



CITY OF PACIFIC GROVE
300 Forest Avenue, Pacific Grove, California 93950

AGENDA REPORT

TO: Honorable Mayor and Members of the City Council
FROM: Milas Smith, Environmental Programs Manager
MEETING DATE: June 6, 2018
SUBJECT: Agreement with the Monterey Bay Sanctuary Citizen Watershed Monitoring Network
CEQA STATUS: This action does not constitute a “project” as defined by the California Environmental Quality Act (CEQA) guidelines section 15378

RECOMMENDATION

Authorize the City Manager to enter into an agreement with the Monterey Bay Sanctuary Citizen Watershed Network for watershed sampling, monitoring, and reporting for the Pacific Grove-Monterey ASBS Stormwater Implementation Grant at the cost of \$53,252 plus a 10% contingency.

DISCUSSION

The Pacific Grove Area of Special Biological Significance (ASBS) is 3.2 miles of coastline adjacent to the City of Pacific Grove. This ASBS lies entirely within the Monterey Bay National Marine Sanctuary and contains the Julia Platt Marine Gardens Fish Refuge and Hopkins Marine Life Refuge. The City has been awarded a Proposition 84/1 ASBS grant in the amount of \$4,400,000 for the following:

- Pacific Grove and Monterey Eastern Watershed Hydrological Analysis
- Lovers Point Diversion Project which includes new below-ground stormwater diversion structures, which will capture and divert stormwater to the Monterey One Water plant for treatment and reuse.
- Sea Palm Diversion Project which provides for new below-ground stormwater diversion structures, which will capture and divert stormwater to the Monterey One Water plant for treatment and reuse. Sea Palm also includes a portion of force main sewer line replacement.
- Water quality monitoring to document improvements to water quality before and after construction as a result of the above projects.
- Public Education and Outreach mobile walking tour application.

The Lovers Point and Sea Palm Diversion projects require water analysis before, during, and after construction. These projects are individual portions of the overall project entitled, Pacific Grove-Monterey Area of Special Biological Significance (ASBS) Wet-Dry Weather Stormwater Capture and Diversion Project, (Project) (Map Attachment 1).

The proposed agreement would enable the City to implement the required monitoring component of the Proposition 84/1 ASBS grant, including monitoring outfalls for water quality data on receiving

water, end-of-the-pipe, pollutants loads; and reduction of both wet and dry weather stormwater from entering the Pacific Grove ASBS.

The City has previously implemented two phases of the dry weather runoff diversion system from its storm drain system to the sanitary sewer system. The Monterey Bay Sanctuary Citizen Monitoring Network provided the required water quality monitoring services for the first two phases of the urban diversion project and, as such, is uniquely qualified to undertake the continuation of this projects monitoring efforts. Staff is not aware of any other party with the unique working knowledge of conducting this effort cost-effectively.

Also, the Monterey Bay Sanctuary Citizen Watershed Monitoring Network has provided water quality monitoring and implementation of the Pacific Grove Urban Watch program for more than a decade. The Urban Watch Program is a dry season monitoring program in which citizen volunteers monitor urban runoff flowing from storm drain outfalls, providing data to the City and implementing required monitoring for the Area of Special Biological Significance as well as for other storm drain outfalls citywide.

The primary watershed analysis portion of the grant is to measure the reduction of pollutants entering the Pacific Grove Areas of Special Biological Significance (ASBS). Reduction of pollutants will be accomplished by the capturing, storing, and diverting of stormwater runoff and dry weather flows from Lovers Point and Sea Palm watersheds and directing the stormwater to Monterey One Water for treatment and reuse. The second objective is to characterize the water quality in the ASBS where the Lovers Point and Sea Palm outfalls drain.

In August 2016 the City submitted a grant application to the State. In January 2017, the City received the grant award notice, and on February 20, 2018, the City executed the grant agreement with the State to design, engineer, and complete the infrastructure improvements.

OPTIONS

1. Provide alternative direction as to means by which the City should implement the required monitoring component of the Proposition 84/1 ASBS grant.
2. Deny approval of the agreement, which would result in non-compliance with the grant agreement due to non-performance of the required water monitoring component.

FISCAL IMPACT

There is no fiscal impact to the Fiscal Year 17/18 Budget. The total agreement amount is \$53,252 plus a 10% contingency spent through FY 2018-19, FY 2019-20, and FY 2020-21. The Grant provides for \$28,500 of the proposed costs with the remainder of costs covered by the required Local Match funds.

GOAL ALIGNMENT

1. Environmental
2. Infrastructure
3. Operational Excellence

ATTACHMENTS

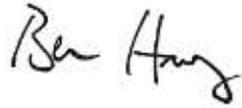
1. Map Stormwater Project Locations
2. Proposal from the Monterey Bay Sanctuary Citizen Watershed Monitoring Network (not to exceed \$53,252 plus 10% contingency)

RESPECTFULLY SUBMITTED:



Milas Smith
Environmental Programs Manager

REVIEWED BY:



Ben Harvey
City Manager



Monterey Bay Sanctuary Citizen Watershed Monitoring Network
299 Foam Street Monterey, CA 93940 Bus. (831) 647-4227 Fax (831) 647-4250

Date: April 17, 2018

To: Daniel Gho and Milas Smith, City of Pacific Grove

From: Lisa Emanuelson
Citizen Watershed Monitoring Network Coordinator
California Marine Sanctuary Foundation

SUBJ: PROP 84/1 ASBS GRANT MONITORING FOR THE CITY OF PACIFIC GROVE;
SWRCB AGREEMENT #D1712658

This proposal covers all aspects of monitoring required for the Pacific Grove-Monterey ASBS Wet-Dry Weather Storm Water Capture and Diversion Project. Each numbered item below has a corresponding budget broken out on the following pages. This proposal encompasses:

1. Monitoring and Reporting Plan
2. Lovers Point and Sea Palm Diversion Monitoring
3. Pacific Grove Sanitary Sewer Improvements



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This grant is for the purpose of constructing infrastructure to reduce pollutants entering the Pacific Grove Areas of Special Biological Significance (ASBS) by capturing, storing, and diverting runoff from the 85th percentile storm and dry weather flow from Lovers Point and Sea Palm Watersheds, and improving the aging sanitary sewer collection system.

The primary intent of the diversion monitoring is to determine the load reduction of common urban pollutants that are not entering the ASBS during the dry weather months through the storm drain system. The second objective is to characterize the water quality in the ASBS where the Lovers Point and Sea Palm outfalls drain.

Task 1: Develop a Monitoring and Reporting Plan

A Monitoring and Reporting Plan will be developed using a template provided by the Grant Manager and will include; a Project Assessment and Evaluation Plan (PAEP), a Monitoring Plan (MP) and a Quality Assurance Project Plan (QAPP). The PAEP describes the manner in which the project performance will be assessed, evaluated, and reported and will detail the methods of measuring and reporting Project benefits. The QAPP will be developed in accordance with the United States Environmental Protection Agency's (USEPA) QAPP guidance document (EPA QA/G-5) or the State Water Board's Surface Water Ambient Monitoring Program's (SWAMP) QAPP. All water quality data obtained through implementation of the MP will be uploaded to the California Environmental Data Exchange Network (CEDEN) or in a comparable format provided by the State Water Board.

Task 1 Budget:

	Cost	Unit	Number	Total
Monitoring and Reporting Plan	\$69	hours	60	\$ 4,140.00
Data entry into CEDEN, analysis and reporting, manage equipment	\$69	hours	60	\$ 4,140.00
Monitoring and Reporting Plan				\$ 8,280.00

Task 2: Lovers Point and Sea Palm Diversion Monitoring

In order to measure load, a sample will be collected from the diversion sumps at Jewell near Pacific at hole #6 on the Pacific Grove Golf Course (for the Lovers Point watershed) and at Del Monte near Sea Palm at hole #7 on the Pacific Grove Gold Course (for the Sea Palm watershed). Monitoring will be conducted twice a month during dry weather months, April through October. Analytes measured will be bacteria (*E. coli*, enterococcus), metals (total copper, total zinc, total lead), nutrients (nitrate as N, phosphate as P, ammonia, and urea), potassium, fluoride, hardness, color, MBAS Detergents, turbidity and total suspended solids (TSS). These are the same constituents that are measured for the MRSWMP program in which there is many years of wet and



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dry weather data. The results, with the total volume of water discharged to MRWPCA through the pump station will be calculated to determine load.

Each outfall within the diverted areas will be inspected at the time of the sump monitoring. In the event that the diversion is not working properly and water is flowing from either of the outfalls, two samples will be collected; one at the end of the pipe and one in the receiving water at ankle depth point zero. The same analytes will be measured as listed above.

In order to answer the question about ASBS water quality, once monthly receiving water monitoring will be conducted at two receiving water sites, one adjacent to the Lovers and one adjacent to the Sea Palm watersheds. This receiving water monitoring will be conducted regardless of flow from the outfall. A grab sample will be collected at ankle depth point zero, and tested for the above list of analytes.

Task 2 Budget:

	Cost	Unit	Number	Total
Monitoring (7 Months x 2)	\$ 69	hours	112	\$ 7,728.00
Laboratory analysis – Sump samples ¹ including QA	\$ 310	samples	42	\$ 13,020.00
End of pipe and receiving water sample analysis ²	\$ 310	samples	20	\$ 6,200.00
Diversion Monitoring				\$ 26,948.00

Task 3: Pacific Grove Sanitary Sewer Improvements

The primary intent of this monitoring is to determine how effective the repair and/or replacement of sanitary sewer lines is in removing bacteria from the Sea Palm watershed in Pacific Grove. In order to do this, samples will be collected at four sites in the watershed: upstream and downstream of each of the repairs. Monitoring will be conducted in the storm drain system twice a month for three months before construction begins and three months after construction has been completed.

Analytes monitored will be fecal indicator bacteria (FIB) (*E. coli*, enterococcus) and Quantitative Polymerase Chain Reaction (QPCR) to detect human specific sourced bacteria (HF183).

¹ Assumes 28 samples at diversion sumps plus 14 QA samples.
² Assumes 14 receiving water and 6 end of pipe samples.



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Task 3 Budget:

	Cost	Unit	Number	Total
Monitoring (6 months)	\$ 69	hours	96	\$ 6,624.00
Laboratory analysis ³ including QA	\$ 55	samples	60	\$ 3,300.00
QPCR Analysis	\$ 135	samples	60	\$ 8,100.00
Sanitary Sewer Repair Monitoring Total				\$ 18,024.00

Total budget for all assigned tasks:

Task 1: Monitoring and Reporting Plan	\$ 8,280.00
Task 2: Lovers Pt and Sea Palm Diversion Monitoring	\$ 26,948.00
Task 3: Sanitary Sewer Effectiveness Monitoring	\$ 18,024.00
Proposal Total	\$ 53,252.00

Please let me know if you have any questions or if you'd like modify this proposal. We appreciate your concern for the Monterey Bay National Marine Sanctuary and look forward to working with you.

Sincerely,
Lisa Emanuelson
Citizen Watershed Monitoring Network Coordinator

Cc: Dennis Long, Executive Director
California Marine Sanctuary Foundation

³ Assumes 48 samples plus 12 QA samples