



SAVE WETLANDS

Citizens Committee to Complete the Refuge

Issue 53

Advocates for the Don Edwards San Francisco Bay National Wildlife Refuge

Fall 2024

Working with Partners: A Powerful Strategy for Protecting the Bay

Citizens Committee to Complete the Refuge and our founding leaders have a long and incredibly successful history of working with partner organizations and alliances to not only create and expand the Don Edwards San Francisco Bay National Wildlife Refuge, but also protect and restore wetlands and important wildlife habitats throughout San Francisco Bay, and even beyond the Bay Area.

In earlier years, the CCCR letterhead included a side panel listing 46 “Endorsers” and “Affiliates” that worked on, or supported, the various CCCR efforts to protect the Bay and its wildlife. The list included organizations large and small ranging from the California Waterfowl Association to the Tri-City Ecology Center, and every size of local or state group in between. This important legacy of joining with others for effective environmental advocacy continues today, and we believe this is a good year to highlight this amazing aspect of CCCR’s work that may not always be apparent.

There is no question that partnering is a really powerful way to amplify a strong message of support or opposition, or even concern. It helps grab the attention of the agency, city council, special district, or state legislators making important decisions on state bills, regulatory permit applications, regional Bay policies, local projects, or CEQA documents, all of which affect Bay habitats and wildlife. CCCR and our partners frequently use joint comment letters to communicate with decision-makers and the letters will often have



four inches of colorful organization logos at the top – very effective messaging right from the start!

Equally important are the different areas of focus or expertise local partners bring to the table – for example, Sierra Club’s many chapters with broad experience on Bay-wide environmental issues, policies and programs; Green Foothills’ longtime working relationships with many local officials and state legislative representatives; San Francisco Baykeeper’s expertise in water quality and pollution issues; Save the Bay’s effective campaigns for regional legislation and Bay-wide policies to protect and restore the Bay; the Bay Area Audubon chapters’ collective expertise in bird-safe building design, light pollution, and knowledge of important local bird habitats needing

Black-necked Stilts. Photo by Matt Ledy.

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What CCCR Did in 2024

CCCR advocates devoted 6000+ volunteer-hours defending potential and current Refugelands, special-status species, wetlands, watersheds and more, at meetings and workshops, in project plan analysis, in document and field research, and with written comments, and at times working with expert contractors and nonprofit partners.

Actions protecting threatened lands that lie within the Refuge Acquisition Boundary, particularly:

- Alviso Lands: Monitoring status of the Shoreline Levee project and its planned restoration of Pond A18, monitor and protect lands that adjoin the community of Alviso
- BCD updated Environmental Assessment for Operations & Maintenance Permit for solar salt ponds/ Corps PN: Monitoring status of review by the BCD Engineering Criteria Review Board; CCCR submitted written comments/attended BCD ECRB meeting
- Cargill-owned ponds, Redwood City: Continued bird observation to document habitat value of ponds
- Maintain monitoring of Menlo Park wetlands (Ravenswood Triangle; Adams/University)
- Mowry Village: Continue to monitor the environmental review process
- Newark Area 4: Continue to monitor, social media posts to further Save Newark Wetlands campaign
- San Jose/Santa Clara Regional Wastewater Facility: Monitor the status of portions of the Plant buffer lands that adjoin Pond A18 and Coyote Creek and are suitable for sea level rise protection at tidal migration lands
- Valley Water Proposed Desalination Project: Inquiries for more information, comments made during Valley Water meetings (Environmentally-focused groups, the Board's Recycled Water Committee)

Actions to avert threats to lands held by the Refuge including:

- City of San Jose Bay Trail Plan: Monitoring and assessing options to protect Salt Pond Restoration actions on Pond A8 from the impacts of short-term build out of the Bay Trail adjoining the top edge of horizontal levee marsh infrastructure that is still in early construction
- Dumbarton Rail: Sam Trans renews conversations regarding bus and bike road – monitor the process
- Menlo Park, West Bay Sanitary District FERRF Project: Monitor
- Monitoring/reporting to Caltrans and Redwood City to prevent debris from entering adjacent tidal waterways that flow to the Refuge

Actions on local projects:

- Beneficial Reuse of Excavated Material in Tidal Marsh Restoration Project, Santa Clara Valley Transportation Authority: Submitted written comments to the scoping notification of preparation of a Draft EIR/EIS
- Capitol Corridor – South Bay Connect: Submitted written DEIR comments
- CPUC Proceedings: Continued to monitor for new commercial ferry operator applications for expansion of service in sensitive areas
- East Palo Alto Ravenswood Business District Specific Plan Update: Submitted written comments regarding the specific plan update and written comments regarding the specific plan DEIR, public comments at multiple City Council meetings
- East Palo Alto Sanitary District – Sanitary sewer parallel trunk line project: Submitted written comments to the Initial Study/Mitigated Negative Declaration
- Google, projects in multiple cities: Advisory and advocacy role on development, impact avoidance and mitigation of proposed and existing real estate and trail projects
- Midpeninsula Regional Open Space District: Advisory and monitoring roles of management and planning actions in the Ravenswood Open Space Preserve and the Stevens Creek Shoreline Nature Study Area
- Newark, Integral Properties – Mowry Village: Hired a CEQA consultant and an attorney to submit comments to the DEIR, submitted extensive DEIR comments, public meetings
- Newark Slough Mitigation Bank Proposal: Periodic check-in with agencies
- Newark – Citywide Parks Master Plan: Attended meetings
- One Shoreline – Millbrae and Burlingame Shoreline Resilience Project: Submitted written and in-person comments on proposed offshore barrier alternative and inadequate NOP process, and provided input on the agency's public outreach process for exploring new project alternatives
- Port of Redwood City NOP and Initial Study for the Port of Redwood City Ferry Terminal Project: Submitted written comments

- Palo Alto Airport – proposed extension of runway: Participated in survey, submitted comments and made public comments to the City Council
- Palo Alto Flood Basin Tidegates: Tidegates that were required to address an unauthorized activity not operated as was required by USACE special conditions – letter to City of Palo Alto requesting they rectify the situation
- Redwood LIFE redevelopment Project (Redwood Shores near Belmont Slough): Commented at community meetings on creating a new specific plan for the project – voiced concerns about potential impacts to wetlands and disturbance of the former landfill at the site
- Palo Alto Baylands: Monitoring multiple projects
 - Valley Water/USACE Sea Level Rise Levee was tabled by the USACE
 - Valley Water Flood Basin Replacement Tidal Gate modified to seismic rebuild of current gate
 - Palo Alto's Mitigation Tide Gates not part of Valley Water project
 - Palo Alto Regional Water Facility horizontal levee project
 - Measure E Lands Rededication letter and public comment – City Council voted against rededication
- Palo Alto Golf Course: Monitoring status of compliance with regulatory wetlands restoration requirements
- SAFER Shoreline levee project in Menlo Park and East Palo Alto: Attended meetings with SAFER staff, provided a letter of support for a planning grant from the SFBay Restoration Authority
- South Bay Shoreline Levee Project: Monitoring and commenting on actions of Phase I (Alviso); Phase II was tabled by the USACE (Palo Alto/Mountain View) and Phase III (Moffett Field/Sunnyvale) USACE Feasibility Study is now underway
- Top Golf at Terra and adjoining North First Street property, San Jose: Monitor development of proposed entertainment, retail and hotel multi-owner complex, next to lower Guadalupe River
- Valley Water Calabazas and San Tomas Aquino Creeks and Pond A8 Creek Connection and associated Feasibility Study of Pond A4: Submitted letter of support for SFBRA grant, comment in public meetings

Actions commenting on Bay Region, State, and Federal Plans and Policies:

- AB 990 potential relaxing of standards for water quality: Submitted letter of opposition to legislators
- Alameda County Water Protection Ordinance and changes in the protection of streams: Submitted comments, attended numerous public meetings
- BCD Regional Shoreline Adaptation Plan Guidance: Served on the Advisory Group/meetings/comment letters/comments to BCD Commission
- California budget and proposed clawbacks of funding for restoration and climate resilience projects: Contacted legislators to urge that funding be restored, particularly for those nearing the implementation phase – preserve Wildlife Conservation Board funding
- California Climate Bond (30x30): Reached out to legislators voicing support
- California environmental group meeting regarding the implications of the Sackett decision
- Letter of support for Climate Adaptation Planning Grant for the Capitol Corridor Joint Powers Authority for rail climate resilience planning for the reach from Newark to San Jose
- Living Shorelines Collaborative: Attended meetings
- Newark Climate Adaptation Plan: Attended public meeting
- Newark Sea Level Rise Vulnerability Assessment and Adaptation Plan: Attended public meeting
- Redwood City Sea Level Rise Vulnerability Assessment Study: Submitted written comments
- San Francisco Bay Regional Water Quality Control Board: Provided oral comments regarding the State Restoration General Order and the BRRIT
- Signed on to a comment letter to state legislators urging them to protect and preserve the California Environmental Quality Act (CEQA)
- Tri-City Multi-jurisdictional Local Hazard Mitigation Plan (Fremont, Newark, Union City): Participated in public and stakeholder meetings/submitted comment letter on draft plan

Actions on projects impacting special-status species and water quality impacts in the Bay Region:

- Carnegie State Vehicular Recreation Area – General Plan DEIR: Submitted joint written comments with Ohlone Audubon Society
- Tesla Park, Alameda County: Supporting efforts to permanently protect this area through classification of these lands as a State Reserved due to many listed and special-status species and habitats and sensitive cultural resources

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What CCCR Did in 2024

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Actions of CCCR as facilitators, stakeholders, representatives at meetings/conferences and on boards:

- Alviso Neighborhood Community Group member
- BCDC Regional Shoreline Adaptation Plan (RSAP) – Advisory Committee
- BCDC–Bay Adapt RSAP Workshop: participated and provided public comments
- Don Edwards San Francisco Bay National Wildlife Refuge– Re-imagining of the Alviso Environmental Education Center and facilities
- Farallon Islands status and update
- Friends of the Estuary Board Member
- Google Ecology Club Member, advisory role, Corporate Real Estate Planning, ongoing
- Palo Alto Baylands Comprehensive Conservation Plan
- Plan Bay Area 2050+: organized and hosted meeting between Plan Bay Area staff and environmental groups, participated in a workshop
- Public Lands Alliance Field Trip to Ravenswood Ponds and Bair Island – tour leader and speaker
- Priority Conservation Area Refresh (PCA)– Metropolitan Transportation Commission (MTC)/ Association of Bay Area Governments (ABAG) – PCA update process: organized and hosted several meetings between MTC/ABAG staff and the environmental community, participated in workshops
- Santa Clara Valley Conservation Council Member
- San Francisco Bay Joint Venture Management Board
- San Francisco Estuary Partnership Implementation Committee
- Santa Clara County Office of Sustainability Working Group for Climate Resilience, Subcommittee for Sea Level Rise and Flooding: meetings, comments
- Shoreline Advocacy Workshop
- Sierra Club, Bay Alive: Contributors as topic advisors and program presenters
- South Bay Salt Pond Restoration Project Stakeholder Forum Member: updates
- Valley Water Environmentally-Focused Stakeholder Group
- Valley Water One-Water Guadalupe Watershed Planning Stakeholder
- Valley Water – Water Reuse County-wide planning: Stakeholder

Working with Partners

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protection; Center for Biological Diversity's expertise on all things related to endangered species, and the laws and regulations meant to protect them; and Greenbelt Alliance, making a strong case for housing, but in the right places, so that important baylands are protected and people are not vulnerable to flooding and sea level rise.

CCCR often takes the initiative on joint letters and even works to facilitate meetings with our partners to discuss issues of concern, or between agencies and environmental groups on specific Bay policies or regional projects. In 2024, CCCR facilitated meetings with One Shoreline on the Millbrae and Burlingame Shoreline Resilience Project, and with MTC/ABAG on Plan Bay Area and Priority Conservation Areas (PCA Refresh), providing opportunities for Bay environmental groups to have a voice.

Other times, we add our signature and logo to a joint letter from another organization. One example of a very important joint letter that CCCR was asked to sign in February was sent to Gavin Newsom and legislative leaders voicing strong support of the State Water Resources Control Board's (SWRCB) Budget Change Proposal for ongoing funding and permanent positions to conduct essential water quality permitting and enforcement work. The joint letter was signed by 21 state and national environmental organizations.

This work has historically been conducted by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency, but due to the 2023 U.S. Supreme Court Sackett decision limiting the extent of federal jurisdiction over wetlands and waters protected by the Clean Water Act (CWA), the regulatory reach of the Corps has been reduced. Fortunately, in California, the Porter-Cologne Act protects waters of the state. And over a decade ago, the state began working on its own definition of wetlands and also to establish its own version of dredge and fill procedures. CCCR was a participant in this tremendously important and lengthy process. The reduction in the extent of federal CWA authority has left a workload vacuum that will require additional SWRCB staff and resources to ensure critical protections to the state's water bodies are not lost. Fortunately, this essential funding was appropriated in the State budget.

In the days ahead, collaborative action will become increasingly critical as we all work to hold the line on the environmental protections that are vital for our Bay, and for natural resources and public lands nationwide.

So, three cheers for all our many wonderful partners! Thank you, and we're looking forward to joining with you to do more good work for the Bay in 2025. 🦆

Enid Pearson

60 Years of Environmental Activism

Just this August, Enid Pearson celebrated her 100th birthday, and we celebrate her lifetime of achievements advocating for local and regional parks, open space, baylands and the Refuge. Enid Williams was born in Venice, California and grew up in Butte, Montana where her father worked for Anaconda Copper Mine. Enid ice skated and enjoyed other outdoor activities. She graduated in Chemistry from Montana State University in Missoula and worked for the Hanford Nuclear Research facility in Washington. She then came to Berkeley, CA where she met and married Paul Pearson. They raised a son and three daughters.

Protecting Parks. While raising their children, Enid enjoyed the local parks and noticed that the City of Palo Alto was using them for non-park uses. In 1964 she organized an initiative petition to amend the City Charter to protect parkland. The vote was 90% in favor of the measure.

Council Service. In 1965 Enid ran for Palo Alto City Council and won. She advocated for the environment on the Council for 10 years.

Protecting the Foothills. In 1970 Enid spearheaded the City's Foothill Environmental Design Study that resulted in preservation of Palo Alto's upper foothills and park dedication of the 520-acre Arastradero Preserve.

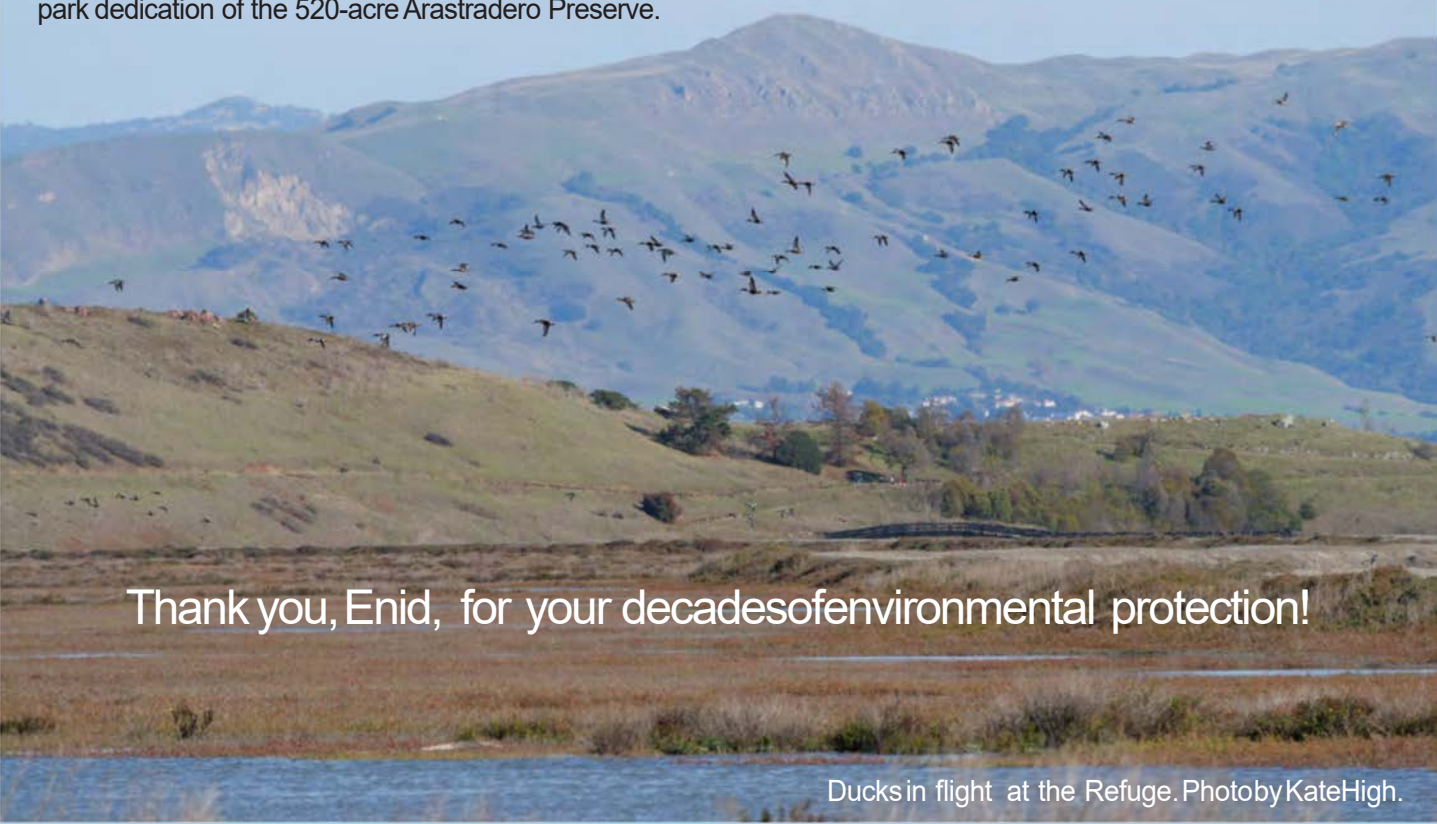
In 2004, the City of Palo Alto renamed it the Enid Pearson Arastradero Preserve in honor of all Enid's work to protect parks in Palo Alto.

Conservation Work. After Enid left the Council, she served as Executive Director of the Peninsula Conservation Center for several years. In 1981 she and Pat Wood opened Pearson-Wood Associates and ran that business until they retired in 2008.

Protecting the Baylands. Not one to stay idle, Enid became active with the Baylands Conservation Committee and then the Citizens Committee to Complete the Refuge, where she served as Treasurer and Board Member for many years. She continues to be active on the Board.

Guardian of Nature. In 2022, the Loma Prieta Chapter of the Sierra Club honored Enid as a Guardian of Nature.

Model of Civic Engagement. We are all grateful for the energy, intelligence, and dedication that Enid continues to devote to protecting our natural environment. 🦆



Thank you, Enid, for your decades of environmental protection!

Ducks in flight at the Refuge. Photo by Kate High.

Warm Springs Unit of Don Edwards SF Bay National Wildlife Refuge: A Conservation Success Story in the Making



Vernal pool in spring bloom at Warm Springs Unit. Photo by Richard Mooi.

By Aidona O. Kakouros, USFWS Botanist

Does the battle and tireless work of grassroots environmental groups to secure a precious piece of land end when the land becomes part of a National Wildlife Refuge? In the early 80s, and again in the 90s, very committed grassroots environmental groups sought to protect a precious piece of land from development in the booming South Bay. The Tri-City Ecology Center and CCCR fought tirelessly and succeeded in ensuring that the property became part of the Don Edwards San Francisco Bay National Wildlife Refuge (NWR). Was all this hard work worth the effort and can we all finally rest on our laurels?

Spanning 719 acres, the Warm Springs Unit of the Don Edwards San Francisco Bay NWR is the last substantial remaining patch of lowland vernal pool alkali grassland in the South Bay and in the Region. Over 250 vernal pools punctuate the grassland creating unique landscape dynamics and further enhancing wildlife value. The Unit is home to three federally

listed species and many rare and unusual species. It is a local biodiversity gem. Our biological monitoring program shows that in the last 12 years, populations of the federally listed California tiger salamander and vernal pool tadpole shrimp have continued to expand and now occupy many of the pools on the site.

In years with good precipitation, native vernal pool plants form floral carpets in the spring. In the summer, large patches of native blooming forbs in the grassland provide



The federally-listed California tiger salamander (left) and vernal pool tadpole shrimp populations have expanded at the NWR. Photos by Robin Gwen Agarwal.

invaluable resources to pollinators in an increasingly developed urban landscape. In recent years, BioBlitzes on the site have detected close to 200 species of invertebrates, and every year the number of species grows. The list of rare and unusual plant species on the site is also growing; as urban development gobbles up habitats around the Bay, the Unit is one of the few remaining sanctuaries for some of these species within the Bay Area. Over the years, we have seen the abundance of many rare species increase significantly within the unit.

While all this sounds wonderful, it takes rigorous management and the implementation of well-informed strategies. It requires many hands on deck to maintain this state of bliss!

Management at Warm Springs is necessary to restore or adjust natural ecological processes impacted by habitat fragmentation and other environmental stressors encountered in an urban setting. For example, the strongly managed grazing program at Warm Springs aims to reduce the biomass accumulation caused primarily by



Climate change is expected to have an impact on endangered Contra Costa goldfields (*Lasthenia conjugens*) at Warm Springs. Photo by Richard Mooi.

Climate change brings new challenges that require active management to support populations of species that are sensitive to the new environmental conditions, in the long-term. For example, sea level rise projections show that the pools with the highest populations of the endangered Contra Costa goldfields may be in peril of being permanently inundated in the next 50 years, and we need to act strategically to facilitate the migration of this species to higher elevation pools within the Unit.

Warm Springs Unit is one of the few remaining undeveloped areas in the South Bay that support the tidal-terrestrial T-zone. The T-Zone functions as a transitional habitat connecting the Bay to the foothills and provides several high-value ecosystem functions and

services. As the sea level rises in the future, the T-zone may serve as accommodation space for estuarine transgression (upslope migration of habitats) and flood water dispersal. The inherent uncertainty in climate projections combined with local planning practices translates to complicated potential scenarios for the Warm Springs Unit area closest to the Bay.

There is an urgent need for conservation advocates and land managers to raise the environmental awareness of local communities to promote comprehensive sustainable practices locally. In this rapidly changing world, long-term conservation success stories on sites like the Warm Springs Unit can only develop through a common understanding of the importance of preserving rare habitats, collaboration and partnerships among diverse stakeholders, and continuous community engagement.

We need to inform citizens about the value of these habitats, connect more people with the land, and share our stories and experiences. The San Francisco Bay NWR Complex has prioritized community engagement in our work plan for 2025. We are seeking to build strong ties with Bay Area communities, adopt inclusive decisionmaking, and inspire stewardship. Resources are limited, but we are deeply grateful to Friends groups and organizations that help amplify our voice and promote our mission. Thank you for your diligence and continuous support of our Refuge—your work matters! 🐾



Volunteers remove invasive thistles at Warm Springs Unit. Invasive species control is one of the most laborious conservation tasks at Warm Springs, and volunteers are key.

nonnative grasses; this in turn improves the hydrology of the pools and establishes favorable germination conditions for native species. We use integrated pest management to reduce the negative effects of invasive species, favored by extreme weather conditions associated with climate change (e.g. drought) and lack of control over actions on bordering lands such as the railroad edges, highways, landfills, etc. Staff, partners, and volunteers spend hundreds of work hours annually to remove target invasive species.

NOTE: due to the presence of federally listed and rare species, the Warm Springs Unit of the Refuge is not open to the public other than through guided tours, offered during the spring when the vernal pool flowers are in bloom.

Many Thanks to Paul Mueller as He Retires

Paul Mueller, U.S. Fish and Wildlife Service Volunteer Coordinator for the San Francisco Bay National Wildlife Refuge Complex, retired this September after being with the Refuge Complex for over 15 years.

Ceal Craig, President of the Board of Directors for the San Francisco Bay Wildlife Society, had the following fond words tracing Paul's career and contributions:

"Paul's deep sense of caring for Refuges and all they provide was part of his every waking moment. Always willing to lend a hand, a smiling face, and helpful approach, he inspired many volunteers to support the Refuges."



Paul Mueller at the Refuge office, where he spent 15 years as Volunteer Coordinator. Photo by Sam High.



Paul has worked with hundreds of volunteers to support the Refuge. Photo by Sam High.

Paul has been with us for over 15 years. I remember him first from the Sloughs News, a newsletter for volunteers at the San Francisco Bay National Wildlife Refuge Complex. This publication that he largely wrote shared upcoming opportunities and helped us feel valued. I think the last edition was March – May 2020. During the coronavirus epidemic times, we didn't have in-person programs and volunteering opportunities became more limited. This edition came out just as those gates and limits went in place for us all. Then as things started opening up, the Society began working with FWS to open up the Visitor Contact Station in Fremont, at least on Saturdays. And with Paul's help, we've been doing that, in particular, this past summer.

Paul began his federal career in the National Park Service, in particular at Lowell National Historical Park in Massachusetts and also Mt. Rainier NP. He then joined our Complex as the Volunteer Coordinator.

In his recent retirement party, people described Paul as kind, caring, and supportive. A storyteller, and always willing to help or share the load. Ken, a volunteer, "appreciated Paul putting up with his sea stories," thanking him for his years of service. Several of his FWS colleagues mentioned some shared beer and pizza time, and that Paul was an expert at flavor nuances in beers and coffees, often bringing coffee to them to start their day. Winnie thanked Paul for coordinating the many Coastal Cleanup events. SFBWS gave Paul some Nature Store items to remind him about us in his new digs in the Santa Cruz area. We wish him all the best, with gratitude for all he did for us."

Thank you, Paul – everyone at CCCR wishes you a very Happy Retirement!

Mowry Village Update: A Bad Proposal Vulnerable to Sea Level and Groundwater Rise

A development proposal for 203 houses on restorable baylands in Newark was brought forward to the Newark Planning Commission in 2023. The project encompasses 35.3 acres, including the 29-acre housing site and 6.3 acres of other lands to support the extension of utilities and improvements to Mowry Avenue.

At that time, it was anticipated that the Mowry Village Final EIR (FEIR) would be released in early 2024. CCCR has learned from Newark city staff that the Mowry Village development proposal has been revised and the FEIR may be available for public review in mid-January 2025. City staff anticipates the project returning to the Planning Commission and then on to the City Council for consideration in the first quarter of 2025.

The housing is proposed on two parcels totaling 29 acres: a 10-acre undeveloped parcel, and an adjacent 19-acre site that is the current location of the Pick-n-Pull auto wrecking yard. Pick-n-Pull has a conditional use permit (CUP) for the auto wrecking facility that expires December 31, 2034. No development is needed in order to ensure the site is cleaned up after closure because as a condition of the CUP, Pick-n-Pull is required to:

- Remove all vehicles, parts and other "garbage and debris" within two months of CUP termination;
- Remove all structures associated with the auto wrecking facility;
- Submit to the City a Closure Permit Application and draft Closure Plan regarding the clean-up of any toxic substances or hazardous materials, and to pursue approval of the Closure Plan from appropriate agencies within five months of CUP termination; and
- Promptly upon approval of the Closure Plan by all applicable agencies "diligently complete the clean-up of all toxic and hazardous materials on the Property according to the approved Closure Plan (and Corrective Action Plan if required) within the time period required by such Plan or Plans."

The two parcels are surrounded by water on three sides. Alameda County Flood Control & Water Conservation District's Line D forms the southern boundary, and the District's Line B and the Cargill crystallizer ponds are located to the north across the street from the proposed entrance to the development. These two waterways flow into the fully tidal Mowry Slough, just to the west of the project site.

Newark zoned these lands for park and open space purposes as part of the Newark Areas 3 and 4 Specific Plan. CCCR and others have identified these lands as suitable for the restoration of tidal wetlands if flows from Mowry Slough were re-established.



The proposed development is on bayland with water on three sides.

We recognize the continued need for housing within the Bay Area; however, these lands are located in the current FEMA floodplain and will be vulnerable to sea level rise and subsequent groundwater rise. The development would require 252,000 cubic yards of fill to elevate the site above the projected sea level and storm surge rise. The soils are comprised of Bay muds and sands that are identified by the US Geological Service (USGS) as having high susceptibility of liquefaction. In addition, this development is not within easy walking distance of necessary public amenities. This is simply not a smart place to put a housing development. However, these lands are an ideal location to restore tidal marsh habitat that will sequester and store carbon from our atmosphere. Restoring these lands will also provide Newark with a nature-based solution that buffers the city from future flooding.

With the support of attorney Jason Flanders, CCCR submitted extensive written comments on the Draft EIR in 2023. In the coming months, we will continue to identify concerns with this development and point out opportunities for Newark to implement aspects of its Local Area Hazard Mitigation Plan and Climate Action and Sea Level Rise adaptation planning efforts on these 29 acres of restorable Baylands. For more information regarding the environmental review process for the proposed development, concerned citizens can contact CCCR at cccrrefuge@gmail.com and ask to be added to the mailing list for project updates.

Carin High and Jana Sokale
cccrrefuge@gmail.com

Friends of RedwoodCity



The Millbrae and Burlingame Shoreline Resilience Project area is the entire shoreline and the five creeks along San Francisco Bay between the two red stars. Image from Google Earth.

One Shoreline's Millbrae and Burlingame Shoreline Resilience Project

Last year, CCCR sounded the alarm on One Shoreline's initial proposal to build a 2.65-mile-long offshore barrier, creating a 670-acre lagoon in San Francisco Bay. In response to numerous comment letters voicing serious concerns, this spring the agency paused the CEQA environmental review process to solicit input from regulatory agencies, landowners and the public on the outreach process and formulation of new project alternatives to address sea level rise and flooding. In October, One Shoreline staff presented three new project alternatives to the agency's Board of Directors. We're pleased to report some great news – the proposed "far-offshore" barrier/lagoon in the Bay has been dropped!

Environmental groups have been advocating for consideration of nature-based solutions for this area, and living shoreline strategies have now been incorporated into the three alternatives. According to materials recently

provided by One Shoreline, sections of the shoreline in all three proposals would have a near-shore levee with a 10:1 waterside slope, "...intended to support the development of a living shoreline. A living shoreline might include a clustered formation of exposed sand bars using near-shore reefs to create quieter near-shore intertidal areas for sediments to accumulate and potentially form beaches adjacent to the shoreline and Bay Trail. ... The near-shore reefs also provide places for oysters and other invertebrates to attach, as well as habitat for fish."

The three alternatives would require varying amounts of bay fill totaling 70, 90, or 120 acres. Two of the alternatives include temporary detention of creek flows during large storm events that occur at high tides in either an underground tunnel or open waterway.

CCCR and our partners will continue to engage with One Shoreline staff as the current public outreach on the

More: oneshoreline.org/projects/millbrae-burlingame

three alternatives move forward. Once the alternatives are refined, One Shoreline will then proceed with a preliminary determination of the Least Environmentally Damaging Practicable Alternative (LEDPA), which is required by the regulatory agencies, followed by the selection of the preferred alternative for CEQA review and analysis.

Ferry Terminal Update

The Port of Redwood City and WETA (the Water Emergency Transportation Authority) proposal to build a ferry terminal on Redwood Creek continues to move forward. In May, the Port released two documents, a Ferry Terminal Initial Study, and a Notice of Preparation of an Environmental Impact Report (NOP) for the project. This would be the first ongoing ferry operation south of the San Mateo Bridge in recent history, with an as yet unspecified number of trips each day to and from San Francisco and Oakland. Elements of the proposed project would be in, or in close proximity to, sensitive Bay habitats including tidal marshes on Bair and Greco Islands in the Don Edwards San Francisco Bay National Wildlife Refuge and open waters of the Bay.

CCCR submitted a comment letter on the Initial Study and NOP, raising a number of concerns about adverse



A recent survey found 312 intact Cliff Swallow nests under the historic wharf on Westpoint Slough in Redwood City. The Port is proposing to demolish the wharf. Photo by Matt Leddy.

impacts to Bay habitats and wildlife, particularly the potentially significant harm to shorelines from the wakes of WETA vessels and private ferries if they are allowed to use the WETA terminal. In addition to the original proposal for a ferry terminal project along Redwood Creek, the Port is now proposing to build a hotel-office-retail complex on the land adjacent to the ferry terminal. Without any reason or explanation from the Port, this new project

component also includes the demolition of an historic dock on Westpoint Slough that supports a large colony of nesting Cliff Swallows that forage in the Refuge. As of this writing, we are still awaiting release of the Draft Environmental Impact Report for the project. 🐦

Gail Raabe and Matt Leddy
cccrrefuge@gmail.com

There's much more than birds at Bair Island! Besides the harbor seals, bat rays, and leopard sharks we've seen in the sloughs, fun critter encounters can be had by just walking along the levee Bay Trail at Inner Bair Island. Here are two of our favorites this year: Gopher Snake and Praying Mantis. Photos by Matt Leddy.



Baylands Conservation Committee

Palo Alto Flood Basin Tide Gates

Santa Clara Valley Water has proposed a replacement for the 16 tide gates at the Flood Basin. Included are two gates that had been modified in the 1970s by the City of Palo Alto as a mitigation for fill of over 50 acres of wetlands for landfill expansion. The tide gates were automated, and must be automated, to permit an approximate 3' tidal fluctuation (+1.5' to -1.5') within the basin except during major storms.

As a bit of history, prior to 1975 the City of Palo Alto violated its landfill permit issued by the U.S. Army Corps of Engineers. The City had filled about 25 acres of wetlands without a permit. In conjunction with mitigating that violation, the City also requested permission to fill an additional 40 acres of wetlands. Altogether a total of ~65 acres of prime tidal wetlands would be lost. (It should be noted that the entire 137-acre landfill, aka Byxbee Hills Park, is on filled wetlands, much of which was done prior to adoption of the U.S. Clean Water Act.)

In March 1975, the City prepared a draft Palo Alto Refuse Disposal Area EIR, which identified two mitigation measures—one for the already filled wetlands and one for the proposed new fill. Those mitigation measures were: 1) pipes allowing tidal fluctuation in the lagoon adjacent to the Interpretive Center, and 2) conversion of two of the 16 tide gates for the Flood Basin to allow very limited and closely controlled tidal fluctuation in the 600-acre Flood Control Basin to improve water quality and to encourage the growth of wetland habitat. The City Refuse Utility has a perpetual obligation to keep those tide gates functioning properly for the purposes specified.

We've learned that the mitigation tide gates have not been functioning automatically for sometime, so the mitigation goals of 1) encouragement of tidal marsh and 2) improved water quality are not being met.

The City has been notified about this concern, but so far there is no indication that anything is being done. This demonstrates the need for mitigation accountability and the need for concerned citizens to track the permit requirements of projects located within our baylands, and to notify permitting agencies when those permit requirements are not being met.

Palo Alto Airport Runway Expansion

In September of this year, the Palo Alto City Council entertained a proposal that would allow the airport to expand or move the runway north. All alternatives

considered for this proposal would require expansion into dedicated parkland. Three alternatives (2, 4, and 5) would have resulted in fill being placed in wetlands in the Baylands Nature Preserve. The proposed project would have also been inconsistent with Palo Alto's 2008 Baylands Master Plan,



Google Earth Image (February 2024) of the Palo Alto Airport, Lagoon, Duck Pond, Byxbee Park, and Palo Alto Flood Basin.

which calls for “protecting open spaces of vital sources of public health, natural beauty, and enjoyment.”

Furthermore, the proposed airport expansion project would have resulted in adverse impacts to the Duck Pond and lagoon. The lagoon that surrounds the Duck Pond was required by the Corps as compensatory mitigation for unauthorized fill of wetlands at Byxbee Park (as described in this article). Compensatory mitigation areas are intended to be maintained and protected in perpetuity.

In response to the proposal, a petition was circulated and 13 environmental and local groups submitted a letter to the City Council opposing the project.

In a survey that was conducted prior to the City Council meeting, 43% of participants favored taking no action (no airport expansion).

After hearing from more than 70 speakers, the City Council ultimately voted to not support alternatives that would expand the runway. Many thanks to members of the public who showed up on behalf of the baylands and wildlife. 🐾

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Save Wetlands in Mayhews

The City of Newark's Climate Action Plan (CAP) is having a long-overdue overhaul. The first plan was in its initial framework phase in January of 2010. Fourteen years ago the city was concerned with reducing greenhouse gas emissions and not much more.

The initial framework called for reductions in driving by city employees and replacing lighting fixtures in city buildings. There would be baseline studies, a set of goals for reducing emissions and creation of an action plan. Results would be monitored.

Specific City suggestions for reduction of greenhouse gas emissions included a new HVAC system for the Community Center. The current system was decades old and the city claimed it would be too expensive to upgrade. You could cross this project off your list. The City also praised itself for using slurry on streets in place of repairing degraded streets. According to the 2010 action plan, the slurry would dry to a

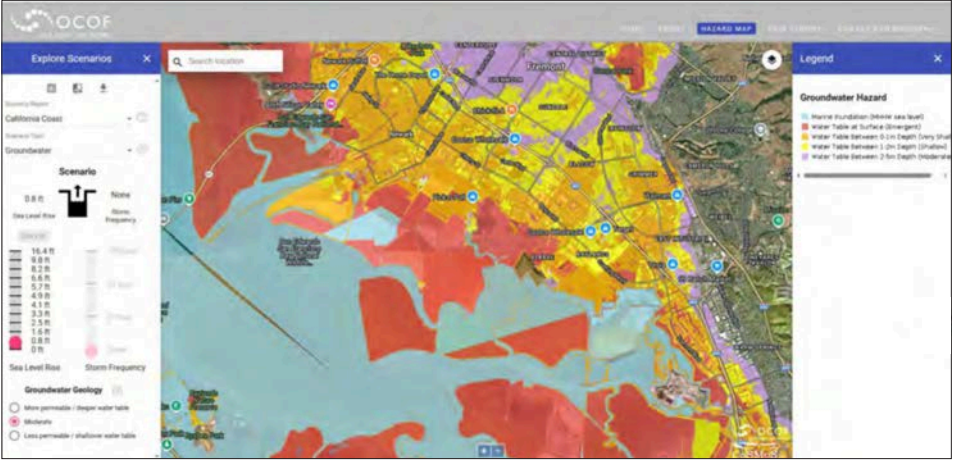
was unclear what constituted friendly landscaping; however, I believe it would exclude something like poison oak.

The outdated CAP is in the early stages of replacement. A public meeting was held on September 25, 2024. The meeting was to gather suggestions

consultants. One item of concern for the public was protection of wetlands and many expressed the preference of not building in flood-prone areas west of the railroad tracks between Mowry and Stevenson. Sea level rise was not a consideration in the 2010 plan but will be in the new plan.



The Explorer tool (above) shows level of inundation based upon 12" sea level rise and a 100-year storm. Below, the Our Coast Our Future tool shows groundwater rise based on 10" sea level rise.



gray color and become what the City called “cool pavement.”

The framework called for residents to create their own action plans and share them with family and neighbors. The personal action plans were to be reviewed regularly and changes made to achieve goals. Suggestions included reduction in residential lighting and upgrade to heating and air conditioning. Bay Area-friendly landscaping was also suggested. It

from residents on what we wanted for a new plan. Residents were told that the City will also be preparing a Sea Level Rise Vulnerability and Adaptation Study.

Members of the public provided important information regarding issues like groundwater rise, concerns about mobilization of contaminants, the need to plant trees for shade and carbon sequestration. Small group discussions provided much needed input for the

Two online tools explore climate change scenarios (from top):
explorer.adaptingtorisingtides.org/explorer
ourcoastourfuture.org/hazard-map

There will be just one more public meeting sometime in the spring of 2025. After that, a plan will be drawn up, vetted by City staff, presented to the Planning Commission and City Council. Will it be a responsible Climate Action Plan and Sea Level Rise Vulnerability Assessment and Adaptation Study, or will they lack meaningful measures to address these significant challenges? Those of us in attendance at the September public meeting look forward to the staff and consultant suggestions at the spring 2025 meeting. 🐾

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Regional Shoreline Adaptation Plan



The end of this year has been momentous in more ways than one. As the year draws to a close, we hope one shining light will be the approval of the Bay Conservation and Development Commission's (BCDC) Regional Shoreline Adaptation Plan (RSAP).

The Problem

It isn't just our communities and infrastructure that are threatened by rising sea levels – crucial habitats of the Bay that provide essential services (not only for plants and wildlife, but also for our communities) are vulnerable as well.

All the ecological, societal, economic, and climate resilience benefits provided by the Bay's habitats could be lost unless shoreline communities adopt sea level rise adaptation strategies that will ensure the continued existence of those habitats.

There currently is no regional approach for addressing the impacts of sea level rise. Right now, we have a haphazard process with little to no coordination between neighboring jurisdictions with regards to how they will protect their

Tidal wetlands are just as threatened by sea level rise as our shoreline communities. The photo on the left depicts mature tidal wetlands; on the right, the same tidal wetlands along the New Market Slough are completely inundated by King Tides, a reminder of the threat posed by rising sea levels. Photos courtesy of Carin High.

communities from sea level rise caused flooding and inundation. A regional approach is necessary to ensure that actions taken within one community will not adversely impact neighboring communities. Some cities and counties are ahead of the curve and have begun collaborating on the types of adaptation strategies that are best suited for their reach of shoreline, but others have not even begun the process of planning for sea level rise or have proposed only hardened solutions.

The hardened or "gray" solutions are currently the automatic default approach, and include seawalls, traditional 2:1 sloped flood control levees or the use of riprap, etc. These structures can destroy tidal wetlands as the displaced wave energy can erode adjacent marshes, mudflats and beaches.

On the other hand, we now know that natural and nature-based solutions (NNBS) such as tidal wetlands, oyster shell reefs, and beaches can, themselves, help us respond to rising

sea levels by reducing and slowing storm surges and wave energy. Tidal wetland vegetation traps suspended sediments from the water column and thus elevates the marsh surface, so that at moderate rates of sea level rise wetlands have their own built-in resilience response.

Unfortunately, within the San Francisco Estuary, sediment supplies are dwindling as documented in the San Francisco Estuary Institute's 2021 report, *Sediment for Survival*. And, the historic pattern of developing right up to the edges of the Bay means that in some reaches of the shoreline, there is no room to accommodate the landward movement of the Bay's habitats. This means tidal wetlands and other habitats are at risk of drowning and disappearing. This phenomenon, where tidal wetlands are trapped between rising sea levels and hardened structures such as development, seawalls, flood control levees, etc., is called "coastal squeeze."

For over two decades, the scientific community, agency staff, foundations and environmental advocacy groups have recognized the value and need to protect and restore the Bay's tidal wetland and associated habitats. The 1999 Bay Ecosystem Habitat Goals Project identified the need to protect and restore 100,000 acres of wetlands to ensure the ecological health of the Bay. In order to accomplish this, in an era of rising sea and groundwater levels, we need to not only protect and restore tidal wetlands, but also provide space for the landward migration of these essential habitats as sea levels continue to rise.

Why Do We Care?

Not only do Bay habitats provide resilience against sea level rise, tidal wetlands can also sequester carbon up to ten times as much as sequestered by forested lands.

The Bay's habitats improve water quality, contribute to the high level of biodiversity in our region, and provide feeding, resting, and breeding grounds for resident and migratory

... continued on next page

bird species. Tidal wetlands act as nurseries for fish species and support important fisheries. The Bay's habitats provide economic benefits from tourism and recreation and are of immense cultural value to our communities. These habitats provide opportunities for education, provide for human health and a sense of well-being and a sense of place. And, no small thing in an age of climate change, the Bay itself plays a role in regulating and cooling the climate of the Bay Area.

Given the threat posed by sea level rise to these crucial habitats, it is imperative that the protection of the ecological health of the Bay is incorporated into the development and implementation of shoreline adaptation plans at the local and regional level.

Enter Senate Bill 272

In late 2023, the State Legislature passed Senate Bill 272 (a bill authored by Senator Laird), which requires BCDC to develop a Regional Shoreline Adaptation Plan (RSAP) by December 31, 2024. The RSAP will provide instructions for local governments along the shoreline, vulnerable to sea level rise, on how to prepare Subregional Shoreline Adaptation Plans (Subregional Plans). Plans must be submitted to BCDC for review and approval by January 1, 2034.

SB272 requires the local sea level rise adaptation plans to utilize the best available science, include a vulnerability assessment that ensures equity for at-risk communities, and identify the lead for planning and implementation. It also requires updates to the sea level rise adaptation plans submitted by local governments. In addition, and most importantly, the bill stipulates that the guidelines established by BCDC "...shall recognize and build upon the



Hardened structures like seawalls and bulkheads (right) and concrete riprap rubble (above) result in the drowning of wetlands, require maintenance and potential replacement, and do not provide the multiple benefits provided by healthy functioning Bay habitats. Photos by Carin High.

'guiding principles' of the joint platform as described on page 16 of the Bay Adapt Regional Strategy for a Rising Bay Joint Platform." Included are the critical guiding principles of Equity and "Putting nature first wherever possible."

The RSAP Guidelines provide the framework for a coordinated regional approach to the development and implementation of shoreline sea level rise adaptation strategies, and provide checklists regarding information that must be provided in a local government's assessment of its sea level rise vulnerability and the development of plans for shoreline adaptation, such as the projected heights of sea level rise, existing shoreline infrastructure and housing, existing shoreline habitats, etc. One crucial requirement of the RSAP is that local governments prioritize the use of natural and nature-based solutions (NNBS) for sea level rise adaptation wherever possible and to protect existing shoreline habitats whenever possible.

What Do We Want from the RSAP?

CCCR, along with scientists, regulatory agency staff, staff from cities and counties, environmental justice leaders, development interests, transportation and infrastructure agencies, and several other environmental groups participated for over a year on the BCDC RSAP Advisory Group.

The process included numerous meetings and two internal drafts of the RSAP. A public draft of the RSAP was released in September of this year, and CCCR submitted joint comments with the 3-Chapter Sierra Club Bay Alive Committee.

Our focus throughout the development of the RSAP guidelines has been to elevate the importance of the Bay's ecological health and resilience, and equity throughout the language, requirements, and recommendations of the RSAP. Based upon the public draft that was released, we feel progress has been made. The language regarding the Bay at the beginning of the



process was focused mostly on its aesthetic beauty, but it now recognizes the Bay's importance for wildlife, the economy of the Bay Area, and our quality of life.

It is extremely important that the language, requirements and recommendations of the RSAP clearly identify the value of natural habitats for the climate resilience and the many other benefits they provide, including benefits for the Bay Area economy. Towards that end, the final language, the requirements, and recommendations must ensure that the development of shoreline adaptation plans by local governments:

- Prioritize the use of natural and nature-based solutions (NNBS), such as tidal wetlands restoration, wherever and whenever feasible. The rest of the U.S. and other countries recognize that NNBS can provide valuable multiple benefits that in most cases cannot be provided by traditional gray infrastructure.
- Protect existing shoreline habitats, protect suitable adjacent undeveloped or lightly developed lands that could support landward habitat migration.
- "Level the playing field" to ensure the protection of vulnerable communities is prioritized, and that contaminated sites along the shoreline and in environmental justice communities are cleaned up. The voices of socially vulnerable communities, Indigenous and Tribal governments must be included in the development of shoreline adaptation plans at all levels from the planning stage to the implementation stage.
- Do not make the automatic leap to the use of gray infrastructure.
- Avoid permanent development and new/expanded infrastructure in areas that will be vulnerable to sea level and groundwater rise and will require future protection.
- Avoid constraining future opportunities for managed retreat, if that is the only option remaining.

The RSAP must include metrics for success, particularly with respect to the ecological health and resilience of the Bay's habitats. The goal of restoring and protecting 100,000 acres of tidal wetlands to protect the ecological health of the Bay has existed since 1999 and was thoroughly vetted by Bay Area scientists, agency staff, environmental groups, and the public. In 2022, the San Francisco Bay Joint Venture released an updated version of Restoring the Estuary. That document takes into consideration the threats posed by sea level rise and the continuing development of the shoreline, and has recommended protection of 16,500 acres of



Features such as shell hash, sand and cobble beaches, provide important functions such as wave and flood attenuation, and multiple benefits, including important roosting, feeding and breeding habitat for wildlife. Photo by Matt Leddy.

estuarine-uplands transition zone habitat and 14,000 acres of suitable adjacent undeveloped or lightly developed uplands habitat, "as identified in the 2022 San Francisco Joint Venture Implementation Strategy."

It is absolutely critical that the RSAP includes regional goals for habitat protection and restoration that will provide for the ecological health and resilience of the Bay's vital habitats as sea levels continue to rise. It is also imperative that our progress toward meeting these regional goals is tracked to ensure that we can course correct if necessary.

Conclusion

CCCR deeply appreciates the opportunity to work with BCDC staff on this regionally significant issue. We appreciate their responsiveness to the comments from the environmental community and recognize that there are many competing interests along the Bay's shoreline. We won't know what the final language of the RSAP will be until after this newsletter is printed. The final language must not be weakened, and must advance a coordinated, regional, holistic, and resilient approach to the significant challenges that will be posed by sea level rise. In an era of rising sea levels, we need language in the RSAP that will ensure healthy shoreline communities and a healthy, sustainable Bay ecosystem.

Carin High and Arthur Feinstein
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Dr. Peter Baye Receives the 2024 Jean Auer Environmental Award!

We were very pleased to see coastal ecologist Dr. Peter Baye given well-deserved recognition as a 2024 recipient of the Jean Auer Environmental Award at this year's State of the Estuary Conference in May. Also receiving an award this year was Dr. Ann Riley, who co-founded the statewide Urban Creeks Council (now the California Urban Streams Partnership), in recognition of her efforts over the past 30 years to elevate the importance of protecting and restoring our urban waterways.

According to the SFEP website, "Every two years the San Francisco Estuary Partnership presents the Jean Auer Environmental Award to an outstanding individual to honor their significant contribution toward improving environmental quality in the Bay-Delta Estuary. The award is given in memory of Jean Auer, a Bay Area environmentalist, whose ground-breaking efforts were directed particularly at improving water management in California." Past recipients have included, among others, Dr. Howard Shellhammer, "a longtime champion of the Bay Area's wetland and marsh ecosystems", Sylvia McLaughlin, "co-founder of Save The Bay", and Trish Mulvey, "citizen activist with Citizens Committee to Complete the Refuge." The introductory comments about Peter Baye at the conference captured the breadth of his work on tidal marsh restoration projects throughout the Bay Area, such as Petaluma Marsh, Rush Ranch, Bolinas Lagoon, and Pinole



Dr. Baye botanizing in tidal wetlands. Photo by Carin High.

Creek, as well as his efforts pioneering the use of ecotone levees and reintroducing the California seablite at a number of sites in the Bay. Peter was also recognized for his contributions to the development of important documents that guide and influence wetland restoration in the region, including the Baylands Ecosystem Habitat Goals report and update, and the Shoreline Adaptation Atlas, and as a lead author of the Tidal Marsh Ecosystem Recovery Plan.

An award well deserved! Thank you Dr. Baye for your many decades of work for an ecologically diverse and healthy San Francisco Bay. 🌿



CCCR members by the new gate along the Flyway Trail Ravenswood Pond Complex. From left: Eileen McLaughlin, Carin High, Matt Leddy, Gail Raabe, and Margaret Lewis. Photo by Howard High.

Bair Island Champion Sandra Cooperman Fondly Remembered

We were all saddened to hear that Sandra (Sandy) Cooperman had passed away in September. Locally renowned as a champion for Bair Island, Sandra will be fondly remembered.

As water from the Bay flowed once more into the Refuge's Inner Bair Island, the December 2015 breach left many of us in awe. But for Sandra Cooperman of Redwood City, it was the result of a lifetime effort. Thirty-three years had passed since the Redwood City Council had approved a change to the General Plan allowing development on Bair Island. After that meeting, Sandra and a group of residents standing outside the Council chambers decided to "let the voters choose!" Calling themselves the Friends of Redwood City, their 1982 referendum, [Measure O](#), was the first in Redwood City's history. Going up against Mobile Oil and outspent five to one, in Sandra's words, [the Friends "...pounded the pavement and walked the precincts," and they won by a 42-vote margin.](#)

After the referendum, Bair Island was saved but not protected from future development plans. In 1985, the newly re-formed Citizens Committee to Complete the Refuge reached out to the Friends to work towards including Bair Island in the Refuge to protect it from future threats. Sandra and her close friend Carolyn Nobles went to the first meeting at the LaRivieres' house and agreed that was a good idea. In Florence's words, Sandra and Carolyn's response, ["...really gave me a lot of courage, that if those people who worked so hard on that political issue feel that this idea would further protect that land, then we have a chance at it."](#) The result was a partnership, which, along with essential help from Peninsula Open Space Trust, proved critical to accomplishing that goal.

In 2004, the Friends of Redwood City launched the second successful Redwood City referendum, [Measure Q](#), to overturn a City Council decision allowing a massive high-rise development just a stone's throw from Bair Island. When Ralph Nobles led the Friends of Redwood City ["Once more into the breach!"](#) – Sandra was right there with her support.

According to a memorial published on Palo Alto Online, Sandra was originally from Milwaukee, Wisconsin and "...was a community and political activist, working on voter registration, free speech, anti-war and anti-poverty



Sandra spent a lifetime championing Bair Island, and she will be missed. Photo by Kate High.

initiatives. She played an active role in numerous political campaigns. Civically minded all her adult life, Sandra served on numerous community boards and advisory panels. Outside of her family, her most enduring legacy was as an environmental activist, playing a key role in the preservation of Bair Island, the last remaining open wetlands in the Bay Area."

At the December 2015 breach of Inner Bair Island, Sandra was the only member of the original Friends organizer to witness the event. Florence LaRiviere, standing next to her friend and fellow Bay warrior, noticed that Sandra was overcome with emotion. The journey of 33 years had ended, the Friends of Redwood City had prevailed, and the Bay waters would soon bring the historic wetlands back to life. 🌿

You can hear Sandra recounting the effort that went into saving Bair Island from development in the video [Saving Bair Island, A Noble Cause](#).

You can watch the video at tinyurl.com/SavingBair

Citizens for East Shore Parks: The Amazing 2024!

Aiming Toward a Unified Shoreline Experience Along the East Shore from Crockett to San Jose

CCC knows full well the challenges in saving the shoreline of San Francisco Bay. For nearly 40 years, Citizens for East Shore Parks (CESP) and Sierra Club, like CCC, have worked to re-create the eastern shore of San Francisco Bay, to establish parkland and open space along the entire eastern shore, from the Refuge in the south northward to Richmond/Pinole. We are aiming to connect all the East Shore parks and open spaces into a great connected shoreline experience from Crockett to San Jose.



Great Blue Heron at Point Molate. Photo by Jack Scheinman.

Excepting ports and like facilities requiring direct access to Bay waters, CESP and Sierra Club campaign for a shoreline with habitat protection, recreational uses and now, with sea rise, restored marshland to absorb higher levels of seawater and ground water.

Our accomplishments: McLaughlin Eastshore State Park, the Tom Bates Sports Fields, the soon-to-be Point Molate Regional Park. Our aspirations: Golden Gate Fields incorporated into the McLaughlin Eastshore State Park; toxic hotspots along the Bay cleaned up.

McLaughlin Eastshore State Park

CESP and Sierra Club won the 20-year battle to create the McLaughlin Eastshore State Park, (Oakland Bay Bridge northward 8.5 miles into Richmond at Point Isabel), repurposing industrial uses, dumping grounds, and

non-shoreline uses into parkland and habitat. We organized a coalition of thousands, partnerships with community and environmental groups, the East Bay Regional Park District, State Parks Department, many federal, state, and local elected officials (including the tireless Tom Bates) representing six cities, two counties, two Congressional Districts, two park districts, multiple lawsuits, thousands of volunteers, and millions of voters. Together we created a state park where so many said we could never prevail.

Point Molate

Success at Point Molate! This once-threatened shoreline is now saved and on its way to becoming the newest shoreline park of the East Bay Regional Park District. CESP and Sierra Club won last year in spectacular fashion.

This battle also took almost 20 years and required organizing an amazing coalition of community groups, enlightened elected officials, the East Bay Regional Park District plus the successful lawsuit filed by our tireless team of environmental lawyers (Stuart Flashman, Norman La Force, and Robert Cheasty) with their amazing victory, on appeal, stopping the destructive development proposals and protecting Point Molate.

Due to the foresight of dedicated elected officials, including Senator Nancy Skinner, the state approved funds to purchase Point Molate for a regional park. We expect that to happen this year.

Point Molate is an ecological treasure with its aquatic, shoreline, and upland areas home to more than 700 species



Point Molate habitat and shoreline. Photo by Alix Mazuet.



Illustration of Golden Gate Fields as a park. Provided by Citizens for East Shore Parks.

of plants, animals, and insects, including precious eelgrass, Dungeness crab, leopard sharks, seahare, Osprey and Bald Eagles soaring overhead, and Ohlone Sacred Sites that require protection.

Golden Gate Fields Closure Presents a New Opportunity

Golden Gate Fields (GGF) racetrack, 140 acres smack in the middle of McLaughlin Eastshore State Park (straddling Albany and Berkeley), closed in 2024, creating the chance to incorporate it into the McLaughlin Eastshore State Park (MESP). CESP and Sierra Club have always advocated for the inclusion of the GGF property whenever the racetrack finally closed. Now that timely opportunity arrives just as sea level rise and water table rise are being better understood.

CESP, Sierra Club, and a multi-talented coalition of environmental and community groups, elected officials, and volunteers believe GGF should be the keystone of the MESP and given interim park and recreational uses. As sea and water tables rise, GGF should be restored to its original condition as a partial wetland to become an excellent example of how prioritizing nature-based solutions can create a resilient shoreline that provides the multiple benefits of community and ecosystem resilience and recreation. This accords with state and regional planning goals to use natural buffering as the first line of defense in

shoreline adaptation planning for sea level rise and water table rise in accordance with SB272.

Toxic Shoreline – South Richmond

CESP, Sierra Club, community leaders, and allies are working toward full cleanup of multiple toxic sites along Richmond's shoreline, including the Superfund level toxicity at the Astra-Zeneca site (Zeneca) along the south Richmond shoreline. Protecting the health of the community, the environment, and San Francisco Bay guides the need for this cleanup. Over a century of chemical manufacturing and disposal has left over 100 toxic chemicals at Zeneca. Developers who once controlled the Richmond City Council have tried to build housing on top of this toxic site – CESP, Sierra Club, and our inspired community allies and environmental groups will not quit until the toxins are cleaned up. 🐾

Robert Cheasty, Executive Director
Shirley Dean, Board President
Norman La Force, CESP Vice-President
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For more information regarding our efforts to protect the Bay and shoreline, visit eastshorepark.org.

South Bay Salt Pond Restoration Project

Completing Phase 2 at Ravenswood

Dave Halsing, Executive Project Manager, South Bay Salt Pond Restoration Project

The past 12 months have been quite remarkable for the South Bay Salt Pond Restoration Project. As the members and many friends of the Citizens Committee to Complete the Refuge probably know, four of the Ravenswood Ponds in San Mateo County were included in Phase 2 of the Restoration Project—the planning for which began in mid-2012...and we're finally done!

But backing up a little, and to put the story in context for those who don't know it, in 2003, 15,100 acres of former salt-production ponds were acquired from Cargill Salt and became the Restoration Project. In the 20 years since, we have worked with partner agencies, local governments, and a wide range of stakeholders and interest groups, including the Citizens Committee, to pursue our three main goals of habitat restoration, flood protection, and public access and recreation. Phase 1 of the project was implemented between 2008 and 2014, and some early considerations of Phase 2 began as early as 2011.

The Phase 2 project at Ravenswood on the lands of the Don Edwards San Francisco Bay National Wildlife Refuge included three different types of habitat restoration in four former salt ponds. In December 2023, we initiated tidal restoration in Pond R4, the largest of the four ponds at 295 acres, by removing a portion of the outboard levee to restore tidal flows from the Bay for the first time in over 100 years. The restored tidal marsh will provide vital habitat for the federal and state endangered salt marsh harvest mice (*Reithrodontomys raviventris*) and Ridgway's Rails (*Rallus obsoletus*)



Dave Halsing shows where the new Flyway Trail links the Bay Trail to the trail network at Bedwell Bayfront Park. Photocourtesy of the SBSPRP.

obsoletus) and for native fish and many birds and mammals. The marsh restoration in Pond R4 is coming along swimmingly with nearly an inch of sediment having accreted on the pond bottom in less than a year. Patches of vegetation are already appearing, and we're seeing more types of waterbirds and shorebirds using the pond as it fills and drains with each tide cycle.

At Pond R4, we also built two large habitat transition zones (HTZs) to increase the amount of habitat at higher elevations to improve the marsh's resilience to sea level rise. The HTZs were built up against improved former salt pond levees to help meet the habitat separation goals, contain the tidal flows within that pond, and add protection against scour and seepage into the closed landfill that underlays Bedwell Bayfront Park. This work necessitated the import and placement of almost 500,000 cubic yards of clean earthen fill to improve the levees and build the HTZs.

Those HTZs were then planted with native vegetation by Save The Bay, who had separate grant funding to grow plants in raised beds on the nearby West Bay Sanitary District property. We are grateful to Save The Bay's staff and volunteers for their efforts and to the Sanitary District for donating the space for the raised beds.

The work in the three other Ravenswood ponds (jointly about 330 acres) was completed in 2023. Pond R3 was enhanced by the addition of two water control structures so that it can be reliably drained each spring to dry it for the threatened Western Snowy Plover (*Charadrius nivosus*) and other ground-nesting birds and to allow occasional refreshing of the small pockets of remaining water to improve the continued availability of food for the plover adults and chicks.

The two smaller ponds, R5 and S5, have been connected to each other by removing most of the levee between them and to the surrounding

waterways by three more water control structures. This allows them to be operated as shallow managed ponds intended for use by shorebirds, ducks, and other waterbirds. These ponds are also part of an important and successful collaboration with One Shoreline (a new-ish flood management and sea-level rise adaptation agency in San Mateo County) and the neighboring cities of Redwood City and Menlo Park to incorporate a local flood protection project into our work. The Bayfront Canal & Atherton Channel Project was built concurrently with our Phase 2 project and allows temporary diversion of peak stormwater outflows into Pond R5/S5 when there are high tides in the bay and its sloughs. This reduces the effects of stormwater on the surrounding neighborhood and has successfully reduced the frequency and extent of local flooding in multiple large storm events in two winter seasons. This project is a powerful demonstration of the multi-benefit potential provided by tidal marsh restoration projects.

The breach of the R4 levees allowed return of tidal flow from the Bay. Photocourtesy of the SBSPRP. A crowd gathered to watch and celebrate the return of tidal flow. Photo by Carin High.



Finally, to meet our third project goal—public access—trail development, benches, and interpretive signage were completed in spring and summer of 2024. The contents of the signage were developed with input from the Association of Ramaytush Ohlone, including information about their historical use of the pre-salt pond marshes, as well as their ongoing presence in the Bay Area. Other signs describe the three types of habitat restoration, the National Wildlife Refuge and its goals, as well as the Restoration Project itself. These signs are set in a large viewing area at the center of a new half-mile long trail—named the Flyway Trail

(for the Pacific Flyway) that links the Bay Trail to the trail network inside of City of Menlo Park's Bedwell Bayfront Park. It's a tremendous addition to the local public access opportunities. In combination with the also-new pedestrian bridge that Meta built through its campus and over Highway 84 to connect East Palo Alto and eastern Menlo Park to the Bay Trail and the Refuge, this new trail is a valuable outdoor amenity to help bring people into contact with the open space in their neighborhoods.

We held a celebratory event on October 19 of this year to formally open the Flyway Trail and its viewing area, introduce it to the local communities and our partner organizations, and help inspire people to visit and enjoy this part of the Don Edwards Refuge. The event, planned jointly by the USFWS-Refuge team, the City of Menlo Park, and the Restoration Project team, had over 200 attendees, and more than a dozen partner entities participated in the celebration.

This completed Phase 2 work at Ravenswood is a major milestone in the Restoration Project. None of this happens without a lot of help and participation from neighbors and other entities. We are

grateful to all who have contributed to the decade of work to get there: funders, neighbors, technical experts, elected officials, and other stakeholders. 🐦

The Flyway Trail is adjacent to Bedwell Bayfront Park in Menlo Park (1600 Marsh Road). A new pedestrian bridge through the Meta campus and over Highway 84 connects East Palo Alto and eastern Menlo Park to the Bay Trail and the Refuge.

Far South Bay

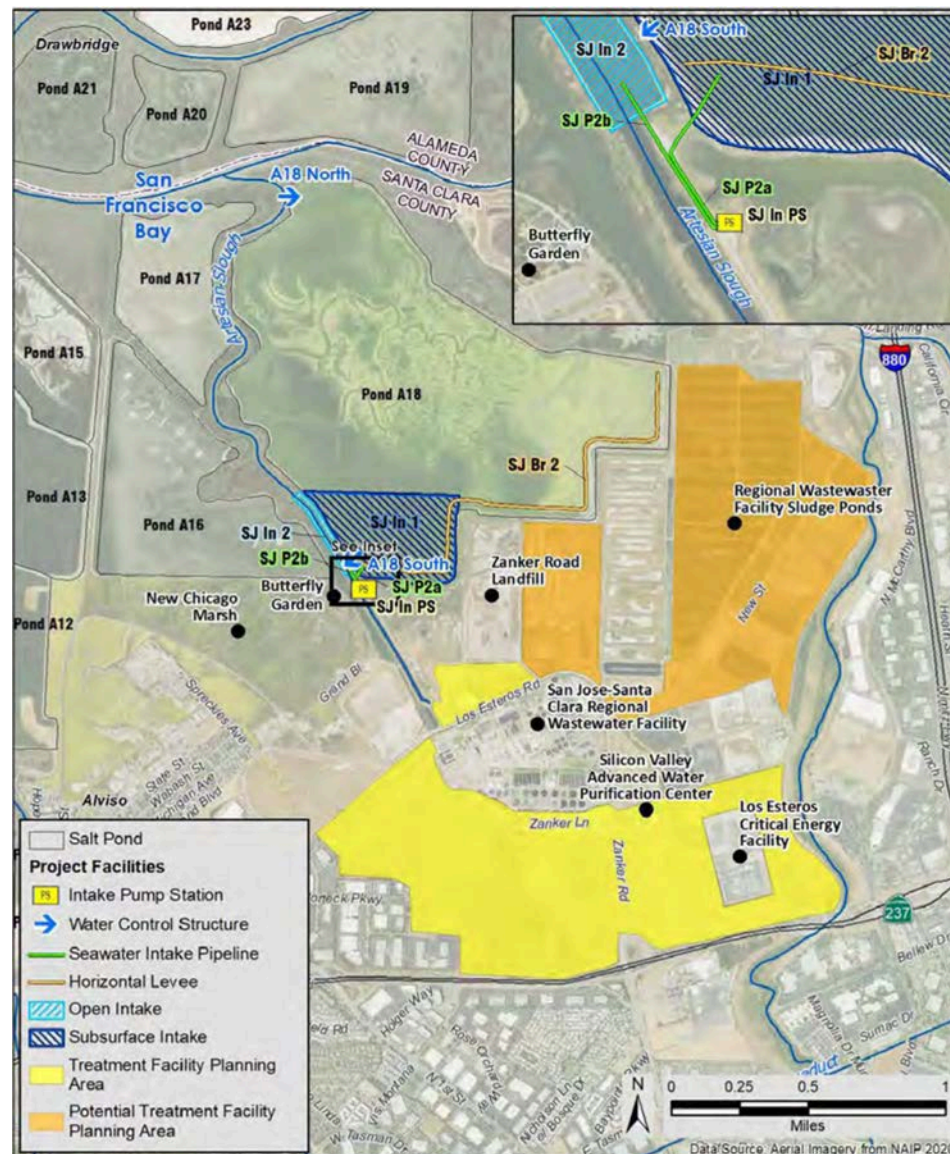
Desalination Project Comes with Concerns and Questions

Valley Water (the Santa Clara Valley Water District), has had its eye on the potential of desalination as an added water supply source for a long time. In 2003 it joined with other large water suppliers to collaborate in the Bay Area Regional Desalination Project (www.regionaldesal.org). That project's studies identified three potential sites for a pilot project, none in the South Bay; instead a pilot was launched in Suisun Bay along the San Francisco Bay.

More recently, Valley Water decided to investigate the option within its jurisdiction. Phase 1, a preliminary feasibility study, was completed in 2023. In 2024, conclusions of that study were used to define and fund Phase 2 at ~\$1.72M. Its purpose is to evaluate engineering feasibility, determine suitable capacity and location in the South Bay to achieve between 10 and 40 million gallons a day (MGD) for drinking water supply, as well as feasible water treatment and brine (reverse osmosis concentrate) management.

In its e-newsletter of October 1, 2024, Valley Water (VW) for the first time brought the desalination project to public attention and also provided information on its website: valleywater.org/your-water/water-supply-planning/desalination.

First phase findings recommended locations for water intakes, treatment plants and brine disposal. Of concern, all of the preferred locations for water intake adjoin or lie within lands of the Don Edwards San Francisco Bay National Wildlife Refuge and other



San Jose Project Options, Figure 3-9 from the Valley Water Desalination Study.

wetlands in San Jose, Mountain View, and Palo Alto. In this phase, there was no investigation of potential Refuge wetland or wildlife impacts and no contact with Refuge management.

Phase 1 studies evaluated intake of 20 MGD to produce an estimated 10 MGD of purified output. We note that the existing Valley Water Purification Plant intakes ~10 MGD of treated wastewater, producing ~8 MGD output, and plans to expand that plant are underway. Another way to think about this is that desalination produces 50% of the output as reusable water, whereas the existing purification produces 80%.

Meanwhile, ecological and geological questions swirl. The VW studies

released earlier this year provide some explanations while producing more questions. We learn that the State Water Board standards establish that for desalination, subsurface (below Bay floor) water intake is given priority consideration to avoid the fish impingement impact of open water (surface) intake. But if subsurface intake is infeasible then open water intake can be considered. Unfortunately, if allowed, open water avoidance options do not fully mitigate impingement.

What happens when 20 MGD x 365 days or 7.3 billion gallons/year, year upon year, are processed? A recent VW Board Committee update mentioned

that, in fact, there would be variation in the volume related to water availability from other sources. If drought occurs in four out of 10 years, it would still be substantial.

Although not specified in Phase 1 studies, it appears that subsurface water would be drawn from shallow aquifers. A recent update to the Board's Recycled Water Committee, confirms that groundwater studies are underway in the current phase. The studies must identify impacts from drawing water from shallow aquifers. Can aquifers refill fast enough to avoid aquifer collapse and surface subsidence? On a Bay where we need our marshes to accrete surface sediment to stay ahead of sea level rise, subsidence could be catastrophic.

The primary recommendation for the brine generated by the desalination process is deep water disposal and dilution. In the South Bay, that location appears to be the existing navigable channel located toward the east side of open Bay waters. The Bay south of the Dumbarton Bridge (Dumbarton Notch) is the shallowest part of the San Francisco Estuary. USGS studies of

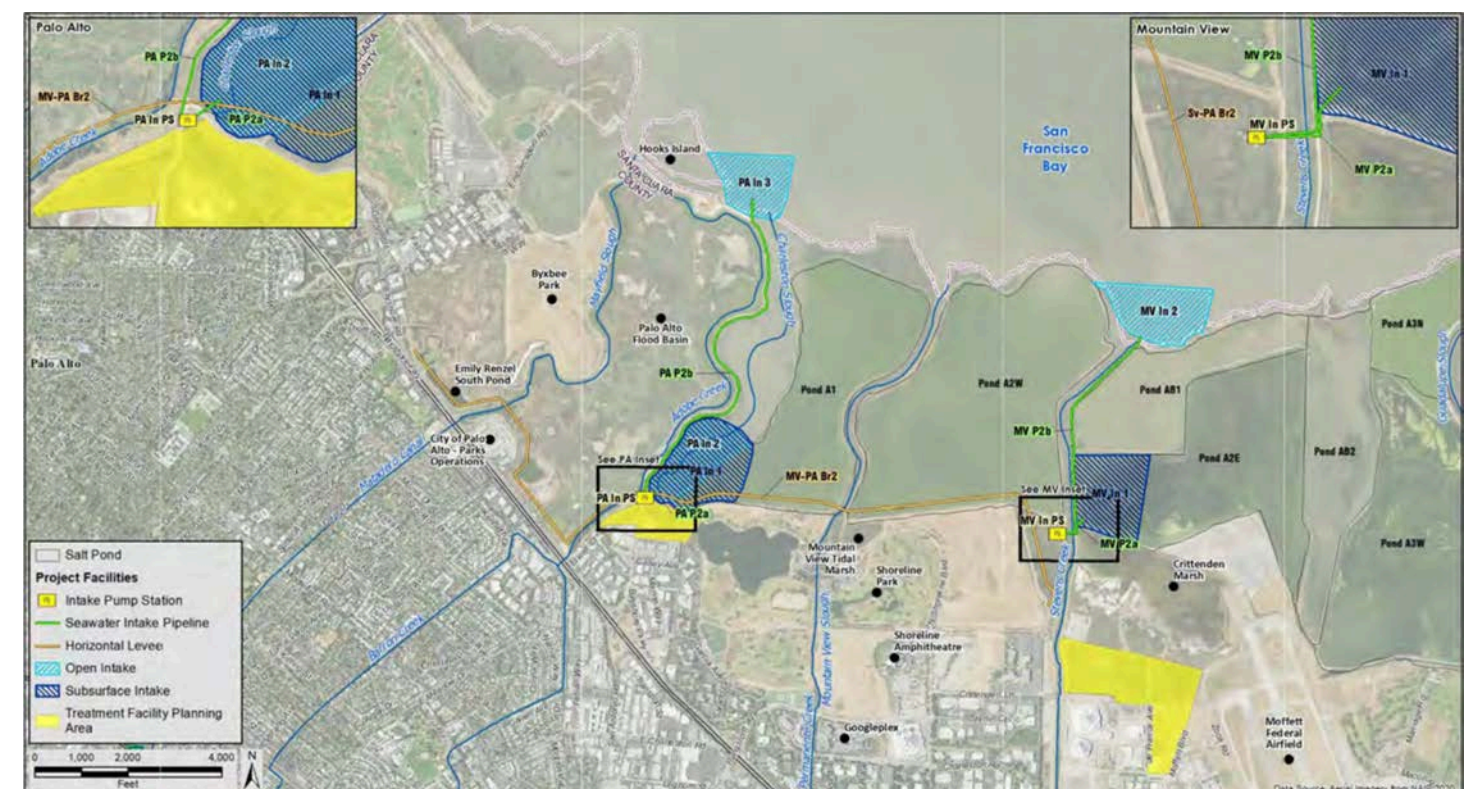
sediment for the South Bay Salt Pond Restoration Project found that existing currents south of the Dumbarton Notch retained more sediment than was dispersed northward. For release of desalination brine, we wonder if those same currents would retain more of the brine's polluting constituents below the notch, thereby slowly concentrating dispersion to the estuarine and benthic species in the shallowest part of the Bay. Valley Water has met with the Water Board, confirming that the projected daily contaminant load and dispersion plan would be within standards. But could there be adverse impacts to benthic organisms on the Bay floor from possible accumulated contaminants over time?

We have many, many more questions about how desalination could possibly be environmentally feasible. We look forward to getting answers from Valley Water and its contractors. We invite our readers to pay attention and ask their questions too.

Eileen McLaughlin
wildlifestewards@aol.com



Yellowlegs in restored tidal wetlands of the Refuge at La Riviere Marsh. Photo by Carin High.



Mountain View and Palo Alto Project Options, Figure 3-10 from the Valley Water Desalination Study.

Friends of the Alameda Wildlife Reserve

Each year brings stories of success and challenge. FAWR continues to be very busy with new and enduring activities. We've had new friends join us bringing talent and enthusiasm.

2024 began with our missing the female Bald Eagle we grew to love. The young pair that nested and failed at the Corica Park Golf Course in 2023 would not nest in 2024. Big Junco did not return, but the male was seen with some regularity as if looking for her. She will not be forgotten, having left indelible images on our hearts.

FAWR continues to offer scheduled monthly walks at the golf course and monitor what is seen, broadening our understanding of Alameda's habits and wildlife. One visit recently allowed walkers to see five species of local

protected. FAWR also participated in "Return of the Tern" bus tours of the colony and the wonderful USFW Tern Watch program in 2024.

FAWR is celebrating its 30th year. Our first meeting was in November 1994. It is also the 30th year of having East Bay Regional Park District hold the popular "Return of the Tern" public bus tours of the colony in 1994. The City of Alameda created a proclamation to celebrate the anniversary. We expect a similar proclamation for FAWR at the November City Council meeting.

Monitoring Ospreys, falcons, herons, and cormorants continues, but with added efforts. We met with the San Francisco Bay Bird Observatory (SFBBO) to try and organize our data with theirs to get a larger image of Bay Area



Black Skimmers in flight at AWR.
Photo by Rick Lewis.

experience on a regular basis has become very popular. Beginning with one teacher, the program is expanding. Children learn to take notes, identify birds, and more. Our volunteers witness the children's curiosity and wonder. Everyone has a wonderful time. What a joy to get away from desks for a while!

The Alameda Sun, our home town news that printed bird articles once monthly, stopped the presses, but an e-paper, the Alameda Post, has asked us to write articles and allowed more space for photographs. Thanks to our excellent photographers, we are able to share inspiring images that will get residents to Elsie Roemer Bird Sanctuary and other locations to look for spectacular species that come to town like numerous Black Skimmers and hundreds of Elegant Terns with their unmistakable voices.

Our monthly bird surveys at Alameda Wildlife Reserve-VA are in their 20th year! The same two volunteers have been conducting these surveys since April 2004.

We are so lucky to have talented people to promote wild resources in a way that inspires protection. 🐦

Leora Feeney
Co-chair, Friends of Alameda
Wildlife Reserve
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A middle school morning class learning about Bay Area birds and how to take field notes. Photo by Rick Lewis.

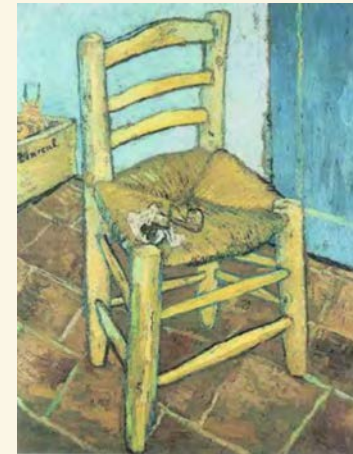
herons: Great Blue Heron, Great Egret, Snowy Egret, Green Heron, and Black-crowned Heron.

Least Terns returned earlier this year than in 2023 and produced more nests and fledglings than recent years. It was considered a banner season. They still suffered predation from falcons and others. Horned Larks and Killdeer continue to take advantage and are allowed to nest in the Least Tern colony that is carefully monitored and

breeding populations for these species. We'll see how this falls into place next year. We hope to combine resources to begin mapping colonial species for the entire San Francisco Bay Area. This mapping information, combined with population trends, might reveal whether and where birds relocate when disturbances cause breeding failure.

A collaboration with teachers and our volunteers to offer middle school youngsters outdoor classroom

The Uneasy Chair



At the end of this year, God willing, I will reach the age of 101. I think it's time to rename my little column; in spite of what I called it, there has been great joy in the years of slogging through the wetlands of San Francisco Bay. Here are a

few notes at random about the triumphs along the way.

We had several years of anxiety before we learned the news that President Nixon signed Don Edwards's spectacular bill establishing our National Wildlife Refuge.

In spite of a very aging memory, I will never forget tremendous joy in saving Bair Island. That full page ad in the western addition of the NY Times suggested by Bill Rukeyser was instrumental in our efforts to preserve these lands. Thank you, Arthur Feinstein and the Audubon societies that begged Mr. Kumagai, the owner of the land, to let us preserve it undeveloped.

Party at a hotel in Newark with Refuge Manager Rick Coleman celebrating President Reagan's signing our bill expanding the Refuge. Rick scrambling around on the floor picking up "chits" Mr. Edwards had called in to get the bill passed.

The ear-splitting shout that went up from our small group when Howard Shellhammer announced that the battle to name our little salt marsh harvest mouse, found only in the marshes of San Francisco Bay, as an endangered species had been won. A rare feat and no sure thing at all.

Emily marketed Linda Patterson's wonderful wetland painting as an auto shade, and I got calls from as far away as Florida—"I just saw one of those auto shades—send me a box!"

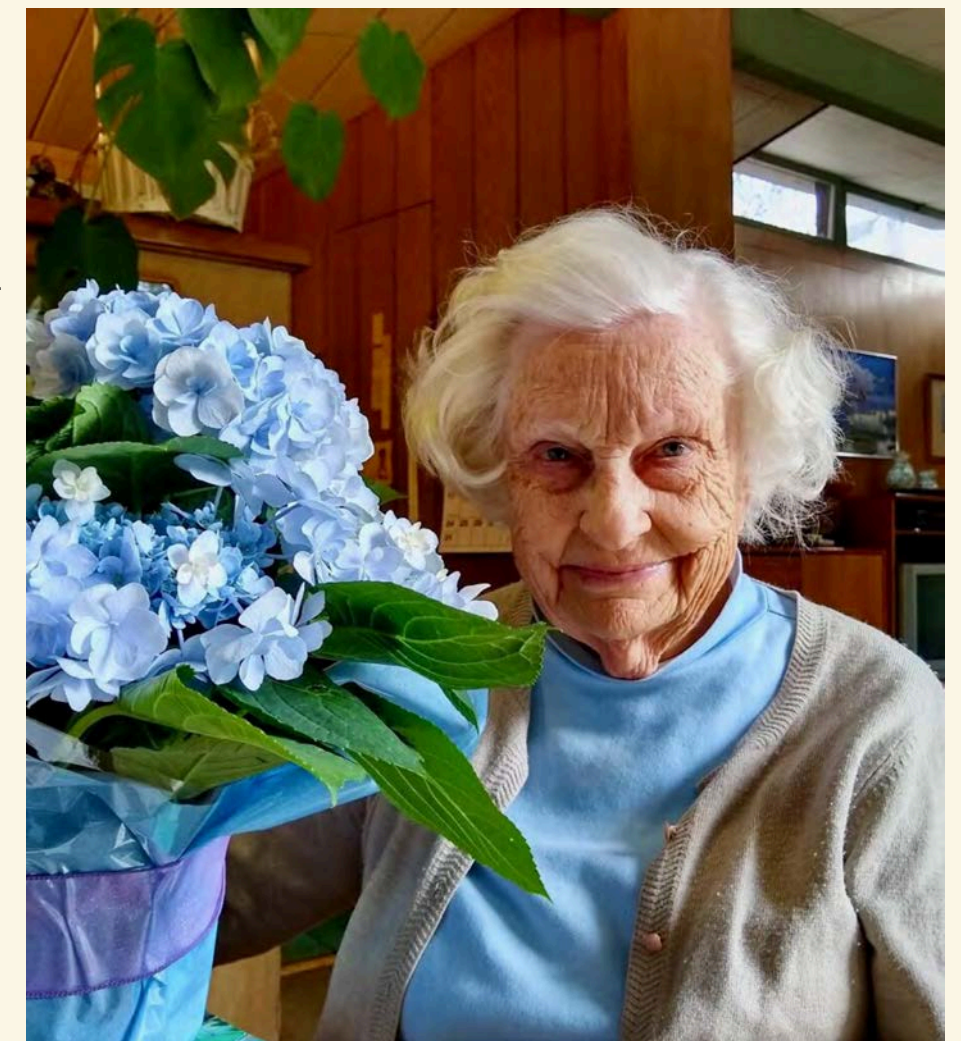
How many pancakes did Nancy Holmes have to sell to send San Jose State professors to testify in DC?

Sam High (expert photographer and amateur ornithologist) and sister Kate (marine biologist) remind me of the knowledge and compassion of the younger generations.

And then there's Peter Baye, whom I can call any time I feel down and he will recite my favorite verses from Tom Lehrer.

I am so very grateful for those who will carry on when I am no longer able, Carin and Gail and the rest of the CCCR Officers and Board Members. Also, thanks to my many faithful and patient readers who have helped me over the years, especially Pratim Soni who never complains about the technical articles I ask her to read, and Gina DeFerrari who read to me weekly, even when traveling in Italy. And to my daughters Anne, Celia, and Ginny.

Florence M. LaRiviere
Uneasy Chair Emerita





Contrasts in how we treat the Bay shoreline: tidal wetlands restoration across the water from development at the Bay's edge, protected by gray infrastructure – a bulkhead wall. Photo by Sam High.

SaveWetlands is the annual newsletter of the Citizens Committee to Complete the Refuge, an all-volunteer nonprofit public benefit corporation, federal tax ID 77-0518777.

Our mission is to save the Bay's remaining wetlands by working to place them under the protection of the Don Edwards San Francisco Bay National Wildlife Refuge, and to foster worldwide education regarding the value of all wetlands.

Support is welcome from anyone interested in saving wetlands; a tax-deductible contribution of \$20 per issue is appreciated.

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