



# DIRECTOR'S REPORT

November 16, 2021

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## PROGRAM HIGHLIGHTS



The virtual one-day free State of the Estuary Summit held on October 1 included an audience of about 600 and covered a suite of relevant topics including climate resilience, regional restoration and rematriation efforts, environmental justice and community engagement, and intersectional partnerships.

A huge thank you to our Conference Steering Committee members, all the presenters and moderators, and the SFEP staff team who all worked hard to make the event engaging, relevant, and successful. In case you missed it, attached at the end of this report is the comprehensive coverage of the Summit found in the October issue of Estuary News.

### Estuary Blueprint 2022 Update

As the Estuary Blueprint update process heads into the home stretch, Working Groups are wrapping up the majority of their work on the 2022-2027 Blueprint Actions. The 32 Actions from the 2016-2021 Estuary Blueprint have been consolidated and reworked into 25 priority Actions for 2022-2027. The updated Actions maintain the comprehensive suite of priorities from previous versions of the Blueprint, with a more streamlined focus. Guiding Principles for this update have led to greater integration of Delta priorities, an emphasis on the increased urgency of climate change, and the development of new tasks that build on partnerships with Tribes, Tribal organizations, and community-based organizations working in underserved and frontline communities.

A summary of the changes will be provided at the IC meeting and a full draft of the updated Actions will be made available to the public for comment in December.

## Transforming Urban Water Initiative Updates

The Transforming Urban Water Initiative (TRUW) team have been busy hosting successful convenings on nature-based shoreline infrastructure.

The Transforming Shorelines Collaborative met on October 7, 2021. This meeting was hosted in partnership with Valley Water and focused on reverse osmosis concentrate (ROC) and the potential application onto horizontal levees. The meeting featured opening remarks by Tom Mumley, SF Bay Regional Water Quality Control Board and Aaron Baker of Valley Water. In addition, the meeting included talks on the Oro Loma Horizontal Levee, floating treatment wetlands, and integrating nature-based solutions into the landscape of the Bay.



The TRUW team also hosted a 3-day Roundtable workshop on Multi-benefit Shorelines November 2-4, 2021. The workshop was developed in close partnership with the Bay Area One Water Network and was facilitated by Molly Mayo of the Meridian Institute. The team gathered a group of experts to develop recommendations for advancing multi-benefit, nature-

based solutions (NBS) for coastal resilience, habitat enhancement, and water quality improvement of the San Francisco Bay estuary. The goal was to identify inclusive and equitable NBS approaches that provide multiple benefits such as improving water quality in the Bay, adapting for sea level rise, and bolstering wildlife habitat at the shoreline. The specific aims of this convening were:

- Characterize the key barriers to the adoption of multi-benefit NbS, and identify practical strategies for overcoming them while retaining protections for ecosystems and communities.
- Develop a strategy and roadmap of next steps to advance funding and develop regulatory pathways for NbS in the San Francisco Bay Area.
- Identify allies and forge partnerships for collaboration on the planning, implementation, and maintenance of NbS projects.

This convening, along with relevant background materials, will inform a report, authored by the BAOWN and SFEP, which captures key outcomes and a strategic vision that can be presented to decision-makers, legislators, impacted communities, and funders.

To learn more about TRUW, check out the project website: <https://www.sfestuary.org/truw/> or contact Heidi Nutters ([heidi.nutters@sfestuary.org](mailto:heidi.nutters@sfestuary.org)).

## Pacheco Marsh Levee Breached!



The waters of Suisun Bay flowed back into the 232-acre Pacheco Marsh for the first time in over 100 years during a very successful levee breach event on October 29<sup>th</sup> as part of the larger Lower Walnut Creek Restoration Project. The event was very successful with over two hundred guests and one fireboat in attendance!

The levee breach commemorated nearly 20 years of work by the Contra Costa County Flood Control District and the John Muir Land Trust, which includes acquiring the property, raising \$24.5 million in funding, and completing the first phase of restoration.

SFEP staff have been engaged with the project for over a decade, beginning with the US EPA-funded “Flood Control 2.0” project which advanced multi-benefit visioning for the Lower Walnut Creek flood control channel, and, more recently, managing funding from the San Francisco Bay Restoration Authority and the Integrated Regional Water Management Program.





# COMPLETED PROJECTS

## Integrated Regional Water Management Round 4

### Marin Municipal Water District AMI Expansion

Marin Municipal Water District (MMWD) has implemented water conservation programs for many decades. The District's potable water supply is reliant on local surface water from the Mount Tamalpais watershed with around 25% of supply imported from the Russian River watershed in Sonoma County. The Advance Meter Infrastructure (AMI) Expansion Project was implemented to enhance water supply reliability under increasing drought conditions.

MMWD has completed the project with an estimated savings of 48 acre-feet (AF) per year for a total of 970 AF of potable water saved over 20 years. The project involved replacement of aging water meters with new, digital meters that allow leak detection and a potential change in customer behavior based on personal water use dashboards that show real-time consumption. The project began as a turf removal project but was rescoped to capture water savings via meter replacement. AMI meters are able to detect large leaks (3,000+ gallons per day), which account for roughly 75% of the estimated water savings in Marin based on previous pilot data. Small to moderate leaks (100 – 2,999 gallons per day) account for roughly a quarter of the estimated water savings. Leaks are detected and can be corrected within hours or days with the new infrastructure, contrasting with existing meters that were read only once every three months. The project is complete and awaiting final retention payment.

### City of East Palo Alto Groundwater Supply Project



The City of East Palo Alto's Groundwater Supply Project was implemented to increase water supply reliability in East Palo Alto, which has disadvantaged community census blocks covering 32% of the land area. The City's sole source of potable water is from the San Francisco Public Utilities Commission (SFPUC), with no system storage or alternative supply sources to meet peak demands or to provide backup during a catastrophic event.

The Proposition 84-funded project developed and used groundwater as a new source of approximately 1,200 AF of potable water per year. The project included the design and construction of a well treatment system at a previously inactive well, and designed a new well and treatment system at an additional site for use as an emergency source. The completed well serves as a supplemental water source and is available for use during emergencies. The project will reduce the City's demand and dependence upon SFPUC supplies, boost pressure within the City's distribution system, provide alternate supplies during emergencies, and provide the City with the supply reliability it needs to support economic development. The project is complete and awaiting final retention payment.

## NEW FUNDING

### Nature-Based Solutions for a Resilient Estuary (US EPA Water Quality Improvement Fund Grant) - \$1,891,409

The Transforming Urban Waters (TrUW) Initiative has received additional funding to advance nature-based shoreline infrastructure. The funding will advance the Palo Alto Horizontal Levee Project through final design and the start of construction. The project will also fund continued meetings of the Transforming Shorelines Collaborative, support integration of social science in the Estuary Blueprint, and advance resilience indicators in the State of the Estuary Report.

### Wetlands Regional Monitoring Program Plan Phase III (US EPA Wetlands Program Development Grant) - \$569,366

The Wetlands Regional Monitoring Program (WRMP) has been selected for additional funding to: 1) strengthen community engagement and advance ecosystem services evaluation; 2) enhance the data management system for community integration; and 3) advance regulatory agency alignment with monitoring recommendations. The funding is expected to be awarded by EPA by the end of 2021.

### San Francisco Regional Water Quality Control Board Permit Assistance (Santa Clara Valley Water District) - \$569,796

The contract with Santa Clara Valley Water District was extended for an additional two years, supporting SFEP staff to continue to provide assistance to the San Francisco Regional Water Quality Control Board in expediting Valley Water matters and service requests.

## COMMUNICATIONS

### ESTUARY News Magazine



The [October issue of ESTUARY News](#) explores breaching season in full swing, with Hill Slough, Dutch Slough and Pacheco Marsh opening to tides this fall. It also describes how research on Bay nutrients carried on in a garage during COVID restrictions, sitings of cows trampling creeks, and EBMUD efforts to sustain groundwater.

Other topics including bird interactions with floating solar arrays, 150 years on patrol with DFW 150, and the October State of the San Francisco Estuary Summit.

## Knee Deep Times

The region has a new digital magazine featuring stories from the frontlines of climate resilience. Produced by Estuary News Group, [KneeDeepTimes](https://www.kneedeep.org) launched in September 2021 with funding from the Bay Area Regional Collaborative and support from SFEP. With a geographic focus on the San Francisco Bay Area, the magazine will also explore West Coast, national and global topics relevant to local action. Check it out, subscribe, and pass it on! [www.kneedeep.org](https://www.kneedeep.org)

## #AskAScientist/#AskAnActivist



For the past three months, SFEP staff Diana Fu has been leading the revamp of our social media communications, starting with Instagram, producing exciting new content to highlight the State of the Estuary Summit and the Estuary Blueprint update. On select Fridays, Diana interviews a colleague from one of our partnering organizations. In September, #AskAScientist featured Christina Toms, an environmental scientist and engineer with the SF Bay Regional Water Quality Control Board. Diana and Christina talked climate change and why Christina loves wetlands and has hope for the future. In October, Diana interviewed Stephanie Panlasigui of the San Francisco Estuary Institute about her work on nature-based solutions and resilient landscapes, and also spoke with environmental educators Ashia Ajani and Phoenix Armenta of Mycelium Youth Network on their Apocalyptic Resilience conference for youth. The interviews are short, fun and explore the exciting work being done around the Estuary. Follow us on [Instagram](https://www.instagram.com/sfep) or subscribe to our [YouTube channel](https://www.youtube.com/sfep) to view past interviews and receive notifications for future events.

## PROGRAM MANAGEMENT

### Federal Bipartisan Infrastructure Bill Passed

On Friday November 5<sup>th</sup>, the House passed the more than \$1 trillion bipartisan infrastructure bill, sending it to the President for his signature. Included in the bill is an additional \$24m over 5 years for EPA Region 9's Water Quality Improvement Fund, as well as funding for NOAA, Coastal Zone Management (BCDC), National Estuarine Research Reserves, and more. In addition, there is \$132m in the bill for the National Estuary Program. Based on the language in the Bill, this will result in just over \$900,000 per NEP each year for the next five years. Although it is not yet certain how EPA will allocate the additional funding to the NEPs, it is likely the funds would be distributed through an augmentation of our annual appropriation, meaning we may need to include it in our proposed annual workplan and budget for FY 22-23.

## IC Changes



Mike Vasey, Director of the SF Bay National Estuarine Research Reserve since 2013 and long-time IC member retired in August. Mike was instrumental in the NERR's 2003 designation and has been an enthusiastic and creative partner on many regional initiatives with SFEP, including the Wetlands Regional Monitoring Program. We will miss you, Mike!

Stuart Siegal is the Interim Manager of the SF Bay NERR and the new primary representative for the NERR on the IC. Stuart has been working in the SF Estuary for 35

years, focusing on restoration and climate adaptation, and has been with the SF Bay NERR since 2015 as the country's first NERR Coastal Resilience Specialist. Welcome, Stuart!

## Staff Changes

We are excited to announced that Alex Thomsen will be joining SFEP staff for a limited-term position following the completion of her SeaGrant Fellowship in January. Alex will work on the WRMP and TRUW programs as well as supporting SFEP with the Estuary Blueprint. 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).