



United States Department of the Interior

FISH AND WILDLIFE SERVICE
San Francisco Bay National Wildlife Refuge Complex
1 Marshlands Road
Fremont, California 94555



16 March 2012

Luisa Valiela
San Francisco Bay Program Lead
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA, 94105

Dear Ms Valiela:

On behalf of the Don Edwards San Francisco Bay National Wildlife Refuge I am writing to convey our support for the Coastal Conservancy's Initial Proposal to the San Francisco Bay Area Water Quality Improvement Fund for mercury monitoring related to the South Bay Salt Pond Restoration Project.

The South Bay Salt Pond Restoration Project is one of the country's largest wetland restoration projects and plans to eventually restore approximately 15,000 acres of former salt evaporation ponds back to tidal wetlands in South San Francisco Bay. This historic opportunity is unfortunately located in a mercury-rich environment due to run off from the historic New Almaden Quicksilver Mine (the Guadalupe River watershed drains into the project area: Alviso Slough and adjacent ponds). One of the project's key scientific uncertainties is the lack of knowledge of how tidal restoration could remobilize mercury laden sediments or create environmental conditions that increase mercury methylation. In order to continue to restore tidal wetlands, the SBSP Restoration Project must monitor the changes in mercury's distribution, availability and bioaccumulation that could be caused by project actions. Without this information, the SBSP Restoration Project will not be able to design projects that avoid mercury mobilization and uptake, or, possibly, not even be allowed to implement future phases because of lingering concerns about mercury.

This study will provide critical information to SBSP Restoration Project Management Team in guiding their future decisions regarding wetland management and restoration. We appreciate the EPA's role in continuing to fund these important efforts in San Francisco Bay, and request your support for the Conservancy's request to continue the momentum on the South Bay Salt Pond Restoration Project.

Sincerely,

Eric Mruz
Manager
Don Edwards San Francisco Bay NWR





United States Department of the Interior

U. S. GEOLOGICAL SURVEY

WATER RESOURCES DIVISION
345 Middlefield Road, MS480
Menlo Park, CA 94025

April 30, 2012

Luisa Valiela
San Francisco Bay Program Lead
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA, 94105

Re: Federal Leveraged Funds from the USGS in support of Coastal Conservancy application for Comprehensive Mercury Studies

Dear Ms Valiela:

Dr. Mark Marvin-DiPasquale is a Project Chief in the US Geological Survey's National Research Program, leads a research effort entitled "Biogeochemistry At Regional Scales", and is a co-investigator on the current proposal submitted by the State Coastal Conservancy. This letter details the 'in-kind' contribution on the part of the USGS, in terms of Dr. Marvin-DiPasquale's salary, that is being listed as 'Federal Leveraged Funds' in the proposal budget.

Approximately 10% of Dr. Marvin-DiPasquale's annual effort is currently focused on South Bays Salt Ponds Restoration research efforts, which equals \$16,700 annually in base salary and benefits. His effort in this regard is split 50/50 on Project Management (\$8,350/yr) and report writing (\$8,350/yr). In the current proposal, and as the lead PI on mercury analysis in surface water and sediment, he is associated with four of the six study components, specifically: Study 1 (Bathymetry and Deep Core Mercury), Study 3 (Mercury Flux / Diel Sampling), Study 4 (Biosentinals), and Study 5 (Pond A6 Deposition).

The proposal budget is broken down into two phases: Phase 1 funded by the State Coastal Conservancy (April 2012 thru April 2013) and Phase 2, which the requested EPA grant would partially fund (thru December 2014). Of the above four study components Dr. Marvin-DiPasquale is involved with, the Federal Leveraged Funds breaks down as follows:

Study 1 - Phase 1, Project Management and Data Synthesis / Report Writing = \$4,200; Phase 2 (May 2013 thru December 2014), Data Synthesis / Report Writing = \$2,100

Study 3 - Phase 1, Project Management and Data Synthesis / Report Writing = \$4,200; Phase 2 (May 2013 thru December 2014), Data Synthesis / Report Writing = \$2,100

Study 4 - Phase 2 (January 2013 thru December 2014, Project Management and Data Synthesis / Report Writing = \$8,400

Study 5 - Phase 2 (August 2012 thru December 2014, Project Management and Data Synthesis / Report Writing = \$6,300

These amounts total \$8,400 for Phase 1 (April 2012 thru April 2013) and \$18,900 for Phase 2 (August 2012 thru December 2014) research components, for a combined USGS contribution in salary and benefits of \$27,300 for the entire project from April 2012 thru December 2014.

Sincerely,

Cynthia L. Brown
Assistant Branch Chief, USGS BRR-WR



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Western Ecological Research Center
Modoc Hall, Suite 3006
3020 State University Drive East
Sacramento, CA 95819

April 25, 2012

Luisa Valiela
San Francisco Bay Program Lead
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA, 94105

Re: Letter in support of Coastal Conservancy application for Comprehensive Mercury Studies

Dear Ms Valiela:

On behalf of the Western Ecological Research Center (WERC) of the U.S. Geological Survey (USGS), I am writing to convey our support for the Coastal Conservancy's Proposal to the San Francisco Bay Area Water Quality Improvement Fund for mercury studies related to the South Bay Salt Pond Restoration Project.

WERC is a partner in this study effort. Our role in the project is as research participant on Study 4, Biosentinels. Dr. Josh Ackerman is the lead for Study 4, and is a Principal Investigator with USGS and an Associate in the Department of Wildlife, Fish, and Conservation Biology at the University of California, Davis. His research specialty is in ecotoxicology and avian ecology, and his research program focuses on contaminant bioaccumulation and effects of contaminants on bird reproductive success. Dr. Ackerman has been lead for the previous mercury biosentinel study for the South Bay Salt Pond Project in 2010 and 2011, and lead for the large CALFED mercury study examining mercury biomagnification in birds and fish in the San Francisco Bay. Study 4 continues the earlier biosentinel studies and will investigate mercury bioaccumulation under post restoration conditions. The research team for this study includes Dr. Darell Slotton of the University of California, Davis and Dr. Mark Marvin-DiPasquale of USGS. This study will enhance Dr. Ackerman's ability to understand mercury dynamics throughout the Bay region and complement his work on mercury dynamics in the North Bay as well as the Delta.

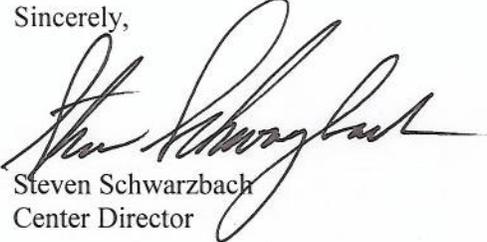
WERC also supports the Lead Scientist position for the South Bay Salt Pond project (SBSP). The Lead Scientist, Laura Valoppi, has been coordinating the applied studies, monitoring, and research needs of the SBSP for almost 3 years, and she has coordinated and overseen the mercury studies. The State Coastal Conservancy is providing over 66% of the funding to support the Lead Scientist position, and 10% of the lead scientist time will be dedicated to coordination and integration of the results of this comprehensive mercury study. The match for the non-federal funds is \$15,000.

We hope by participating in this study we can assist the South Bay Salt Pond's project answer one of the key scientific uncertainties about how tidal restoration could remobilize mercury laden sediments or create environmental conditions that increase mercury methylation. Since we support the SBSP Restoration Project's goal to restore tidal wetlands, we are collaborating in this effort to monitor the changes in mercury's distribution, availability and bioaccumulation that could be caused by project

actions. Without this information, the SBSP Restoration Project and other wetland restoration efforts around the Bay will not be able to design projects that avoid mercury mobilization and uptake, or, possibly, not even be allowed to implement future phases because of lingering concerns about mercury.

This study will provide critical information to SBSP Restoration Project and other wetland managers around the Bay in terms of future decisions regarding wetland management and restoration. We appreciate the EPA's role in continuing to fund these important efforts in San Francisco Bay, and request your support for the Conservancy's request to continue the momentum on the South Bay Salt Pond Restoration Project.

Sincerely,



Steven Schwarzbach
Center Director

RECEIVED
APR 27 2012
COASTAL CONSERVANCY
OAKLAND, CALIF.



John Frawley
*President &
Chief Executive Officer*

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March 14, 2012

Luisa Valiela
San Francisco Bay Program Lead
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA, 94105

Dear Ms Valiela:

On behalf of The Bay Institute, I am writing in support for the Coastal Conservancy's Initial Proposal to the San Francisco Bay Area Water Quality Improvement Fund for mercury monitoring related to the South Bay Salt Pond Restoration Project (SBSP.) The SBSP will to restore tidal marshes on approximately 15,000 acres of former salt evaporation ponds.

The Bay Institute has been an active partner in promoting implementation of the SBSP as well as of many other such projects throughout San Francisco Bay. We published a report in 1987, *Citizens' Report on the Diked Historic Baylands of San Francisco Bay*, that identified region-wide opportunities for wetland restoration during a time when these former tidelands were at grave risk of development.

The South Bay Salt Pond Restoration Project is located in a mercury-rich environment due to run off from the New Almaden Quicksilver Mine. One of the project's key scientific uncertainties is about how tidal restoration could remobilize mercury-laden sediments or create conditions that increase mercury methylation. In order to continue to restore tidal wetlands, the SBSP Restoration Project must monitor the changes in mercury's distribution, availability and bioaccumulation that could be caused by project actions.

The proposed study will provide critical information to SBSP Restoration Project Management Team in guiding their future decisions regarding wetland management and restoration. We appreciate the EPA's role in continuing to fund these important efforts in San Francisco Bay, and request your support for the Conservancy's request to continue the momentum on the South Bay Salt Pond Restoration Project.

Very truly yours,



Marc Holmes, Program Director

RESOURCES LEGACY FUND

March 15, 2012

Luisa Valiela
San Francisco Bay Program Lead
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA, 94105

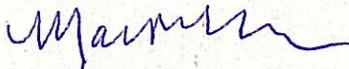
Dear Ms Valiela:

On behalf of Resources Legacy Fund, I am writing to convey support for the Coastal Conservancy's Initial Proposal to the San Francisco Bay Area Water Quality Improvement Fund for mercury monitoring related to the South Bay Salt Pond Restoration Project.

The South Bay Salt Pond Restoration Project is one of the country's largest wetland restoration projects, with plans to eventually restore approximately 15,000 acres of former salt evaporation ponds back to tidal wetlands in South San Francisco Bay. This historic opportunity is unfortunately located in a mercury-rich environment due to run off from the historic New Almaden Quicksilver Mine (the Guadalupe River watershed drains into the project area: Alviso Slough and adjacent ponds). One of the project's key scientific uncertainties is the lack of knowledge of how tidal restoration could remobilize mercury laden sediments or create environmental conditions that increase mercury methylation. In order to continue to restore tidal wetlands, the SBSP Restoration Project must monitor the changes in mercury's distribution, availability and bioaccumulation that could be caused by project actions. Without this information, the SBSP Restoration Project will not be able to design projects that avoid mercury mobilization and uptake, or, possibly, not even be allowed to implement future phases because of lingering concerns about mercury.

This study will provide critical information to SBSP Restoration Project Management Team in guiding their future decisions regarding wetland management and restoration. We appreciate the EPA's role in continuing to fund these important efforts in San Francisco Bay, and request your support for the Conservancy's request to continue the momentum on the South Bay Salt Pond Restoration Project.

Sincerely,



Martha S. Campbell
Executive Director



SAN FRANCISCO ESTUARY INSTITUTE

4911 Central Avenue, Richmond, CA 94804 • p 510-746-7334 • f 510-746-7300 www.sfei.org

April 20th, 2012

Luisa Valiela
San Francisco Bay Program Lead
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA, 94105

Re: Letter of Support of Coastal Conservancy application for Comprehensive Mercury Studies

Dear Ms Valiela:

On behalf of the San Francisco Estuary Institute, administering the Regional Monitoring Program for water quality in San Francisco Bay (RMP), I am writing to convey our support for the Coastal Conservancy's Proposal to the San Francisco Bay Area Water Quality Improvement Fund for mercury studies related to the South Bay Salt Pond Restoration Project.

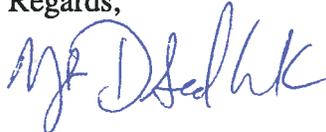
The Regional Monitoring Program is a partner in this study effort. As a representative to the Technical Review Committee, you are well aware of significant mercury impairment in the Bay and the substantial resources that the RMP is expending to understand mercury processes, sources, and pathways that result in food web accumulation.

The RMP's role in the project is a research participant on the Regional Monitoring Program's long-term trend analysis for contaminants in San Francisco Bay birds, and approximately \$40,000 of these Regional Monitoring Program funds can be considered as leveraged matching funds that can integrate our San Francisco Bay data with this study's South Bay Salt Pond Restoration Project area in the extreme South Bay. Bay bird mercury trends were most recently summarized in our 2011 Pulse of the Estuary (Pollutant Effects on Aquatic Life). Our 2008 Pulse of the Estuary focused exclusively on mercury (Mercury: Water Quality Enemy Number One) and provided an excellent summary of the USGS work sponsored by the RMP.

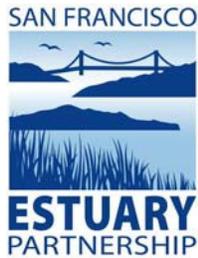
We hope by participating in this study we can assist the South Bay Salt Pond (SBSP) project to answer one of its key scientific uncertainties about how tidal restoration could remobilize mercury laden sediments or create environmental conditions that increase mercury methylation. Because we support the SBSP Restoration Project's goal to restore tidal wetlands, we are collaborating in this effort to monitor the changes in mercury's distribution, availability and bioaccumulation that could be caused by project actions. Without this information, the SBSP Restoration Project and other wetland restoration efforts around the Bay will not be able to design projects that avoid mercury mobilization and uptake, or, possibly, not even be allowed to implement future phases because of lingering concerns about mercury.

This study will provide critical information to SBSP Restoration Project and others wetland managers around the Bay in terms of future decisions regarding wetland management and restoration. We appreciate the EPA's role in continuing to fund these important efforts in San Francisco Bay, and request your support for the Conservancy's request to continue the momentum on the South Bay Salt Pond Restoration Project.

Regards,



Meg Sedlak,
RMP Program Manager



April 30, 2012

Luisa Valiela
San Francisco Bay Program Lead
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA, 94105

Re SF Bay Area Water Quality Improvement Fund proposal – *California Coastal Conservancy, South Bay Salt Pond Restoration Project*

Dear Ms. Valiela:

Along with our own three projects under consideration for funding, I am writing to convey our additional support for the Coastal Conservancy's proposal to the San Francisco Bay Area Water Quality Improvement Fund for mercury studies related to the South Bay Salt Pond Restoration Project.

The Conservancy's proposed project is consistent with SFEP's Comprehensive Conservation and Management Plan. Specifically, the project will implement Wetlands Action 5.2 which calls for studies to address the effects of known stressors and emerging contaminants, including mercury, on wetland restoration projects. These studies are critical to help the South Bay Salt Pond project answer one of the key scientific uncertainties about how tidal restoration could remobilize mercury laden sediments or create environmental conditions that increase mercury methylation. This effort will monitor the changes in mercury distribution, availability and bioaccumulation that could be caused by project actions. Without this information, the SBSP Restoration Project and other wetland restoration efforts around the Bay will have difficulty designing projects that avoid mercury mobilization and uptake, or, possibly, not even be allowed to implement future phases because of lingering concerns about mercury.

This study will provide critical information to SBSP Restoration Project and to other wetland restoration projects around the Bay. We appreciate the EPA's role in continuing to fund these important efforts in San Francisco Bay, and request your support for continuing the momentum on the South Bay Salt Pond Restoration Project.

Sincerely,

A handwritten signature in blue ink that reads "Judy A. Kelly".

Judy A. Kelly
Director

UNESCO-IHE
Institute for Water Education



T +31 015 2151872
E v.deoliveira@unesco-ihe.org

Luisa Valiela
San Francisco Bay Program Lead
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA, 94105
USA

UNESCO-IHE
P.O. Box 3015
2601 DA Delft
Netherlands

Our reference
OR/068/VDO

Date
01 May 2012

Subject: Letter of Support of Coastal Conservancy application for Comprehensive Mercury Studies

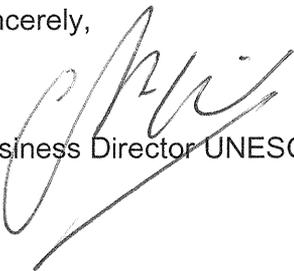
Dear Ms Valiela:

On behalf of UNESCO-IHE, I am writing to convey our support for the Coastal Conservancy's Proposal to the San Francisco Bay Area Water Quality Improvement Fund for mercury studies related to the South Bay Salt Pond Restoration Project. UNESCO-IHE is a partner in this study effort. Our role in the project is a research participant/funder on South Bay Mercury study and we will be providing \$50,000 in matching funding for Delft3D modeling of the scour of Alviso Slough resulting from a combination of restoration actions and sea level rise. We will provide expertise in application of the Delft3D software package that has a proven track record for similar studies carried out worldwide. The model will allow for flow predictions as well as transport of sediment, geomorphic change, and tracking of contaminants in South Bay and adjacent (former) salt pond areas.

We hope by participating in this study we can assist the South Bay Salt Pond's project answer one of the key scientific uncertainties about how tidal restoration could remobilize mercury laden sediments or create environmental conditions that increase mercury methylation. Because we support the SBSP Restoration Project's goal to restore tidal wetlands, we are collaborating in this effort to estimate mercury mobilization by slough scour that could be caused by project actions. Without this information, the SBSP Restoration Project and other wetland restoration efforts around the Bay will not be able to design projects that avoid mercury mobilization and uptake, or, possibly, not even be allowed to implement future phases because of lingering concerns about mercury.

This study will provide critical information to SBSP Restoration Project and others wetland managers around the Bay in terms of future decisions regarding wetland management and restoration. We appreciate the EPA's role in continuing to fund these important efforts in San Francisco Bay, and request your support for the Conservancy's request to continue the momentum on the South Bay Salt Pond Restoration Project.

Sincerely,


Business Director UNESCO-IHE

Postgraduate education, training
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I www.unesco-ihe.org

May 3, 2012

Ms. Luisa Valiela
San Francisco Bay Program Lead
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Re: Letter in Support of Coastal Conservancy Application for Comprehensive Mercury Studies

Dear Ms. Valiela:

On behalf of the Santa Clara Valley Water District (District), I am writing to convey our support for the Coastal Conservancy's (Conservancy) Proposal to the San Francisco Bay Area Water Quality Improvement Fund for mercury studies related to the South Bay Salt Pond (SBSP) Restoration Project.

The District is a partner in this study effort. Our role in the project is as a funder supporting Study 2, and we will be providing matching funds of \$56,710 in FY2012 and leveraged funds of about \$59,545 in FY2013 for the partial operation of a water flow monitoring station on Coyote Creek and the water flow and sediment monitoring station on the Guadalupe River. These flow and sediment monitoring stations are operated by the U.S. Geological Survey (USGS). The data provided by these stations is used to compute the suspended-sediment flux in Coyote Creek and the Guadalupe River, which is critical for understanding the tributary contribution to the regional sediment budget.

By participating in this study we expect to assist the SBSP Restoration Project to understand one of the key scientific uncertainties associated with the restoration which is how tidal restoration remobilizes mercury laden sediments or creates conditions that increase mercury methylation. Since we support the SBSP Restoration Project's goal to restore tidal wetlands, we are collaborating in this effort to monitor the changes in mercury's distribution, availability and bioaccumulation that could be caused by project actions. Without this information, the SBSP Restoration Project and other wetland restoration efforts around the Bay will not be able to design projects that avoid mercury mobilization and uptake, or, possibly, not even be allowed to implement future phases because of lingering concerns about mercury.

This study will provide critical information to the SBSP Restoration Project and others wetland managers around the Bay to assist future decisions regarding wetland management and restoration. We appreciate the EPA's role in continuing to fund these important efforts in the Bay, and request your support for the Conservancy's request to continue the momentum on the SBSP Restoration Project through this grant.

Sincerely,



Ann Draper
Deputy Operating Officer
Watershed Stewardship Division

cc: P. Showalter, S. Dharasker, C. Elias, L. Lee, D. Drury (via e-mail)

