



Director's Report

March 17, 2021

PROGRAM HIGHLIGHTS

2021 State of the Estuary Conference - SAVE THE DATE

The 2021 State of the Estuary Conference will be held Monday and Tuesday, **September 27th and 28th, 2021** as a primarily virtual event, with the possibility of hosting remote, small gatherings where allowed, including on site at the Bay Area Metro Center as well as throughout the Bay and Delta. The 2021 SOE Conference Steering Committee has been formed, consisting of over 30 members representing myriad partner agencies and organizations. The Steering Committee has met twice to discuss logistics and potential session topics. The Estuary Partnership team is conducting research on the best platforms and services with which to host and facilitate the conference, along with its many breakout sessions, poster sessions, and scheduled activities.

2021 Biennial Bay-Delta Science Conference - REGISTRATION OPEN

11th Biennial Bay-Delta Science Conference



BUILDING RESILIENCE THROUGH DIVERSITY IN SCIENCE

April 6–9, 2021 ■ Virtual ■ #BDSC2021

Registration is now open for the 2021 Bay-Delta Science Conference, which will be held virtually. Attendance is free with registration: <https://baydeltascienceconference.org/>

Invasive Species Alert: Zebra Mussels Found in Aquarium Moss Balls

In early March, USGS scientists were alerted that live zebra mussels were discovered embedded in “moss balls” sold at a pet/aquarium store in Seattle, Washington. The aquarium moss balls are not moss but a green filamentous algae (*Aegagropila linnaei*). News spread quickly through the Federal Aquatic Nuisance Species Task Force (ANSTF) agencies, members, and to all the State Aquatic Invasive Species Coordinators and reports immediately started popping up in aquarium stores across the nation (in over 30 states as of March 8th). It appears that the contaminated moss balls were likely imported from the Ukraine to distributors in the US, then were shipped to pet stores nationwide. In the last two months, approximately 100,000 moss balls were being distributed every two weeks, with 90% of them being imported through two Florida locations and one California location, but they were also coming through New York and shipped through the internet. The products have now been recalled from many shelves and the U.S. Fish and Wildlife Service is working with the appropriate federal agencies, state agencies, and the pet industry to identify the breadth of the situation and determine what additional actions can be taken to mitigate the risk. Since these are freshwater mussels, folks are urged **not to** dispose of them in drains, waterways, or gardens. Instructions for decontamination and disposal of moss balls are available at: <https://www.fws.gov/fisheries/ANS/zebra-mussel-disposal.html>.

There has been quite a bit of work done with the aquarium trade reminding people not to dump their aquarium pets, plants, or water, but zebra mussels were never in that mix. The good news is that ANSTF and Western Regional Panel on Aquatic Nuisance Species (WRP) and associated members have built capacity and created networks since the 1990's, so word is getting out rapidly and action is being taken quickly.



Background: Zebra mussels and then quagga mussels were first introduced into the US in the Great Lakes via ballast water, then spread throughout the region naturally downstream and to new water bodies via trailered recreational boats. The zebra mussel invasion was one of the primary drivers for the Nonindigenous Aquatic

Nuisance Prevention and Control Act of 1990 that formed the ANSTF and called for ballast water regulations and other measures to prevent and control infestations in coastal and inland waters. There has been much work since then to prevent the spread of quagga and zebra mussels throughout the US, particularly in the western states, via recreational boating. The WRP recently finalized the [Quagga Zebra Mussel Action Plan \(QZAP\) 2.0](#) in September 2020, and it does not even mention the aquarium trade or moss balls. This is quite the curve ball on the zebra mussel story which initiated the coordinated prevention and control of aquatic invasive species at the federal level in the US.



COMPLETED PROJECTS

St Helena

The City of St. Helena has successfully completed their Upper York Creek Dam Removal project, funded by the California Department of Water Resources and the City. This defunct dam was not providing flood protection services and was preventing fish from accessing 1.5 miles of high quality spawning and rearing habitat upstream. The project team at St. Helena designed the deconstruction to take advantage of natural sediment transport mechanisms by installing sediment traps downstream before notching the dam.



The project received significant media attention, one article can be found [here](#). The Estuary Partnership has been managing this project under the Integrated Regional Water Management grant program for 8 years and Partnership staff were instrumental in assisting the City with moving the project design development and regulatory efforts forward through design review, stakeholder coordination, and advocacy with DWR on behalf of the project. The deep involvement of project management staff was critical in assisting the City staff's limited capacity to coordinate the plethora of regulatory agencies and consultant resources to successfully implement the project.

COMMUNICATIONS

ESTUARY News Magazine

The December issue of ESTUARY News explores regional history through long-ago floods, crashes, missteps, and bird-sightings. Stories include: How the Great Flood of 1862 Inspired Measure AA, The Legacy of Gold Rush Sediment, Water Wealth in Old Irrigation Districts, and more. This issue also follows up on recently published stories and the successful virtual meeting of the Regional Monitoring Program (RMP) for Water Quality in San Francisco Bay. Special for this issue, Julie Beagle, USACE, shares Wicked Scary Sea Level Rise Stories in a Science-in-Short podcast.



Estuary News continues to curate and promote the monthly digital newsletter, "Pearls," composed of shorter, timely articles focused on estuary-wide issues.

PROGRAM MANAGEMENT

NEP News

There is much to report on the Federal front for both the Partnership specifically and the National Estuary Program more broadly.

2020 San Francisco Estuary Partnership Program Evaluation: As you may recall, the Partnership underwent our U.S. EPA 5-year program evaluation last Spring/Summer, consisting of review by a Program Evaluation Team of a comprehensive package of written materials. In addition, while no site visits to our region by the Program Evaluation Team were allowed due to COVID-19 restrictions, we developed a “virtual site visit” consisting of a pre-recorded presentation by Partnership staff on the Integrated Regional Water Management Program, a short video on the 2019 State of the Estuary Report, and an in-person virtual presentation on the Wetlands Regional Monitoring Program presented by Partnership and San Francisco Regional Water Quality Control Board staff. In December of 2020, I received a letter from the U.S. EPA informing me that the Partnership passed the 2020 PE and is eligible for continued federal funding through the National Estuary Program (letter attached).

FY 21 Appropriations: The Estuary Partnership received a slight increase in our FY21 appropriation in the Omnibus Appropriations Bill, signed just before the end 2020. The \$700,000 appropriation is reflected in the FY 22 Draft Workplan and Budget. The spending bill also included a 50% increase for the San Francisco Water Quality Improvement Fund, a competitive grant program run through US EPA which funds projects that implement the Estuary Partnership's *Estuary Blueprint*.

National Estuary Program Reauthorization: On January 14th the President signed HR 4044, the Protect and Restore America's Estuaries Act, reauthorizing the National Estuary Program for five years with nearly double the authorized funding amount. If appropriated at the authorized level, each NEP would receive close to \$1.4 million per year. We

coordinated with ABAG/MTC on a [press release](#) in February, which included a quote from Congresswoman Jackie Speier.

H.R. 610: Speaking of Rep. Speier, on January 28 she announced the introduction of her San Francisco Bay Restoration Act, which would authorize \$50 million per year for five years (twice the amount of previous versions of the bill) to establish a San Francisco Bay Program Office within the U.S. EPA to fund projects to advance the Estuary Blueprint. The bill has 10 cosponsors from the Bay Area delegation: Speaker Nancy Pelosi, Jared Huffman, John Garamendi, Mike Thompson, Jerry McNerney, Mark DeSaulnier, Barbara Lee, Ro Khanna, Anna Eshoo, and Zoe Lofgren. Rep. Speier held a press conference to announce the new legislation that included Congressman Jared Huffman, California Secretary for Environmental Protection Jared Blumenfeld and Save the Bay Executive Director David Lewis.

IC Changes

Over the past several months, I have been focusing my efforts on filling vacant seats on the Implementation Committee. I am pleased to welcome the following new IC member representatives:

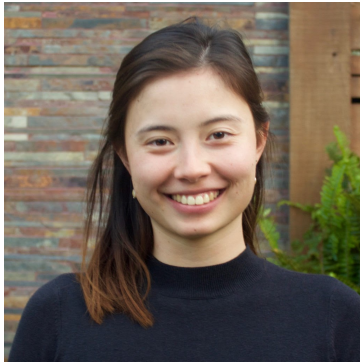
Audubon CA - Casey Arndt (primary), Director of the Richardson Bay Audubon Center and Sanctuary, and Andrea Jones (alternate), Director of Bird Conservation for Audubon California

California Natural Resources Agency - Mark Gold, Executive Director, Ocean Protection Council; Deputy Secretary for Ocean and Coastal Policy, California Natural Resources Agency

US Fish and Wildlife Service - Chris Barr, Acting Complex Manager for the San Francisco Bay National Wildlife Complex

I am continuing to work to identify new representatives for the following remaining vacant seats and hope to welcome new representatives at a future IC meeting: Pacific Gas & Electric, Environmental Justice, Bay Area Open Space Council (now Together Bay Area).

Staff Changes



We are excited to welcome our 2021 - 2022 Sea Grant Fellow, Alexandra Thomson. Alex will assist with development of the Wetlands Regional Monitoring Program (WRMP) and planning of the State of the Estuary Conference. Alex is interested in linking coastal science and management and maximizing the mutual benefits of environmental management and conservation for human communities and the environment, including improving environmental equity. She has a B.A. in

Biology from Brown University and an M.S. in Environmental Science from California State University Monterey Bay. For her Master's thesis research, she collaborated with the Elkhorn Slough National Estuarine Research Reserve to inform adaptive management in marsh restoration through analysis of field-collected and remotely sensed vegetation monitoring data. Previously, Alex has worked on water quality and recreation with the Charles River Conservancy (Cambridge, MA) and on invasive weeds management with the USDA Agricultural Research Service (Albany, CA).

We said goodbye to our 2020 - 2021 Sea Grant Fellow, Kelly Santos. Kelly contributed an extraordinary amount to the Wetland Regional Monitoring Program during her Fellowship, including helping to establish the Technical Advisory Committee and redesign of the project website (full release is coming soon!). It's been pleasure working with Kelly. We are going to miss her!



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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460**

December 23, 2020

**OFFICE OF
WATER**

Ms. Caitlin Sweeney
Director
San Francisco Estuary Partnership
375 Beale Street, Suite 700
San Francisco, CA 94105

Dear Ms. Sweeney,

The purpose of this letter is to provide the results of the Environmental Protection Agency's (EPA) 2020 Program Evaluation (PE) and to thank you and the San Francisco Estuary Partnership (SFEP) staff, as well as your partners, for contributing to the 2020 PE process. We recognize that you put considerable effort into both the PE package and the responses to our follow-up questions. We also appreciate your facilitation of a live webinar and associated background materials as part of the PE Team's virtual site visit to showcase some of the work being conducted in your study area.

I would like to note that your evaluation benefited from the voluntary participation of Ms. Lexie Bell, Executive Director of Morro Bay National Estuary Program (MBNEP), who served in an ex officio capacity on the PE Review Team. Ms. Bell's participation provided the Review Team members with an invaluable National Estuary Program (NEP) perspective. Ms. Bell also shared information about MBNEP that may be useful to your Partnership and took several lessons learned from this PE back to her NEP. Such peer-to-peer information sharing is vital to both programs.

The primary purpose of the EPA PE is to help EPA determine whether the 28 programs included in the NEP are making adequate progress implementing their Comprehensive Conservation and Management Plans (CCMPs). The evaluation process has considerably enhanced EPA Headquarters and Regional knowledge of each NEP and promoted innovative projects and approaches across all 28 NEPs. In addition, EPA uses the evaluation process to assess how the NEPs support Clean Water Act (CWA) core programs and to evaluate the extent and effectiveness of the NEPs' contributions to the achievement of one relevant EPA's *2016 - 2020 Strategic Plan Goal* – Goal 2: Protecting America's Waters, Objective 2.1, Protect Human Health and Objective 2.2, Protect and Restore Watersheds and Aquatic Ecosystems.

Based on the PE Review Team's findings, we believe the San Francisco Estuary Partnership continues to make significant progress in implementing its CCMP. We are pleased to announce that SFEP has passed the 2020 PE and is eligible for continued federal funding authorized by CWA §320.

2020 Program Evaluation Findings

The following summary highlights the Review Team's key findings by identifying SFEP's: (I) Progress Made in the Areas Highlighted in the 2015 Program Evaluation, (II) Support of CWA Core Programs, (III) Strengths, and (IV) Challenges. This summary is intended to recognize the Partnership's successes and recommend efforts to further strengthen SFEP. The Partnership's response to these recommendations will be evaluated in the next PE cycle.

I. Progress Made in the Areas Highlighted in the 2015 Program Evaluation

- **2015 Recommendation:** *The SFEP should continue to pursue all possible avenues to work with all sectors of society in the region....[such as]...leadership and the development of targeted outreach products and tools that can serve the private sector in the region...[in responding to] managing and maintaining growth in resources that will be needed to meet the demands imposed by climate issues in both the Delta and the Bay.*

The Review Team congratulates SFEP for addressing this challenge on multiple fronts. The strong collaborations demonstrate the leadership capacity SFEP maintains among multiple agencies of the State of California and other organizations in the San Francisco Bay region on climate change readiness. Even with the challenges associated with population growth throughout its study area, SFEP continues to strategically and thoughtfully support climate resilience in the San Francisco watershed by reaching out across many communities, adding value through the technical expertise and convening powers of the NEP, as demonstrated in the development of its most recent CCMP in 2016.

The Partnership has also leveraged its outstanding grants management capacity to oversee projects and initiatives that contribute to a more resilient environment and healthier communities. One example is the Oro Loma Living Laboratory, an innovative approach with UC Berkeley and the Oro Loma Wastewater Treatment Plant. This project demonstrates the concept of a horizontal levee that offers not only protection from storm surges but also serves a wastewater processing function – removing wastewater-derived contaminants such as nitrogen, phosphate, and pharmaceuticals – all while providing valuable habitat. The other example is the Mapping and Visioning in the Transition Zone Project in a North Richmond disadvantaged community. SFEP utilized funding from EPA’s Climate Ready Estuaries program in FY 2017 to facilitate a community vision process and incorporated environmental justice principles to address shoreline vulnerability in this area. SFEP dedicated funding, staff time, and technical expertise in these two model efforts, which reflect the local community and regional priorities, thus responding to the 2015 PE challenge and turning it into a core strength.

II. Support of CWA Core Programs

- Implementation of Mercury TMDL in the Guadalupe River Watershed

SFEP collaborated with its partners at Santa Clara County Parks, Santa Clara Valley Water District, San Francisco Bay Regional Water Quality Control Board, and the San Francisco Estuary Institute to remediate all calcine-paved road features in the New Almaden Mining District. Located in the Guadalupe River watershed, the mining district’s operations have led to significant impairments to surrounding waterbodies. During the review period, this project conducted by SFEP partners sequestered approximately 25-263 kg of mercury in the Guadalupe River watershed to implement the mercury TMDL approved in 2008. This is a significant accomplishment considering that the Mining District was once the largest mercury mine in North America and produced 5% of the world’s total mercury.

III. Strengths

- Program Planning and Administration – Providing Effective Tools and Resources

SFEP continued to deliver a high return on investment throughout the review period, with a primary leveraging investment of over seven times its base funding. Altogether, the Partnership has leveraged

over \$92 million through its network of collaborators to implement actions in its CCMP. To better showcase all activities being conducted in the watershed, the NEP also hosts a widely recognized CCMP tracking tool that is updated on a monthly basis. This tool has proven to be a valuable resource to communicate progress to stakeholders, serving as a model for other NEPs to replicate. Lastly, SFEP has remained the go-to organization for convening various scientific and research tech-transfer opportunities in the Bay Area, like the Bay-Delta Science Conferences (2016, 2018) as well as the State of the Estuary Conferences (2017, 2019). The latter event has served as the venue for releasing the periodic State of the Estuary Reports (2015, 2019) that contain indicator tracking metrics based on the analysis of available data from various partner agencies and organizations.

- Ecosystem Restoration and Protection – Integrated Approach to Water Conservation

We commend the SFEP for securing multiple rounds of funding from the California Division of Water Resources' (DWR) Integrated Regional Water Management (IRWM) Program because this ensures that the Partnership continues to play a crucial role of meeting the IRWM Program's objectives while delivering on the NEP's priorities at the same time. Projects completed during this review period included agricultural Best Management Practices, groundwater storage, flood reduction measures, and green infrastructure initiatives. SFEP and DWR have prioritized integration of water conservation efforts across the region, with additional benefits for improving habitat, water quality, and/or community resiliency that are anticipated to help maintain the health of the estuary. Altogether, IRWM projects funded during the review period resulted in at least 15,293 acre-feet per year of potable water supplied, offset, or conserved, along with 191 acres and 10 stream miles of habitat created, restored, or improved. These investments by DWR reflect the state and the region's leadership on addressing water conservation and integrated management, and are already supporting actions in the new Federal Water Reuse Action Plan.

IV. Challenges

- Provide updates to the next CCMP iteration

SFEP's 2016 CCMP was developed to integrate into one document the elements of its Strategic Plan, with its specific five-year objectives and actions. Even in this short time period, several milestones have been accomplished and the extent of climate change impacts in the Bay Area is better known. SFEP also provided a preliminary schedule for updating the CCMP/Estuary Blueprint in their next workplan (2020-2021). To account for these changes, the Review Team recommends that SFEP provide the following updates to their next CCMP iteration:

- Incorporate findings of the risk-based vulnerability assessment into its objectives to address climate stressors;
- Identify climate adaptation measures and other strategies for hazard mitigation;
- Ensure that supplemental CCMP documents are consistent with the CCMP Checklist.

There are available resources to guide SFEP in integrating climate elements and disaster planning measures, including EPA's Climate Ready Estuaries Workbook and FEMA's National Disaster Recovery Framework. In addition, the current NEP Funding Guidance (FY 2021 - FY 2024) contains valuable information on the CCMP revision and update process along with specific guidelines for supplemental documents (Finance, Restoration, Communication, and Monitoring strategies). EPA can offer assistance where necessary.

- Strengthen your working relationship with the new host entity and maintain NEP autonomy

SFEP transitioned to a new hosting arrangement in the summer of 2017 when its long-standing host agency, the Association of Bay Area Governments (ABAG), merged with the Metropolitan Transportation Commission (MTC). This major change in operations provided additional benefits to SFEP that were not readily available before. It also introduced a number of programmatic and administrative challenges that were not encountered in the previous hosting arrangement. In FY 2019, EPA provided supplemental funding to analyze the organizational, financial, and governance structure of the SFEP. An Organizational Assessment Report was developed with detailed findings along with recommendations for possible next steps.

To continue building on the progress made to date, the Review Team recommends that SFEP explore strategies to expand opportunities and address challenges with the new host entity. The Review Team also recommends that SFEP maintain its autonomy by addressing recommendations identified in the Organizational Assessment Report, specifically:

- Clarify governance and operational processes, and consider developing a Memorandum of Understanding between SFEP and ABAG/MTC to define roles and responsibilities;
- Periodically report back to EPA on progress made and soliciting additional guidance, if necessary.

Thank you again for participating in the PE process. We welcome any additional thoughts you may have, either about the evaluation process or EPA's involvement in the implementation of SFEP's CCMP. If you have any questions or comments, please contact me at (202) 748-7017 or Vince Bacalan at (202) 566-0930.

Sincerely,

Robert S. Benson

Robert S. Benson
Acting Chief, Partnership Programs Branch
Office of Wetlands, Oceans and Watersheds
U.S. Environmental Protection Agency

cc: John Goodin, U.S. EPA, Director, Office of Wetlands, Oceans and Watersheds
Brian Frazer, U.S. EPA, Director, Oceans, Wetlands, and Communities Division
Gail Louis, U.S. EPA Region 9, Watersheds Section Manager
Luisa Valiela, U.S. EPA, Region 9 SFEP Coordinator
Vince Bacalan, U.S. EPA, Headquarters SFEP Coordinator
Robin Parker, U.S. EPA, Headquarters NEP Team Coordinator
Lexie Bell, Executive Director, Morro Bay National Estuary Program