



CHARG Forward Forum

Implementing for One Bay

OAKLAND | OCTOBER 3RD, 2019

AGENDA HIGHLIGHTS

AGENDA

Welcome

Melanie Richardson, Valley Water

Daniel Woldesenbet, Alameda County

Keynote Address

Facilitating Climate Adaptation to Elevate the Bay's Resiliency *Therese McMillan, MTC*

Ramping up the Technical Approach for Solutions to Sea Level Rise

ART Bay Area: Asset Vulnerabilities and Next Steps *Jessica Fain, BCDC*

Groundwater Could Generate More Flooding Than Seawater. Are We Ready? *Kristina Hill, UC Berkeley CED*

What Model Should I Use? A Technical Comparison *Matt Brennan, ESA*

The One Bay Solution: Tackling Sea Level Rise at the Right Scale *Rohin Saleh, ACFCD*

10 Challenges to Implementation in 10 Minutes *Roger Leventhal, MCFCD*

Lunch CHARG-Up Announcements

Mapping our Sea Level Rise Response

Updating Our Sea Level Rise Resiliency Projects Map

Policymakers: Turning Policy Into Action

Dr. Bill Quirk, Assemblymember District 20

Senator Bob Wieckowski, Senate District 10

Brian Perkins, District Director for Congresswoman Jackie Speier, 14th District

Karen Holman, Midpeninsula ROSD Board VP

Wrap-up/Next Steps

Adjourn

SPEAKERS



Melanie Richardson, Chief Operating Officer-Watersheds has been with Valley Water for 29 years and has been the Chief Operating Officer for

3 years including a year in the Acting role. Prior to this, Melanie served as the Deputy Operating Officer for Watersheds Design and Construction, the Deputy Administrative Officer for Corporate Business Services and an Assistant Operating Officer in Water Supply. Melanie is on the Board of the Bay Planning Coalition and the National Association of Storm and Flood Agencies, is a registered Civil Engineer in California and holds a Bachelor's degree in Petroleum Engineering from Montana State University.



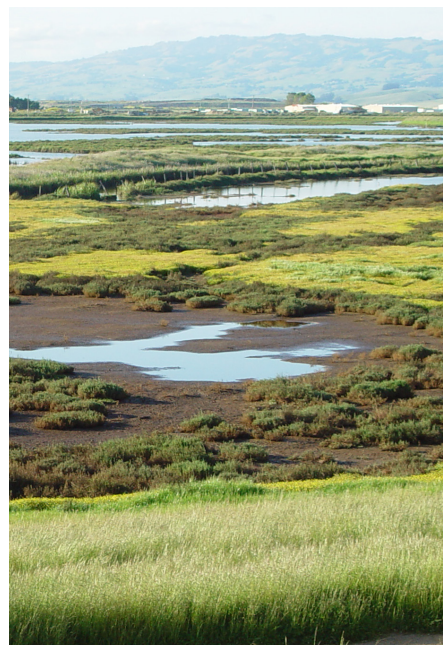
Daniel Woldesenbet, Director of the Alameda County Public Works Agency, oversees the planning, engineering, construction, maintenance and

operation of public infrastructure. Among his other responsibilities, Daniel also serves as the General Manager of the Alameda County Flood Control and Water Conservation District (ACFCD) that manages the District's natural creeks, channels, levees and associated flood control infrastructure, and serves as the County Engineer for Alameda County. Daniel has received several prestigious awards, including statewide recognition as the 2013 County Engineer of the Year, the prestigious national award "2014 Top Ten Public Works Leader of the Year" from the American Public Works Association, and was the 2015 recipient of the Achievers Award from the National Forum for Black Public Administrators. Daniel holds a PhD in Public Policy, MPA, MBA and BS in Civil Engineering, and is a licensed Professional Engineer.



Therese W. McMillan has served since March 2019 as MTC's Executive Director and as the top executive for the Association of Bay Area Governments.

Therese, who received her BS from UC Davis, a Master's Degree in Civil Engineering Science from UC Berkeley, and a Master's Degree in City and Regional Planning from UC Berkeley, previously worked for 25 years at MTC, including more than eight years as MTC's deputy executive director for Policy before her 2009 appointment by then-President Barack Obama to serve as deputy administrator of the Federal Transit Administration, which was followed by service from 2014 to 2016 as Acting FTA administrator before serving from April 2016 to February 2019 as Los Angeles County Metropolitan Transportation Authority's chief planning officer.



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AGENDA HIGHLIGHTS (CONTINUED)

GOALS

Learn How to Forward Planning Into Implementation at a Regional Scale

Stakeholder Networking

Update Sea Level Rise Resiliency Projects Map

Learn How Policymakers Can Support Implementation



Subcommittee at the Capital

SPEAKERS (CONTINUED)



Jessica Fain, Planning Director, has been in the role for BCDC since October 2018, where she leads a team of talented planners focused on sea level rise adaptation, environmental justice, ecosystems and working waterfronts. Prior to joining BCDC, Jessica worked in planning and resiliency in New York City, as a Waterfront Planner at the New York City Department of City Planning and then as the Program Director at the Science and Resilience Institute at Jamaica Bay. Jessica holds a BA from the University of Pennsylvania and a Master's Degree in City Planning from Massachusetts Institute of Technology.



Rohin Saleh, Supervising Civil Engineer, has over 30 years of experience with ACFC. He possesses a Master's Degree in Water Resource Engineering and is a Certified Flood Plain Manager (CFM). He is in charge of the District's Flood Control and Watershed Planning Section. CHARG was established in 2014 under Rohin's direction and guidance.



Roger Leventhal, PE is a Senior Engineer with the Marin County Flood Control District. He was in private consulting for approximately 25 years (12 years running his own firm) prior to coming to the County specializing in the analysis, design and implementation of restoration and multi-benefit flood control projects. He has designed and managed several large Bay Area tidal marsh restoration projects, including those involving the beneficial reuse of dredged sediments to create wetlands including the Novato thin-lift dredge placement projects and the Montezuma Wetlands project. He was lead engineering designer for the Aramburu Beach Restoration Project as a living shoreline design project. Recently, he has been focused on the statistical analysis of historic storm data to develop Marin-specific flood warning triggers. He has a BS in Geology (geomorphology) from UC Santa Barbara and a Master's Degree in Hydraulic Engineering from UC Berkeley.



Matt Brennan, Senior engineering hydrologist, has more than 20 years of experience specializing in estuarine management and restoration. His strengths include evaluating and designing management and restoration scenarios from hydrologic and geomorphic perspectives to support ecosystem sustainability. Matt is leading the SAFER Bay and Navigable Slough Flood Hazard Mitigation Projects, as well as the Mountain View Shoreline Sea Level Rise Study.



Kristina Hill, Associate Professor, is a researcher who studies underground flows of water in the context of urban design. Using in-depth knowledge about European and Japanese flood adaptation strategies, she has proposed new models of coastal protection that can bring in private as well as public capital, while supporting coastal ecosystems.



Dr. Bill Quirk, Assemblymember of District 20 has a PhD in Astrophysics from Columbia University. He developed NASA's first climate model in the 1970s. At Lawrence Livermore National Lab, he was this country's technical expert on foreign nuclear weapon's programs working with the CIA, NSA and other agencies to write the Presidential Daily Intelligence Brief. He currently represents southern Alameda County in the State Assembly. He has been waiting 40 years to participate in a Climate Adaptation program.



Senator Bob Wieckowski represents the 10th Senate District, which stretches from southern Alameda County into Santa Clara County. Senator Wieckowski's district is home to many of the state's leading clean tech companies. The 10th Senate District is a major contributor to California's clean economy. The Senator is a state leader in advocating for climate adaptation programs and has participated on numerous regional, state and international panels focusing on climate change. A strong voice in the Legislature for consumers and low-income earners, he received the "Champion of Justice" Award from the East Bay Community Law Center for fighting against abusive debt collectors and oppressive wage garnishments.



Brian Perkins is the District Director for Congresswoman Jackie Speier. He has spent 31 years in various staff positions in the state legislature, local government, and Congress. In his current position, among many responsibilities, he works closely with local governments to facilitate permits and funding for public works projects, including bayside projects. He was assigned by Congresswoman Speier to work closely with Supervisor Dave Pine in the creation of the San Mateo County Flood Control and Sea Level Rise Resiliency District. He is a lifelong Bay Area resident.



Karen Holman, before being elected to the Midpeninsula Open Space District, served as mayor, two-term city council member, and planning commissioner in the City of Palo Alto. She also currently serves on the Advisory Board of the San Francisco Bay Restoration Authority. Karen has been active in community work for many years including a long public record of environmental stewardship such as serving on both Acterra and Palo Alto Zero Waste Task Forces, as a member of the Santa Clara Valley Water District Commission, as representative to League of California Cities, Peninsula Division. Karen co-chaired the Midpeninsula Regional Open Space District Advisory Committee, contributing to the creation of the District's Vision Plan. Born and raised in Missouri, Karen has lived in Palo Alto since 1975. Karen had a long career in graphic design before pursuing work in the conservation and historic preservation field. She holds a BA in Graphic Arts from the University of Arkansas.



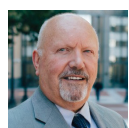
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SUBCOMMITTEE

The Subcommittee is comprised of BAFPA members representing flood protection agencies around the Bay.*



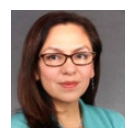
Hank Ackerman is the Flood Control Program Manager for ACFCD. He is responsible for the planning, design and construction of all flood control projects in western Alameda County. Hank is a licensed civil engineer in the state of California, a graduate of UC Berkeley and has over 30 years of experience with ACFCD.



Paul Detjens is the Capital Programs Manager for the Contra Costa Flood Control and Water Conservation District. Paul has 28 years of experience in Hydrology, Hydraulics, Geomorphology, Geographic Information Systems, and Stream Restoration. For the last 15 years, Paul has helped steer the District away from its single focus on efficient, concrete-lined channels and to focusing on long-term environmental sustainability. Paul currently heads up the District's response to climate change and leads the District's efforts to restore the largest and arguably most important watercourse in Contra Costa County, Lower Walnut Creek. A Bay Area native, Paul earned his BS in Civil Engineering from UC Davis and is a Registered Professional Engineer in California.



Vincent Gin is the Deputy Operating Officer over the Watershed Stewardship and Planning Division at Santa Clara Valley Water District (Valley Water). He is a registered civil engineer and has worked over 25 years in flood protection, transportation, and navigation sectors, with experience in engineering, regulatory permitting, water quality, and coastal and harbor infrastructure. Prior to joining Valley Water, Vincent worked at the County of Orange in Project Management, Dana Point Harbor, Watershed & Coastal Resources, and Flood Control. Vincent is a co-chair of the Flood Management Committee for the National Association of Flood & Stormwater Management Agencies (NAFSMA). His past association experience includes serving on the Board of Directors for the County Engineers Association of California (CEAC) and California Marine Affairs & Navigation Conference (CMANC); and as a voting member on the National Association of Counties's (NACo) Environment, Energy and Land Use Committee.



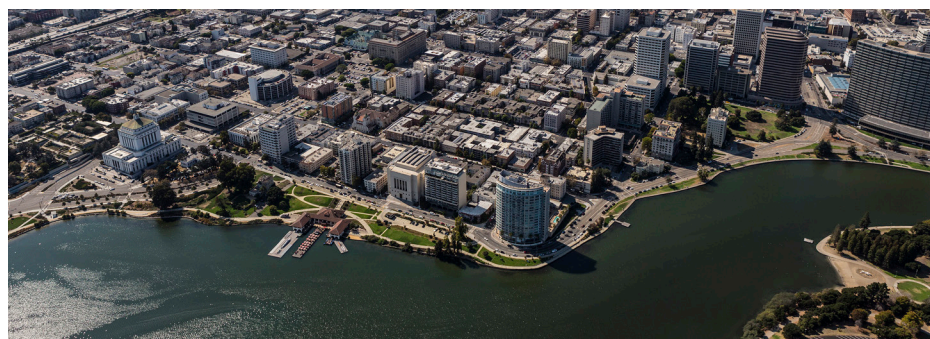
Erika Powell, Program Manager, Flood Resiliency Program. Erika is a registered civil engineer and has been leading several multi-jurisdictional

Flood Resilience Program planning and implementation projects in San Mateo County. As a native of New Orleans, Erika has a lifetime of experience with flooding and the consequences of extreme weather events. Erika has dedicated her professional career to the implementation of over \$1B of multi-beneficial flood protection and restoration projects. Her passion for protecting the environment and mitigating the socio-economic impacts of major floods are backed by her numerical modeling skills and her leadership on numerous projects for the US Army Corps of Engineers, Los Angeles County, and consulting for Santa Clara Valley Water District and the California Department of Water Resources. Erika led the information gathering effort for the development of the California's Flood Future Report: Recommendations for Managing the State's Flood.



Rick Thomasser, PG, is the Watershed and Flood Control Operations Manager for Napa County California. Rick is a past Chair of the Bay Area Flood

Protection Agencies Association (BAFPAA) and a member of the Implementation Committee for the San Francisco Estuary Partnership (SFEP). Rick holds a BS in Geology from the University of Minnesota in Minneapolis. He has over 30 years of experience in environmental consulting, including groundwater, stormwater and flood management and river and stream restoration. He manages the operations and maintenance of the award winning Napa River Flood Protection Project and has directed restoration of over 15 miles of the Napa River in a public-private partnership with agricultural landowners in the Napa Valley.



* Rohin Saleh and Roger Leventhal are also on the CHARG Subcommittee – see their Biographies in the "Speakers" section

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STEERING COMMITTEE

The Steering Committee includes representatives from regional, state and federal agencies; private business and Non-Governmental Organizations.*



Michael Anderson is the State Climatologist for California, a collaborative position between the State and the National Oceanographic and Atmospheric

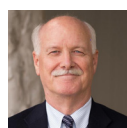
Administration to provide climate data services. He is a registered Civil Engineer working for the California Department of Water Resources. Michael began working in the Department of Water Resources Division of Flood Management (DWR-DFM) Forecasting Section in July 2005. He came to DWR after extensive graduate and post-graduate work at UC Davis in the area of hydroclimate system modeling, monitoring, and evaluation. He received his PhD and MS in Civil and Environmental Engineering from UC Davis. He received his BS in Civil Engineering from Colorado State University.



Dr. Patrick Barnard has been a coastal geologist with the USGS Pacific Coastal and Marine Science Center in Santa Cruz since 2003, and is the Research Director of the Climate Impacts and Coastal Processes Team. His research focuses on storm- and climate-related changes to the beaches and estuaries bordering the Pacific Ocean. His research has been published in over 80 peer-reviewed scientific papers, including Nature, and presented over 100 times at scientific conferences and universities. He serves on numerous regional, national and international scientific review panels related to climate change and coastal hazards. He received a BA from Williams College, MS from University of South Florida, and PhD from UC Riverside.



Joe Birrer is the Director of Engineering and Construction Services for the San Francisco International Airport. He is responsible for all of the utility infrastructure systems supporting SFO's operations and development plans. Joe has 31 years of engineering design, management, and capital planning experience in the City and County of San Francisco, with the majority spent at the SFO. SFO is currently embarking on a major flood protection program to address flooding from both storms and future sea level rise.



Warner Chabot, Executive Director, San Francisco Estuary Institute, brings 40 years of executive experience in the private, public and non-profit sector, focused on science-based, environmental planning and policy issues. Warner has specialized in California coastal, ocean, water, land use and energy issues at the local state and federal level. He has managed his own environmental consulting firm and has served as the CEO of the California League of Conservation Voters. Prior to that, Warner was a Vice President of Ocean Conservancy, a national ocean policy organization.



Richard "Dick" Fahey, AICP, GISP is a Senior Transportation Planner with the California Department of Transportation (Caltrans) in the San Francisco Bay Area District office. In this position, he manages GIS support activities for the District Office, and more recently, has become responsible for coordinating climate change mitigation and adaptation activities. Dick has served on technical advisory committees and project management teams for numerous climate change vulnerability assessments at the local, county, and regional levels, including several state-funded adaptation planning studies in the region. Dick earned a BS in Environmental Policy Analysis and Planning from UC Davis, and is a member of the American Institute of Certified Planners and is a certified Geographic Information Systems (GIS) Professional (GISP).

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Tian Feng, FAIA, FCSI, is the District Architect of the San Francisco Bay Area Rapid Transit District (BART), and was an architectural advisor on the Metropolitan Transportation Commission (MTC) Advisory Committee. Appointed by Gov. Jerry Brown, Feng is currently an Executive Member of California State Architects Board.



James M. Haussener is the Executive Director of the California Marine Affairs and Navigation Conference (CMANC). He has over forty years of experience in the California maritime industry, serving from harbor patrol officer to marina manager as well as teaching sailing and other aquatic sports. As well as 50 years of boating on San Francisco Bay. For the past 15 years, James has been Executive Director to CMANC, the association of local sponsors of federal navigation projects within California. CMANC supports the integrated system of California ports and harbors that provide a key national gateway to international commerce and trade. Over the past decade, James has been part of teams developing value engineering suggestions for maintenance dredging and strategic plans for navigation.

* Jessica Fain and Kristina Hill are also on the CHARG Steering Committee - see their Biographies in the "Speakers" section

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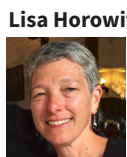
STEERING COMMITTEE (CONTINUED)



Alison Kearns is the Risk Analysis Branch Chief for FEMA Mitigation Division of Region IX. The Risk Analysis Branch promotes disaster resilience by enabling individuals and communities to recover more rapidly from floods and other disasters through effective risk analysis and hazard mitigation planning. As the Risk Analysis Branch Chief, Alison manages a talented team of engineers, risk analysts, and community planners who implement several federal programs that support natural hazard risk reduction in the region. Alison graduated from Florida State University with a BS in both Geography and Environmental Studies, focused in Meteorology, and also received a Graduate Certificate in Emergency Management from Florida State University.



Tom Kendall, Chief of Planning, US Army Corps of Engineers - San Francisco District oversees the development of water resource decision documents within Northern and Central California. He has held various positions with the Corps District since 1984 including Chief of the Water Resources and Engineering branches as well as the Planning/Engineering Division. A registered Civil Engineer in California, he has served as a Director for the American Shore and Beach Preservation Association (California Chapter 1989-1995, National Treasurer 1994 – 2003) and as Scouting Executive Officer for the Corps-Bechtel sponsored Engineering Explorer Post (1992-2006). He was recognized by the American Society of Civil Engineers as the Government Civil Engineer of the Year for 2009. Tom received both his undergraduate and graduate degrees in Civil Engineering from UC Berkeley.



Lisa Horowitz McCann is Assistant Executive Officer at the San Francisco Bay Water Board. She has held management positions at the State Water Resources Control Board's Division of Financial Assistance and the Central Coast Water Board. She led many water quality and watershed protection programs and projects including Stormwater Management, Regional Monitoring, Agricultural Runoff Control, and Wetlands and Riparian Protection. Lisa has a BS in Environmental Studies/Water Resources (UC Santa Barbara) and a Master's Degree in Hydrologic Science (UC Davis).



Moira McEnespy, Regional Manager, manages the State Coastal Conservancy's San Francisco Bay Area Program, which supports a wide range of land protection, restoration, public access, and climate adaptation projects. The Conservancy's "Climate Ready" Program helps develop multi-benefit projects that use natural systems to assist communities in adapting to the impacts of climate change. She holds a Master's Degree in Environmental Science.



Mike Mielke is the Silicon Valley Leadership Group's Sr. Vice President, Environment & Energy. In this capacity, he works to advance state and federal policy specifically related to climate change mitigation and adaptation; corporate environmental sustainability; water quality, supply and governance; and hazardous and solid waste. Mike's life's work involves promoting stronger and more sustainable businesses and communities. He has held jobs in the non-profit, government, and private sectors, including posts with a number of consulting firms, the White House Council on Environmental Quality, and the National Estuary Program. Mike holds a Master's Degree in Public Policy, with a specialization in Ecological Economics, and a BS in Environmental Science.



Joshua Polston is the Airport Operations Manager for the Port of Oakland. He also teaches Economics at Laney College in Oakland. Joshua Polston has a BA in Political Economy and Master's Degree in City/Urban, Community and Regional Planning from UC Los Angeles and UC Berkeley.



Jim Porter is the Director of Public Works for the County of San Mateo. The Department of Public Works has a staff of over 300 and performs a wide array of design, construction, construction administration, operations, and maintenance services involving the County's transportation systems, buildings, general aviation airports, flood control and stormwater management, sewer collection, water distribution, lighting districts, energy conservation programs, and environmental stewardship. Jim has over 32 years of professional engineering experience, 20 of which at the Department Director level. He has a BS in Civil Engineering from the University of Washington, a MPA from San Francisco State University, and is a registered Civil Engineer and Traffic Engineer in California.



Richard Sinkoff, Director of Environmental Programs and Planning leads the Port's efforts to ensure the highest standards of regulatory compliance and environmental performance; improve responsiveness to environmental concerns raised by the community and Port customers; increase the Port's capacity to respond to emerging environmental regulations, policies and conditions; and promote the Port's strategic alignment efforts. Most recently, Richard served as the Port's environmental manager.



Mark Stacey is the Department Chair for the UC Berkeley Department of Civil and Environmental Engineering. Mark heads a National Science Foundation project to examine infrastructure resiliency in California. His multi-disciplinary team analyzes future challenges relevant to long-term water and transportation infrastructure planning, from both the technology and engineering side and the economic and political side. A larger goal of Mark's research is to improve how local, regional, state and federal agencies interact in planning for the future, identifying opportunities where decision-makers can coordinate and improve planning and management of critical infrastructure systems.



Jackie Zipkin is the General Manager of the East Bay Dischargers Authority (EBDA) and serves on the Executive Board of the Bay Area Clean Water Agencies (BACWA). EBDA is a Joint Powers Authority that efficiently and sustainably manages the discharge of wastewater from approximately one million East Bay residents to the San Francisco Bay. As an owner of infrastructure that runs along the edge of the Bay, EBDA is engaged with other stakeholders in improving the East Bay shoreline's resilience to sea level rise through multi-benefit strategies. Prior to joining EBDA in 2018, Jackie served as Manager of Environmental Services at East Bay Municipal Utility District, where she managed environmental programs including the District's Resource Recovery and Wet Weather Programs. Jackie holds a BS and MS in Civil and Environmental Engineering from Stanford University and is a registered Professional Engineer in California.

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FACILITATORS



Ellen Cross is the facilitator for the Coastal Hazards Adaptation Resiliency Group (CHARG). Ellen facilitates and provides large-scale strategy to develop

outcomes on implementing solutions for high stakes initiatives in resiliency, water supply and scarcity, flood protection and natural resources. Ellen has facilitated initiatives that envision multi-stakeholder success goals and operationalizes the tactics to achieve results holistically on multiple fronts to ensure sustained success. Noteworthy facilitation projects include the first Flood and Sea Level Rise Resiliency District in California which just received the Coastal Zone Management Award from the Floodplain Management Association (September 2019) for San Mateo County and its 20 cities and the Paso Robles Groundwater Sustainability Plan, one of California's most critically overdrafted basins under the Sustainable Groundwater Management Act.



John Bourgeois, Program Manager, joined ESA in October 2018 after serving as Executive Project Manager of the South Bay Salt Pond Restoration

Project since December 2009. John has two decades of experience working on large scale wetland restoration issues. For the 12 years prior to the South Bay Salt Pond Restoration Project, he worked as a restoration ecologist on the early planning and design for the South Bay Salt Pond Restoration Project, and many other closely related San Francisco Bay wetlands projects, including the Bair Island Restoration Plan, as well as mitigation planning, implementation and monitoring for transportation, flood protection, and other infrastructure projects. John has a MS from the University of Louisiana at Lafayette, a BS from Tulane University, and brings a strong ecological and planning background and ability to work with multiple stakeholders to CHARG.

CHARG ON!

Partner with CHARG to align regional resilience from a One Bay Shoreline approach. Please contact Ellen Cross at **510-316-9657** or CHARG@esassoc.com.

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