 shall require prior approval of the Management Committee.
- 6.4 Except as provided in Section 8.3 and 8.4 (regarding termination of DISCHARGER status and termination of this AGREEMENT), any ending balance in the Program Fund at the close of each fiscal year shall, at the election of each DISCHARGER and based upon that DISCHARGER'S Percentage Participation, be disbursed to that DISCHARGER, or credited to that DISCHARGER'S Annual Assessment for the subsequent winter storm season.
- 6.5 Upon approval of a new member as set forth in Section 8.1, the Management Committee shall revise the Annual Assessment for each DISCHARGER consistent with the method set forth in Program Budget Guidelines and Cost Share (Exhibit C) taking into account the new member.

Section 7. Additional Rights and Duties of the DISCHARGERS

- 7.1 In addition to participation in the Management Committee, each of the DISCHARGERS agrees to perform the following duties:
- 7.1.1 Participate in Management Committee meetings and activities, and other meetings required of the DISCHARGERS;
 - 7.1.2 Provide the requisite reports to the Administrator for purposes of complying with the joint reporting and compliance mandates applicable to the Special Protections and MNDs and the status Program implementation.
- 7.2 DISCHARGERS agree they are individually responsible for compliance matters not covered by this AGREEMENT.
- 7.3 This AGREEMENT does not restrict the DISCHARGERS from the ability to individually (or collectively) request modifications of or to otherwise challenge, administratively, through litigation, or otherwise, Special Protections or MNDs or other requirements to the extent that a requirement affects an individual DISCHARGER (or group of DISCHARGERS).

Section 8. Additional Parties, Early Termination of Dischargers, and Third Party Data Sharing

- 8.1 Subject to a majority vote of the DISCHARGERS, any agency, corporation or individual responsible for discharges to the State of California's Areas of Special Biological Significance within Regional Water Quality Control Boards (RWQCB) Regions 2 or 3 may become a member of the Program and a party to this AGREEMENT (a "New Party"). New Parties shall execute a copy of this AGREEMENT through their appropriate officials pursuant to the authority conferred by the governing body of the New Party. The Representative of the New Party shall file with the Administrator a duly executed copy of the AGREEMENT. Upon approval, each New Party shall pay an Annual Assessment as determined by the Management Committee. In addition to paying the Annual Assessment, each New Party shall also pay an appropriate buy-in fee as established by the Management Committee, intended to reimburse the Program Fund for the New Party's share of costs that the DISCHARGERS have expended up to the date of the New Party's membership.
- 8.2 Upon approval of the Management Committee Members, the DISCHARGERS may enter into agreements with third-party state or federal agencies for the purpose of sharing data. These agencies shall not become a party to this AGREEMENT, shall not have representation on the Management Committee, and shall not be part of the cost-sharing described in the Program Budget Guidelines and Cost Share (Exhibit C). Such agreements shall be for the sole objective of data sharing.
- 8.3 Any DISCHARGER may terminate its participation in this AGREEMENT by giving the Management Committee at least thirty (30) days written notice. If a DISCHARGER terminates its participation, the terminating DISCHARGER will bear the full responsibility for its compliance with the monitoring requirements of the Special Protections commencing on the date it terminates its participation. Unless the termination is scheduled to be effective at the close of the fiscal year in which the notice is given, termination shall constitute forfeiture of all of the terminating DISCHARGER's contributed share of the

Program Budget for the fiscal year in which the termination occurs. The cost allocations for the remaining DISCHARGERS shall be recalculated for the following fiscal year by the DISCHARGERS without the withdrawing DISCHARGER'S participation.

- 8.4 This AGREEMENT shall terminate immediately and without further notice should sufficient DISCHARGERS terminate their participation pursuant to Section 8.3 such that only a single DISCHARGER has not terminated its participation (Remaining DISCHARGER). Unless the AGREEMENT terminates pursuant to this section at the close of a fiscal year, any funds remaining in the Program Budget shall be forfeited to the Remaining DISCHARGERS to be used solely and exclusively in furtherance of the Remaining DISCHARGER's monitoring requirements pursuant to the Special Protections.

Section 9. General Provisions

- 9.1 Amendment. This AGREEMENT may be amended only by written agreement of all PARTIES. All PARTIES agree to bring any proposed amendment to this Agreement to their respective Executive Management, as applicable, within two (2) months following acceptance of the proposed amendment by the Management Committee.
- 9.2 Execution. This AGREEMENT may be executed by facsimile and delivered in any number of copies (counterparts) by the DISCHARGERS. When each DISCHARGER has signed and delivered at least one (1) counterpart to the Administrator, each counterpart shall be deemed an original and, taken together, shall constitute one and the same AGREEMENT, which shall be binding and effective as to the PARTIES hereto.
- 9.3 Liability. No PARTY shall, by entering into this AGREEMENT, participating in the Management Committee, or serving as the Administrator, assume or be deemed to assume responsibility for any other PARTY in complying with the requirements of the Special Protections. This AGREEMENT is intended solely for the convenience and benefit of the PARTIES and shall not be deemed to be for the benefit of any third party and may not be enforced by any third party, including, but not limited to, the Environmental Protection Agency, the SWRCB, the RWQCB, or any other person.

In lieu of and notwithstanding the pro rata risk allocation which might otherwise be imposed between the DISCHARGERS pursuant to Government Code Section 895.6, the DISCHARGERS agree that all losses or liabilities incurred by a DISCHARGER shall not be shared pro rata, but instead, the DISCHARGERS agree that pursuant to Government Code Section 895.4, each of the DISCHARGERS shall fully defend, indemnify, and hold harmless each of the other DISCHARGERS from any claim, expense, or cost, damage, or liability imposed for injury, including, but not limited to, as defined by Government Code Section 810.8, occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying DISCHARGER, its officers, agents, or employees, under or in connection with or arising from any work, authority, or action taken under this AGREEMENT, including but not limited to any non-compliance by a DISCHARGER with its obligations under the Special Protections or MNDs. No DISCHARGER, nor any officer, Councilmember, Board member, employee, or agent thereof, shall be responsible for any damage or liability incurred by reason of the negligent acts or omissions or willful misconduct of any other DISCHARGERS, their officers, Council members, Board members, employees, or agents, under or in connection with or arising from any work,

authority, or actions taken under this AGREEMENT, including but not limited to any non-compliance by a DISCHARGERS with its obligations under the Special Protections or MNDs.

Notwithstanding the above, if the Administrator is negligent or intentionally wrongful in the performance of its duties under this AGREEMENT, it will be liable to the DISCHARGERS for any consequences of such negligent or intentionally wrongful performance.

- 9.4 Venue. Venue for any actions brought under this Agreement shall be as prescribed by California or Federal law.
- 9.5 Notices: Unless otherwise specified herein, all notices or demands required under this Agreement shall be in writing and shall either be hand-delivered or mailed by first class registered or certified mail, postage prepaid, addressed to the PARTIES to the addresses and to the attention of the person named in Exhibit D.
- 9.6 Governing Law: The terms of this Agreement are governed by, and shall be construed in accordance with, the laws of the State of California.
- 9.7 Severability: If any provision of this Agreement is held to be invalid, for any reason, by a court of law, the remaining provisions of this Agreement shall not be affected thereby and shall continue in full force and effect.
- 9.8 Authorization: Each individual signing this Agreement warrants that he/she is authorized to do so on behalf of the entity on whose behalf he/she is signing and that they have the authority to bind that entity/individual to all the terms of this AGREEMENT, unless the individual's signature block indicates a different purpose for their signature.
- 9.9 Waiver: No waiver by the PARTIES of any breach of any provision of this Agreement shall constitute a waiver of any other breach or of such provision of this Agreement.
- 9.10 Entire Agreement: This Agreement, including Exhibits A, B, C, D, and E constitutes the complete and exclusive understanding between the PARTIES which supersedes all previous agreements, written or oral, regarding the subject matter of this Agreement. No changes, modifications or amendments to this Agreement (including Exhibit A, B, C, D and/or E) shall be valid unless they are in writing and duly executed by authorized representatives of all the PARTIES.

IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the dates shown below:

MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY

Date: _____

Signature

Printed Name and Title

CITY OF PACIFIC GROVE

Date: _____

Signature

Printed Name and Title

CITY OF MONTEREY

Date: _____

Signature

Printed Name and Title

CITY OF CARMEL-BY-THE-SEA

Date: _____

Signature

Printed Name and Title

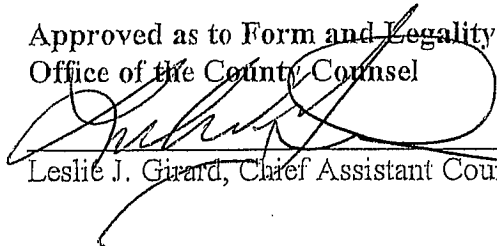
COUNTY OF MONTEREY

Date: _____

Signature

Benny J. Young, RMA Director
Printed Name and Title

Approved as to Form and Legality
Office of the County Counsel



Leslie J. Girard, Chief Assistant County Counsel

COUNTY OF SAN MATEO

Date: _____

Signature

Printed Name and Title

COUNTY OF MARIN

Date: _____

Signature

Printed Name and Title

PEBBLE BEACH COMPANY

Date: _____

Signature

Printed Name and Title

HOPKINS MARINE STATION

Date: _____

Signature

Printed Name and Title

MONTEREY BAY AQUARIUM

Date: _____

Signature

Printed Name and Title

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Date: _____

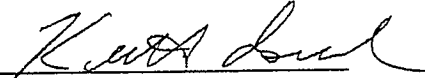
Signature

Printed Name and Title

IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the dates shown below:

MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY

Date: April 23, 2013


Signature

Keith Israel, General Manager
Printed Name and Title

CITY OF PACIFIC GROVE

Date: _____

Signature

Printed Name and Title

CITY OF MONTEREY

Date: _____

Signature

Printed Name and Title

CITY OF CARMEL-BY-THE-SEA

Date: _____

Signature

Printed Name and Title

COUNTY OF MONTEREY

Date: _____

Signature

Printed Name and Title

IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the dates shown below:

MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY

Date: _____

Signature

Printed Name and Title

CITY OF PACIFIC GROVE

Date: 2-20-13

Thomas Frutcher
Signature

Thomas Frutcher
Printed Name and Title
City Manager

Sarah Handgrove
Environmental Programs
Manager

CITY OF MONTEREY

Date: _____

Signature

Printed Name and Title

CITY OF CARMEL-BY-THE-SEA

Date: _____

Signature

Printed Name and Title

COUNTY OF MONTEREY

Date: _____

Signature

Printed Name and Title

IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the dates shown below:

MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY

Date: _____

Signature

Printed Name and Title

CITY OF PACIFIC GROVE

Date: _____

Signature

Printed Name and Title

CITY OF MONTEREY

Date: _____

APPROVED BY:

Paul
City Attorney's Office

Fred Meurer
Signature

Fred Meurer, City Manager
Printed Name and Title

CITY OF CARMEL-BY-THE-SEA

Date: _____

Signature

Printed Name and Title

COUNTY OF MONTEREY


Date: _____

Signature

IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the dates shown below:

CITY OF CARMEL-BY-THE-SEA

Date: 1/23/13



Signature

Jason Stilwell, City Administrator
Printed Name and Title

COUNTY OF SAN MATEO

Date: January 8, 2013


Signature

(Resolution #072327)

Adrienne J. Tissier, President, Board of Supervisors, San Mateo County
Printed Name and Title

COUNTY OF MARIN

Date: _____

Signature

Printed Name and Title

PEBBLE BEACH COMPANY

Date: _____

Signature

Printed Name and Title

HOPKINS MARINE STATION

Date: _____

Signature

Printed Name and Title

MONTEREY BAY AQUARIUM

Date: _____

Signature

Printed Name and Title

COUNTY OF SAN MATEO

Date: _____

Signature

Printed Name and Title

COUNTY OF MARIN

Date: 1/29/13

Judy Arnold

Signature

JUDY ARNOLD, PRESIDENT
Printed Name and Title

PEBBLE BEACH COMPANY

Date: _____

Signature

Printed Name and Title

HOPKINS MARINE STATION

Date: _____

Signature

Printed Name and Title

MONTEREY BAY AQUARIUM

Date: _____

Signature

Printed Name and Title

Printed Name and Title

COUNTY OF SAN MATEO

Date: _____

Signature

Printed Name and Title

COUNTY OF MARIN

Date: _____

Signature

Printed Name and Title

PEBBLE BEACH COMPANY

Date: 12/18/12

Mark Stilwell
Signature

Mark Stilwell, Executive VP
Printed Name and Title

HOPKINS MARINE STATION

Date: _____

Signature

Printed Name and Title

MONTEREY BAY AQUARIUM

Date: _____

Signature

Printed Name and Title

COUNTY OF SAN MATEO

Date: _____

Signature

Printed Name and Title

COUNTY OF MARIN

Date: _____

Signature

Printed Name and Title

PEBBLE BEACH COMPANY

Date: _____

Signature

Printed Name and Title

HOPKINS MARINE STATION

Date: 17 December, 2012



Signature

Lawrence M. Gibbs, CIH
Associate Vice Provost for EH&S
Printed Name and Title

MONTEREY BAY AQUARIUM

Date: _____

Signature

Printed Name and Title

COUNTY OF SAN MATEO

Date: _____

Signature

Printed Name and Title

COUNTY OF MARIN

Date: _____

Signature

Printed Name and Title

PEBBLE BEACH COMPANY

Date: _____

Signature

Printed Name and Title

HOPKINS MARINE STATION

Date: _____

Signature

Printed Name and Title

MONTEREY BAY AQUARIUM FOUNDATION

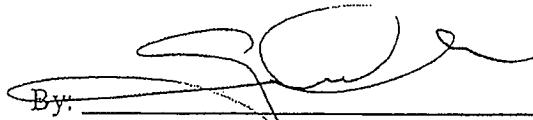
Date: 12-17-12

Ed Prohaska
Signature

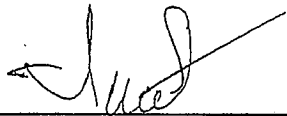
Ed Prohaska CFO
Printed Name and Title

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Date: 2/5/13


By: _____
Scott McGowen, Asst. Division Chief
Division of Environmental Analysis

APPROVED AS TO FORM:



Attorney for the California Department of Transportation

EXHIBIT "A"

CENTRAL COAST REGIONAL AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE DISCHARGERS MONITORING PROGRAM

MANAGEMENT COMMITTEE BYLAWS

The Central Coast Regional Areas of Special Biological Significance Dischargers Monitoring Program Management Committee shall be governed by the following Bylaws.

1. Representation. Each DISCHARGER shall designate a representative to attend meetings in person, by telephone or via a web-based meeting of the Management Committee, and may designate alternates as set forth in this AGREEMENT. If a DISCHARGER'S representative is unable to attend a meeting, the DISCHARGER'S alternates shall attend.
2. Voting. Each DISCHARGER shall have one vote and the Management Committee representative or their alternate shall vote on behalf of the DISCHARGER unless stated otherwise in this AGREEMENT. Voting on all matters shall be on a voice vote unless a roll call vote is requested by any member in attendance or is required pursuant to the Brown Act.

All actions taken by the Management Committee require the affirmative vote of a majority of the Management Committee members entitled to vote. However, the Program Budget, or any other matter having a financial impact on a DISCHARGER not contemplated in the Program Budget, shall be approved by a two-thirds majority vote of a quorum present at the Management Committee meeting where the action is taken.

3. Quorum. A majority of the Management Committee entitled to vote constitutes a quorum for the transaction of business.
4. Officers. The officers of the Management Committee shall consist of a Chair and Vice Chair. The Chair shall preside over all meetings of the Management Committee, and may call special meetings as necessary upon one week of notice to all DISCHARGERS. The Chair may vote on, and second any motion, but may not make a motion. The Vice Chair shall perform the duties of the Chair in the Chair's absence.

In the first Fiscal Year the Administrator shall preside over the initial meeting of the Management Committee, and the first order of business for the initial meeting of the Management Committee shall be the election of the Chair and Vice Chair. The Chair and Vice Chair shall take up their duties immediately upon election.

In subsequent Fiscal Years the positions of Chair and Vice Chair shall be filled by election annually at the Management Committee's meeting in January. If either position becomes vacant for any reason, an election shall be held to fill the position(s) at the next meeting of

the Management Committee. Should both positions be vacant at the same time, the Administrator shall serve as Chair until a Chair is elected by the Management Committee.

5. Meeting Schedule. Regular meetings will be held at a frequency commensurate with the workload of the Management Committee at pre-arranged dates.
6. Starting Time. Meetings will start promptly at the times designated in the meeting notices. Representatives shall endeavor to notify the Administrator whether they will be late or unable to attend.
7. Limitation of Discussion. Discussion on any particular matter by either Management Committee members or by any member of the general public may be limited at the discretion of the chair to such length of time as the chair may deem reasonable under the circumstances.
8. Administrator. The Administrator shall serve as Secretary. The Secretary shall, upon consultation with the Chair, prepare an agenda for each meeting, keep and publish minutes for each meeting (which shall be approved by the Management Committee at the subsequent meeting), prepare and post any notices as may be required by law, and have custody of all documents relating to the Management Committee.

The Administrator shall also serve as Treasurer. The Treasurer shall manage the Program Fund as set forth in the AGREEMENT.

9. New Members. New members may be added to the Management Committee as set forth in Section 8.1 of this AGREEMENT.
10. Bylaws. The information set forth in these Bylaws shall be deemed sufficient to serve as the Bylaws for the Management Committee, subject to approval by the DISCHARGERS.
11. Conduct of Meetings. The meetings are to be guided by the principles of Robert's Rules of Order. The Chair shall decide all questions of order.
12. Program Attorney. The Management Committee may select an attorney or law firm ("Program Attorney") to provide legal advice to the Management Committee on matters involving the Program. The Program Attorney may be the attorney of record for one of the DISCHARGERS, so long as such representation is disclosed and any conflicts of interest are resolved. The Program Attorney may provide such services under separate contract with any DISCHARGER or DISCHARGERS, but shall provide advance notification to all DISCHARGERS before providing such services to identify and resolve possible issues of conflict of interest. The Administrator may assist in coordination of activities with the Program Attorney, and shall provide such assistance as the Program Attorney may require, but shall not give direction to the Program Attorney without prior authorization from the Management Committee.
13. Amendment. These Bylaws may be amended only by a majority vote of all DISCHARGERS.

EXHIBIT "B"

CENTRAL COAST REGIONAL AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE DISCHARGERS MONITORING PROGRAM

RESPONSIBILITIES OF ADMINISTRATOR

The Administrator shall have the following responsibilities:

1. The Administrator shall administer the AGREEMENT, and maintain an appropriate book of accounts, which, among other things, shall specifically identify the costs incurred in implementing the AGREEMENT. These records shall be subject to inspection by any of the DISCHARGERS at all reasonable times.
2. Subject to the prior approval of the Management Committee, the Administrator may enter into such agreements as necessary with public agencies or outside contractors and consultants to carry out the Program objectives.
3. The Administrator shall serve as the Secretary and Treasurer to the Management Committee.
4. Arranging for and conducting meetings of the Management Committee, including preparation of agenda materials and meeting minutes.
5. The Administrator shall perform such other duties as may be required and agreed to by the Management Committee, including, but not limited to, contracting with and managing the work of outside consultants and contractors to perform related work if deemed necessary and appropriate by the Management Committee. The Administrator shall act in a reasonable amount of time to execute contracts with consultants and/or contractors, which have been requested and approved by the Management Committee. The Administrator shall provide a copy of any contract executed on behalf of the Program to any DISCHARGER or person designated by any DISCHARGER or the Management Committee upon request. The contract template shall require consultants to indemnify and name all DISCHARGERS as additional insured and shall meet minimum coverage amounts for insurance policies. The Management Committee shall approve by a majority vote the contract template to be used by the Administrator.

EXHIBIT "C"

CENTRAL COAST REGIONAL AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE DISCHARGERS MONITORING PROGRAM

PROGRAM BUDGET GUIDELINES AND COST SHARE

Program Budget Guidelines

The Year 1 Program budget shall be based upon 1) the State Water Board's approved scope of work, a request for professional services, and the selected contractor's cost proposal, and 2) Program Administrator actual time and materials costs, but not to exceed \$50,000, based on the billing rate schedule included below. The Administrator costs in Year 1 shall include, but not be limited to, the following activities:

- Establishment of program fund and accounting
- Invoices to DISCHARGERS
- Solicitation for professional services to implement Scope of Work
- Procurement and management of professional services agreement
- Coordination with Management Committee

For subsequent Fiscal Years, the Administrator will prepare a Draft Program Budget no later than April 1 for the succeeding Fiscal Year. The Draft Program Budget shall include a breakdown of the costs allocated to each DISCHARGER, in accordance with the Cost Sharing table below. The Administrator will revise the Draft Program Budget, as appropriate, to address concerns and comments from the Management Committee and the Management Committee will then approve and adopt a final Program Budget by June 15 prior to the wet season in which monitoring will occur.

The Administrator and the DISCHARGERS recognize that the Program Budget will be based on estimated costs, and that actual costs may differ from the budgeted amounts. If it appears that costs will exceed the budgeted amounts, the Administrator will notify the Management Committee as soon as the Administrator becomes aware of this and before incurring costs in excess of the budgeted amounts. If the Management Committee determines it is appropriate to have the Administrator incur additional costs above the budgeted amounts, the Administrator will prepare and submit a budget revision request for approval by the Management Committee. Time shall be allotted for Management Committee representatives to request their respective governing Boards or Councils to approve a budget increase request prior to approving a Program Budget revision. Only after the Management Committee approves an increase in the Program Budget will the Administrator incur costs in excess of the budgeted amounts. If there are unspent funds left at the end of the fiscal year, the Administrator will return to each DISCHARGER the unspent portion of that DISCHARGER'S payment, or credit that amount to

the DISCHARGERS annual assessment for the subsequent fiscal year, at DISCHARGER's discretion.

The Administrator will establish a separate job-cost code in its accounting system, to track the hours spent and out-of-pocket expenses directly related to performing work as the Administrator, which will be charged to the Program Fund. The Administrator will include in the Management Committee's meeting agenda reports a summary of the work the Administrator has performed during the intervening time period, the total costs of that work, and the portion of the cost allocated to each DISCHARGER. The portion of the cost allocated to the DISCHARGER will be calculated in accordance with the cost-sharing approach outlined in the Cost-Sharing chart below.

The costs for the Program Administrator will consist of direct costs, as described below.

Cost-Sharing

The Cost Sharing table below shows how the annual Program Budget will be shared amongst the DISCHARGERS based on the Scope of Work ("Exhibit E"). Each DISCHARGER's Percentage Participation in the Program Budget components shall be as set forth in the table below:

Agency	Outfalls 18" to 36"	Percentage of outfalls 18" - 36" (Budget A)	Outfalls = to or >36" w/ receiving water	Percentage of outfalls = to or >36" (Budget B)	Outfalls = to or >36" w/out receiving water	Percentage of outfalls = or >36" (Budget C)	Percentage Participation in Budget Component D
Pacific Grove	7	30.4%	1.83	22.9%	1	50%	11.6%
City of Monterey	0	0 %	.5	6.3%	0	0%	11.6%
Carmel	9	39.1%	1	12.5%	0	0%	11.6%
PBC	3	13%	1	12.5%	1	50%	11.6%
MBA	0	0%	.33	4.2%	0	0%	7.1%
Hopkins	0	0%	.33	4.2%	0	0%	7.1%
Marin County	0	0%	1	12.5%	0	0%	11.6%
Monterey County	0	0 %	1	12.5%	0	0%	11.6%
San Mateo County	4	17.4%	1	12.5%	0	0%	11.6%
Caltrans	0	0%	0	0%	0	0%	4.9%
Total	23	100%	8	100%	2	100%	100%

Program Budget Components

The Program Budget shall be allocated into the following components:

- Component "A" shall consist of all costs associated with Program Core Monitoring for Runoff and Outfalls from 18" to <36" diameter.
- Component "B" shall consist of all costs associated with Program Core Monitoring for Outfalls from >36" diameter, with a receiving water site.
- Component "C" shall consist of all costs associated with Program Core Monitoring for Outfalls from >36" diameter, without a receiving water site.

- Component “D” shall consist of the Program Regional Monitoring, including large discharge receiving water, reference site receiving water, rocky intertidal and bioaccumulation monitoring, technical management and reporting, and Program Administrator costs (not to exceed \$50,000 in Year 1). Caltrans shall participate only in the bioaccumulation and rocky intertidal Program Regional Monitoring.

Annual Assessment

Each DISCHARGER’s Annual Assessment shall be the sum of the amounts calculated by multiplying each component of the Program Budget by the DISCHARGER’s Percentage Participation in that component.

Administrator Costs

Administrator costs will be compensated for actual direct costs on a time and materials basis. In Year 1, time and materials costs shall not exceed \$50,000 and shall be charged at the following rates (salary plus benefits):

Admin Assistant	\$55/hr
Executive Assistant	\$65/hr
Accountant	\$80/hr
Associate Engineer	\$110/hr
Director of Finance	\$135/hr
Director of Admin Services	\$150/hr
Assistant General Manager	\$165/hr
General Manager	\$190/hr

Direct Costs are defined as costs incurred for necessary services and/or materials in the course of managing the Program. Direct costs shall be charged at actual cost. All direct costs shall be tracked and accounted for each fiscal year and provided in an independent annual audit in accordance with Section 5.8. Direct costs are those which can be and are tracked through time cards, invoices, record keeping systems, and other records that specifically allocate a cost to the Central Coast Regional Areas of Special Biological Significance Dischargers Monitoring Program.

EXHIBIT "D"

NOTICES

Pursuant to Section 9.5, unless otherwise specified, all notices or demands required under this Agreement shall be in writing and shall either be hand-delivered or mailed by first class registered or certified mail, postage prepaid, addressed to the PARTIES to the addresses and to the attention of the person named below:

CITY OF PACIFIC GROVE:

Sarah Hardgrave
Environmental Programs Manager
Public Works Department
2100 Sunset Drive
Pacific Grove, CA 93950

CITY OF MONTEREY:

Tom Reeves
City Engineer
Plans and Public Works
580 Pacific St.
Monterey, CA 93940

CITY OF CARMEL-BY-THE-SEA:

Jason Stilwell
City Administrator
Carmel-by-the-Sea City Hall
P.O. Box CC
Carmel-by-the-Sea, CA 93921

COUNTY OF MONTEREY:

Tom Harty
Stormwater Program Manager
Department of Public Works
168 West Alisal Street, 2nd Floor
Salinas, CA 93901

COUNTY OF SAN MATEO:

James C. Porter
Director

Department of Public Works and Parks
555 County Center, 5th Floor
Redwood City, CA 94063-1665

COUNTY OF MARIN:

Terri Fashing
Stormwater Program Administrator
Marin County Department of Public Works
3501 Civic Center Drive, Room 304
San Rafael, CA 94903

PEBBLE BEACH COMPANY:

Thomas Quattlebaum
Environmental Manager
4005 Sunridge Road
Pebble Beach, CA 93953

THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY,
THROUGH ITS HOPKINS MARINE STATION:

Chris Patton
Hopkins Marine Station
Stanford University
Pacific Grove CA 93950-3094

MONTEREY BAY AQUARIUM:

Roger Phillips
Director of Applied Research
Monterey Bay Aquarium
886 Cannery Row
Monterey, CA 93940

CALIFORNIA DEPARTMENT OF TRANSPORTATION (Caltrans):

EXHIBIT “E”

SCOPE OF WORK

Central California Areas of Special Biological Significance Storm Water Monitoring to Satisfy Special Protections November 26, 2012

I. Introduction

The Central Coast ASBS Regional Monitoring Program will be implemented during the 2012–2013 and 2013-2014 storm seasons and includes all ASBS responsible parties¹ on the Central Coast, covering an area from Big Sur, in Monterey County, to Pt. Reyes, in Marin County. This Scope of Work for the Central Coast ASBS Regional Monitoring Program has been developed through discussions with staff from State and Regional Water Boards, as well as the responsible parties discharging storm water into Areas of Special Biological Significance (ASBS).

II. Technical Program

In all specifications for storm water and receiving water monitoring that follow, the minimum requirement for a storm shall satisfy the criteria specified in the Special Protections (i.e., >0.10 inches of rainfall resulting in runoff, >72 hours from the previous storm). Moreover, every attempt shall be made to satisfy the criteria for storm runoff monitoring conducted by the Monterey Bay National Marine Sanctuary (i.e., sheeting water on roadways, heavy flow through the storm drain system and conductivity levels less than 1000 micro Siemens (μ S) and declining) and ensure sufficient time after the initiation of rainfall to allow for time of concentration to include flow runoff from all parts of the catchment or watershed.

This Scope of Work covers monitoring requirements specified in the Special Protections for 12 participants¹ designated as Responsible Parties, as follows:

- National Park Service, Point Reyes National Seashore
- Marin County
- San Mateo County
- Monterey Bay Aquarium
- Hopkins Marine Station
- City of Monterey
- City of Pacific Grove
- Carmel by the Sea
- Pebble Beach Company

¹ It should be noted that three participants, Caltrans, National Park Service and California Department of Parks and Recreation, have not yet committed to full participation in the Central Coast regional program. These State and Federal Agencies may contract separately to implement their monitoring requirements, but with a commitment that they use the same monitoring design, laboratories for sample analysis and provide their data for analysis with the other participants.

- Monterey County
- California Department of Parks and Recreation
- Caltrans

While the City of Monterey is a Responsible Party, it does not operate any storm runoff outfalls of its own that drain into an ASBS. It does, however, contribute runoff to an ASBS outfall operated by the City of Pacific Grove. Storm water, sediment, receiving water and reference site monitoring will be performed under this Scope of Work for Monterey Bay Aquarium and Hopkins Marine Station in compliance with the individual Draft Mitigated Negative Declaration documents issued to each. These two participants have other monitoring requirements for seawater discharges that are being performed outside this Scope of Work.

A. Core Monitoring

1. Runoff Flow Measurements

Total annual storm runoff from each participant shall be estimated (modeled) by using measured rainfall and the amount of impervious area (to be provided by each participant) in each catchment. Targeted ground-truth measurements will be made to calibrate the model. This runoff modeling will permit estimates of total annual and event-specific loads for each participant.

2. Discharge Monitoring

All outfalls ≥ 18 inches shall be sampled, as follows:

- 1 storm in each of 2 years, except for discharges at receiving water sites, which shall be sampled in the same 3 storms sampled for receiving water;
- Each sample shall be analyzed for oil and grease, total suspended solids and fecal indicator bacteria;
- Annual samples (1 storm in each year) shall be analyzed for critical life stage chronic toxicity with a sea urchin using salted-up water.

All samples from outfalls ≥ 36 inches shall be sampled, as follows:

- 1 storm in each of 2 years, except for discharges at receiving water sites, which shall be sampled in the same 3 storms each year that are sampled for receiving water;
- Each sample shall be analyzed for oil and grease, total suspended solids and fecal indicator bacteria, California Ocean Plan trace metals, polynuclear aromatic hydrocarbons, organophosphorous pesticides, pyrethroid pesticides and nutrients (ammonia, nitrate, urea and phosphate);
- Annual samples (1 storm in each year) shall be analyzed for critical life stage chronic toxicity with a sea urchin test using salted-up discharge water.

B. Receiving Water and Reference Monitoring

1. Receiving Water Monitoring

Receiving water (receiving water = in the surf zone at the point of contact between runoff and the ocean) at 11 large storm water outfalls selected to represent worst-case conditions shall be sampled as follows:

- Samples shall be collected before and during 3 storms in each of 2 years;
- Each sample shall be analyzed for oil and grease, total suspended solids, fecal indicator bacteria, California Ocean Plan trace metals, polynuclear aromatic

hydrocarbons, organophosphorous pesticides, pyrethroid pesticides and nutrients (i.e., nitrate, ammonia, urea, orthophosphate);

- c. Samples collected during storms shall be analyzed for critical life stage chronic toxicity with 3 marine species (sea urchin, mussel and giant kelp).

Specific locations of outfalls to be monitored are as follows:

	>18"	>36"	Responsible Party	Location	Longitude	Latitude	Nearest SWRCB Site		
							ID	Longitude	Latitude
		X ^a	Marin County	Trailhead at Agate Beach	-122.71059	37.89749	DUX009	-122.71058	37.89757
X			San Mateo County	Maritime Walk	-122.517537	37.531153	FIT012	-122.51756	37.53115
X			San Mateo County	Juliana	-122.516679	37.529092	FIT015	-122.51667	37.52915
X			San Mateo County	Distillery	-122.513269	37.517706	FIT028	-122.51355	37.51789
X			San Mateo County	Madrone	-122.511592	37.514237	FIT029	-122.51067	37.51246
		X ^a	San Mateo County	Weinke Way	-122.516958	37.528645	FIT016	-122.5173	37.5282
X			California State Parks	Año Nuevo	-122.32181	37.11666	ANO012	-122.32181	37.11666
		X	California State Parks	Point Lobos	-121.93812	36.5187	PTL004	-121.93812	36.5187
		X ^a	California State Parks	Año Nuevo	-122.33662	37.13245	ANO027	-122.33662	37.13245
		X	California State Parks	Point Lobos	-121.94775	36.51524	PTL034	-121.94775	36.51524
		X	California State Parks	Julia Pfeiffer Burns	-121.68885	36.17192	PFE008	-121.68885	36.17192
		X	California State Parks	Julia Pfeiffer Burns	-121.68629	36.17072	PFE011	-121.68629	36.17072
		X	California State Parks	Julia Pfeiffer Burns	-121.68281	36.16924	PFE012	-121.68281	36.16924
		X	California State Parks	Julia Pfeiffer Burns	-121.6773	36.16634	PFE015	-121.6773	36.16634
		X	California State Parks	Julia Pfeiffer Burns	-121.6764	36.16569	PFE016	-121.6764	36.16569
		X	California State Parks	Julia Pfeiffer Burns	-121.66883	36.1553	PFE026	-121.66883	36.1553
		X	California State Parks	Julia Pfeiffer Burns	-121.66781	36.15469	PFE027	-121.66781	36.15469
		X ^a	Pacific Grove	Lover's at Ocean View	-121.91614	36.6246	PCG120	-121.91613	36.6246
X			Pacific Grove	Ocean View between Fountain Avenue and 15th Street	-121.914835	36.62381	PCG215	-121.91484	36.62378
		X ^{a b}	Pacific Grove	Ocean View between 12th Street and 13th Street	-121.913831	36.622873	PCG219	-121.91381	36.62281
		X	Pacific Grove	Ocean View at 15th Street	-121.91472	36.62339	PCG217	-121.91472	36.62339
X			Pacific Grove	Ocean View between Clyde Street and Naiad Street	-121.919561	36.627369	PCG069	-121.91955	36.62735
X			Pacific Grove	Northwest corner of Lover's Point Park at Ocean View Boulevard	-121.916596	36.626648	PCG098	-121.91657	36.6266
X			Pacific Grove	Grand Avenue at Ocean View	-121.914835	36.62381	PCG215	-121.91484	36.62378
X			Pacific Grove	8th Street at Ocean View	-121.910348	36.621624	PCG229	-121.91036	36.62162
X		X ^{a c}	Pacific Grove	Ocean View at the Hopkins Marine Laboratory Stanford University	-121.90305	36.61897	PCG257 PCG258	-121.90305	36.61897

>18"	>36"	Responsible Party	Location	Longitude	Latitude	Nearest SWRCB Site		
						ID	Longitude	Latitude
X		Pacific Grove	At Ocean View between 7th Street and 5th Street	-121.909634	36.621125	PCG230	-121.90995	36.62115
	X ^a	County of Monterey	Scenic Road (12 th)	-121.93286	36.54439	CAR029	-121.93286	36.54439
	X ^a	Carmel	4 th Avenue	-121.93075	36.55610	CAR062	-121.93075	36.55605
X		Carmel	Ocean Avenue	-121.93030	36.55502	CAR061	-121.93033	36.55501
X		Carmel	8 th Avenue	-121.92940	36.55250	CAR059	-121.92933	36.55275
X		Carmel	10 th Avenue	-121.92898	36.55007	CAR050	-121.92904	36.55003
X		Carmel	11 th Avenue	-121.92877	36.54883	CAR046	-121.92877	36.54881
X		Carmel	13 th Avenue	-121.92903	36.54641	CAR037	-121.9291	36.5464
X		Carmel	parking lot at Del Mar near Ocean Avenue	-121.93003	36.55442	CAR060	-121.93006	36.55439
X		Carmel	9 th Avenue	-121.92890	36.55117	CAR055	-121.92891	36.55117
X		Carmel	Scenic Road & Santa Lucia Avenue	-121.92962	36.54552	CAR093	-121.92968	36.54547
X		Carmel	12 th Avenue	-121.92857	36.54765	CAR044	-121.92854	36.54767
X		Pebble Beach Company	Stillwater Pier	-121.942739	36.566625	CAR279	-121.94274	36.56655
X		Pebble Beach Company	18 th Fairway PBGL	-121.948014	36.567247	CAR299	-121.94803	36.5672
X		Pebble Beach Company	18 th Green PBGL / Lodge	-121.950131	36.567372	CAR221	-121.9501	36.56738
	X ^a	Pebble Beach Company	18 th Green PBGL / Lodge	-121.950097	36.567383	CAR220	-121.95001	36.56741
	X	Pebble Beach Company	9 th Green PBGL	-121.933397	36.560394	CAR076	-121.93337	36.5603
X ^a		Caltrans	Fitzgerald	-122.51771	37.53154	FIT011	-122.51771	37.53154
	X	Caltrans	Año Nuevo	-122.29297	37.10714	ANO035	-122.29297	37.10714
	X	Caltrans	Año Nuevo	-122.297	37.11084	ANO034	-122.297	37.11084
	X	Caltrans	Año Nuevo	-122.29764	37.1113	ANO032	-122.29764	37.1113
	X ^a	Caltrans	Año Nuevo	-122.29881	37.11202	ANO033	-122.29881	37.11202
	X	Caltrans	Año Nuevo	-122.30121	37.11334	ANO030	-122.30121	37.11334
	X	Caltrans	Carmel Bay	-121.9247	36.52453	CAR007	-121.9247	36.52453
X		Caltrans	Carmel Bay	-121.92457	36.52469	CAR026	-121.92457	36.52469

- ^a = Sites selected for discharge receiving water monitoring
- ^b = Monitoring of this site will be shared between the cities of Pacific Grove and Monterey
- ^c = Monitoring of this site will be shared among Pacific Grove, Monterey Bay Aquarium and Hopkins Marine Station

2. Reference Site Monitoring

Ocean water at 11 selected reference sites (reference site = in the surf zone at the mouth of a watershed with >90% open space and no listed water quality impairments) shall be sampled as follows:

- a. Samples shall be collected during 3 storms in each of 2 years;
- b. Each sample shall be analyzed for oil and grease, total suspended solids, fecal indicator bacteria, California Ocean Plan trace metals, polynuclear aromatic hydrocarbons, organophosphorous pesticides, pyrethroid pesticides and nutrients;
- c. Each sample shall be analyzed for of critical life stage chronic toxicity with 3 marine species (sea urchin, mussel and giant kelp).

The proposed locations for reference sites span the study region. One reference site described below is not part of this Scope of Work, but is included because State Water Board staff requested that the Central Coast regional program determine the location of that reference site. Locations of sites south of Point Lobos were selected based upon a reconnaissance survey made on November 19, 2012. Several of these southern sites involve either substantial hikes, permission from property owners or special permission for vehicle access. Consequently, adjustments to site locations may be necessary. Moreover, access to at least one site will require crossing a creek to reach the beach at the creek mouth and extreme precautions will be necessary during storm events. The proposed reference locations for water quality monitoring are as follows:

Region	Specific Site
North of Point Reyes	Salmon Creek (USAF responsibility, not covered by this Scope of Work))
San Mateo County	Tunitas Creek
	Gazos Creek
South of Año Nuevo	Scott Creek
Non-urban shoreline in Monterey Bay	La Selva Beach
	Marina State Beach
South of Point Lobos	Malpaso Creek ^a
	Doud Creek
	Little Sur River ^b
Big Sur coast ^a	Big Sur River
	Sycamore Creek
	Big Creek
Total covered by the Scope of Work	11

^a = Beach access to ocean requires crossing the creek.

^b = Public access to be determined.

3. Biological Monitoring

Recent studies have examined whether rocky intertidal communities vary in response to storm water discharges. Initial results from southern California suggest that 2 out of 11 discharge sites exhibited community composition and abundances that could be consistent with storm water discharges (Raimondi *et al*, 2012). Consequently, monitoring of rocky intertidal communities shall be part of this program. The community structure in rocky intertidal habitats shall be measured once at 6 sites near ASBS storm water discharges and at 2 reference sites. Sampling shall involve point-contact estimates of substrate coverage by species along transects from the high intertidal zone to the low intertidal zone. Biological monitoring sites have been selected in consultation among permittees and regulatory agencies with consideration for the locations of sites with existing data.

Rocky intertidal communities will be sampled at the following sites:

ASBS	Sampling Site Name
Año Nuevo Point and Islands ASBS	Año Nuevo
Carmel Bay ASBS	Stillwater
Duxbury Reef ASBS	Bolinas Point
James V. Fitzgerald Marine Reserve ASBS	Fitzgerald Marine Reserve
Pacific Grove ASBS	Hopkins
Point Lobos Ecological Reserve ASBS	Point Lobos
Reference	Santa Maria Creek
Reference	Pigeon Point

4. Bioaccumulation Monitoring

California mussels are known to accumulate concentrations of pollutants in their tissues to concentrations much higher than found in the surrounding water. Consequently, they have been widely applied in studies of water quality status and trends (e.g., CCLEAN, 2012; Davis *et al*, 1999). Consequently, concentrations of contaminants shall be measured in resident mussels from sites near ASBS storm water discharges and from reference sites distant from urbanized ASBS areas utilizing existing programs, wherever possible, as follows:

- Population composites of mussels of roughly uniform shell length shall be collected from each of 7 sites.
- Each composite shall be thoroughly homogenized and analyzed for polynuclear aromatic hydrocarbons, polychlorinated biphenyls, polybrominated diphenyl ethers, chlorinated pesticides, pyrethroid pesticides and Lomefloxacin. These analytes are slightly different from those measured in sections A and B and, except for pyrethroids and Lomefloxacin, are consistent with those measured by CCLEAN.

The following sites will be sampled for bioaccumulation:

Sites
Point Reyes
Scott Creek

Sites
Laguna Creek
41 st Avenue, Capitola
Lovers Point
Fanshell Overlook, 17-Mile Drive
Carmel River Beach
Total = 7

C. Mooring Field Operations (Pebble Beach Company only)

1. Receiving Water

Ocean receiving water at the mooring facility shall be sampled as follows:

- a. Samples shall be collected monthly from May through October on a high use weekend in each month.
- b. Samples shall be analyzed for Ocean Plan indicator bacteria, residual chlorine, copper, zinc, grease and oil, methylene blue active substances (MBAS), and ammonia nitrogen.

2. Sediments

Subtidal sediment shall be sampled, as follows:

- a. Samples shall be collected annually from within the mooring field and below the pier.
- b. Samples shall be analyzed for Ocean Plan Table 1 metals (for marine aquatic life beneficial use), acute toxicity (using *Eohaustorius estuaries*), PAHs, and tributyltin.

D. General Requirements

1. Ensure Data Quality

- a. All sampling and analysis shall conform to a Sampling and Analysis Plan (SAP) and to a Quality Assurance Program Plan (QAPP) that are consistent with requirements of the State of California Surface Water Ambient Monitoring Program (SWAMP). At a minimum, sampling shall be conducted so as to ensure that samples are representative of the site and matrix being sampled and to minimize the introduction of extraneous contamination into samples. Ultra-clean techniques shall be used for collection samples to be analyzed for organic contaminants and trace metals.
- b. Samples of the same type shall all be performed by the same laboratory and shall include appropriate lab blanks, certified reference materials, matrix spikes and matrix spike duplicates and reporting limits shall equal or be lower than those required by SWAMP.
- c. An audit will be prepared describing laboratory performance relative to data quality objectives prescribed in the QAPP.

2. Ensure data availability

All chemical data will be uploaded to the California Environmental Data Exchange Network annually.

3. Reporting

Annual reports shall be delivered within 6 months of the completion of laboratory analyses. At a minimum, annual reports shall include a complete description of sampling methods, sites and analytical methods and analysis of data, including comparison of data from discharges and their respective receiving water sites with those from reference sites and the California Ocean Plan and shall be comparable to Schiff *et al* (2011). The annual report for the second year will be cumulative, including analysis of all data from both years to provide a characterization of storm water discharges and their effects on receiving water quality in Areas of Special Biological Significance.

4. Areas of Special Biological Significance Included

Storm runoff from program participants flows into the following ASBS:

- National Park Service, Point Reyes National Seashore
 - Point Reyes Headlands ASBS
 - Double Point ASBS
 - Duxbury Reef ASBS
- County of Marin
 - Duxbury Reef ASBS
- County of San Mateo
 - James V. Fitzgerald ASBS
- California State Department of Parks and Recreation
 - Año Nuevo ASBS
 - Point Lobos ASBS
 - Julia Pfeiffer Burns ASBS
- Monterey Bay Aquarium
 - Pacific Grove ASBS
- Hopkins Marine Station
 - Pacific Grove ASBS
- City of Monterey
 - Pacific Grove ASBS
- City of Pacific Grove
 - Pacific Grove ASBS
- City of Carmel
 - Carmel Bay ASBS
- Pebble Beach Company
 - Carmel Bay ASBS
- County of Monterey
 - Carmel Bay ASBS
- Caltrans
 - James V. Fitzgerald ASBS
 - Año Nuevo ASBS

- Carmel Bay ASBS

D. Literature Cited

CCLEAN. 2012. Central Coast Long-term Environmental Assessment Network Annual Report, 2010–2011.

Davis, JA, Stephenson M, Hardin, D, Gunther AJ, Sericano J, Bell D, Scelfo GH, Gold J, Crick J. 1999. Long term bioaccumulation monitoring with transplanted bivalves in San Francisco Bay. *Marine Pollution Bulletin*. 38:170–181.

Raimondi, P., K. Schiff and D. Gregorio. 2012. Characterization of the rocky intertidal ecological communities associated with southern California Areas of Special Biological Significance. Southern California Coastal Water Research Project Technical Report 703 – May 2012. Costa Mesa, CA.

Schiff, K.C., B. Luk, D. Gregorio and S. Gruber. 2011. Southern California Bight 2008 Regional Monitoring Program: II. Areas of Special Biological Significance. Southern California Coastal Water Research Project. Costa Mesa, CA.

U:\GENERAL (NEW)\City of Pacific Grove\ASBS Monitoring Program\MOA - ASBS Monitoring Program (rev7) clean.docx