



BayCAN Networking — February 14, 2019 — **UPDATED FEB 26**
Meet the Projects! (see pages 1-10)
Meet the Resources! (see pages 11-13)

The selected projects listed below were identified by BayCAN members at BayCAN’s South Bay, Central Bay and North Bay meetings in late 2018 and through BayCAN’s Personal Consultations. These are “key projects” not the entire roster of BayCAN member activities.

NORTH BAY (SONOMA, MARIN, NAPA)

CORTE MADERA

Key contact: Peter Brown, pbrown@tcmmail.org

Climate Adaptation Plan Update — Kicking off now. New Adaptation Plan will focus on sea level rise, flooding, protecting key assets and possible habitat/Marsh restoration to ensure that land assets such as the transportation sector will be more resilient in the future. Will also have strategies for wildfire mitigation, drought, etc. and it will recommend an Adaptation-Specific Capital Improvement Program, as well as transformative actions for Council adoption.

MARIN COUNTY

Key Contact: Jack Liebster, JLiebster@marincounty.org

BayWAVE and C-SMART — Two major [collaborative efforts](#) to assess vulnerability to the Marin coast (C-SMART) and the bayside (BayWAVE) led by Marin County but a truly joint effort of County, cities, special districts and others.

Multi-Jurisdiction Local Hazard Mitigation Plan — 1st Marin LHMP effort to bring together all players. See initial info [here](#).

Health, Equity and Climate Change — Marin County Health and Human Services has put together a colorful and educational PPT describing the health impacts of climate change and has launched a major [Health Equity Initiative](#).

NAPA COUNTY

Key contact: Deborah Elliot, Deborah.Elliott@countyofnapa.org

2018 Climate Action Plan — Chapter Four “Vulnerability and Adaptation” of the [CAP](#) describes the results of a climate change vulnerability assessment that was prepared (Appendix C) and outlines the specific climate adaptation measures that were developed to address wildfires, heat, drought, etc.

Edgerly Island SLR Study — In this [study](#), Napa County Flood Control and Water Conservation evaluated the flood protection afforded by existing levees and conducted a vulnerability assessment of infrastructure in the Ingersoll and Edgerley Island subdivisions. The goal was to provide information for the NRRD to seek landowner support and funding mechanisms for the identified recommended improvements. The Study has been completed. Three potential plans for improving the community's overall resilience to flooding are proposed for consideration by the NRRD homeowners.

NOVATO

Key contact: Gretchen Schubeck, gschubeck@novato.org

Marin Climate & Energy Partnership — Novato currently chairs the [MCEP](#), a 12-year old collaboration of 11 cities and towns, Marin County, Marin Water District, MCE, and the Transportation Authority.

New 2019 Climate Action Plan — Major update to the CAP will include adaptation including impacts from heat, fire, creek flooding, etc.

Sustainability Program — Works on both in-house [sustainability measures](#) to green city operations AND education and outreach to residents on actions they can take.

SAN RAFAEL

Key contact: Cory Bytof, Cory.Bytof@cityofsanrafael.org

General Plan 2040 — [Major update](#) will integrate climate change all through different elements of the plan. In Year One of 3-year process.

Resilient by Design — Implementation of [RBD project in Canal District/Downtown](#) with community organizations, consultant team and partners.

Climate Action Plan 2030 — [CAP](#) will be adopted in April. Includes small section on adaptation but commitment to developing major adaptation plan that builds on BayWAVE and LHMP.

SAUSALITO

Key contact: Andrew Davidson, ADavidson@sausalito.gov

General Plan Update — 3-year [General Plan Update](#) process will finish at the end of 2019 – last GP done in 1995. Environment and Infrastructure chapter includes: “Greenhouse gas emissions and associated climate change post major long-term risks for Sausalito. The city should consider long-range adaptation strategies to address sea level rise and wildfires such as early warning systems or the relocation of essential public facilities.”

Living Shoreline Project — Wave action buffering [project](#) using a natural reef at Dunphy Park with funding from the Coastal Conservancy and Marin Community Foundation.

SONOMA REGIONAL CLIMATE PROTECTION AUTHORITY

Key contact: Aleka Seville, Aleka.Seville@rcpa.ca.gov

BayREN Water Bill Savings Program — RCPA taking this on-bill program regionwide. See Manager job description [here](#). Program provides financial incentives for individuals to improve water efficiency in homes.

Sonoma Office of Recovery and Resiliency — [New office](#) created by Sonoma County after North Bay firestorms to provide coordination, chart progress, etc. Includes [Recovery and Resiliency Framework](#), approved in December 2018.

Aligning GHG Reduction and Adaptation — RCPA helping to coordinate updates to climate action plans by cities in Sonoma County.

SONOMA WATER (formerly known as Sonoma County Water Agency)

Key contact: Anne Crealock, Anne.Crealock@scwa.ca.gov

Atmospheric Rivers — Sonoma Water is leading the big regional [Advanced Quantitative Precipitation Information](#) (AQPI) project to create much-improved forecasts for AR events so water managers can address flood and water supply issues.

Wildfire Response — Sonoma Water is working with organizations throughout the county to [protect watersheds and water supply from wildfire impacts](#). Includes water control monitoring, erosion control, monitoring for flash floods and debris flows, and public outreach and communication.

Sonoma County Climate Resilience Team — Sonoma Water is a co-founder (with RCPA, Pepperwood Preserve, USGS, Earth Knowledge and the North Bay Climate Adaptation Initiative) of this [public-private coalition](#) to accelerate climate action across sectors.

CENTRAL BAY (SF, ALAMEDA, CONTRA COSTA)

ALAMEDA COUNTY

Key contact: Sarah Church, Sarah.Church@acgov.org

Cooling Communities — Heat preparedness project for 2 vulnerable communities — Ashland and Cherryland in 2019-20. Education, tree planting, etc. Funded by Coastal Conservancy.

CHARG – Coastal Hazards Adaptation and Resilience Group – Bay Area sea level rise network with a NEW Website! <https://sfbaycharg.org/>

Flood Control/Groundwater Study — Looks at climate events causing waterways that lead to SF Bay to get backed up, including groundwater impacts. Done mid-2020. Also, NEW [map of every Alameda County watershed](#).

Wildfire Smoke Resources — Including [Wildfire and Respiratory Health flyer](#) for residents in six languages, FAQ, infographics, mask info, and more—all [here](#).

ALAMEDA (CITY)

Key contact: Liam Garland, LGarland@alamedaca.gov

Climate Action and Resilience Plan — Major update to 2009 Climate Action Plan is underway (with consultants) that includes adaptation/resilience. See all [here](#).

Social Vulnerability Assessment — Part of the climate action plan process – building on the [ABAG Stronger Housing, Safer Communities Project](#) (EQ and flood). Currently in DRAFT form.

Community Input ONLINE — To augment community meetings, the city used OpenGov's [Open Town Hall tool](#).

NEW FEMA Flood Maps — Included extensive community outreach to inform (letters, flyers, etc.) and discuss. See [Alameda Magazine](#) coverage with links.

ALBANY

Key contact: Claire Griffing, cgriffing@albanyca.org

Climate Action & Adaptation Plan — Currently in the planning process for a new [Climate Action & Adaptation Plan](#) that addresses the City's aggressive reduction targets (carbon neutrality by 2050) and incorporates adaptation and resilience measures. Includes assessing Albany's climate risks and drafting adaptation strategies that address public health and equity. Community input has been solicited through a survey, a workshop, stakeholder meetings, and regular Climate Action Committee meetings.

Waterfront Adaptation Plan — Council approved the [Albany Neck & Bulb Transition Study](#) in 2016, outlining strategies that improve access, recreational opportunities, habitat, and shoreline resiliency under anticipated sea level rise scenarios. Because the Albany Bulb is bay landfill, it is particularly vulnerable to flooding and erosion, which will worsen in the future with sea level rise. A coastal vulnerability assessment evaluated typical and extreme water levels, waves, erosion potential, and the effects of SLR for 2050 and 2100 projected water levels. Proposed improvements: Hard and soft shoreline protection measures, including rock revetments, application of coarse gravel, and wetland enhancement.

Local Hazard Mitigation Plan and Community Resilience: The City incorporated climate adaptation and community resilience into its [2018 Local Hazard Mitigation Plan](#). The plan includes a vulnerability assessment and measures to mitigate climate risks associated with fire, drought, flooding, sea level rise, and severe weather. Plan implementation is currently underway, including fire mitigation strategies, enhancements to emergency communications, and neighborhood resilience programs.

BERKELEY

Key Contact: Katie Van Dyke, kvandyke@cityofberkeley.info

Local Hazard Mitigation Plan — Includes substantial climate adaptation info. Now out for public comment in [DRAFT form](#). Includes 5-year Mitigation Strategy which outlines a wide variety of funded and unfunded actions to reduce hazard vulnerabilities.

Vision 2050 — Citizen-led process to develop a framework for a [30-year sustainable infrastructure plan](#) that is climate-smart and technologically advanced.

Berkeley's Resilience Strategy — [6 goals and a series of actions](#) to meet those goals under the Rockefeller-funded 100 Resilient Cities program.

Equitable Community-Driven Climate Adaptation Planning — [68-page guide](#) for local governments developed by Raimi and Associate for USDN. Also, City of Berkeley all-day workshop with Movement Strategy Center and Raimi for city staff and BayCAN members.

CENTRAL CONTRA COSTA SANITARY DISTRICT

Key contact: Lori Schectel, lschectel@centralsan.org

Levee Raising Project — [Comprehensive Wastewater Master Plan](#) includes sea level rise and flood issues. Since Central San's service area is primarily inland, sea level rise protection is an important consideration for certain *selected* facilities. The California Department of Water Resources' standard is to provide protection against a 200-year water level with 3 feet of freeboard, and include allowances for sea level rise due to climate change. Central San has joined with the Contra Costa County Flood Control District to implement a project to raise the levees along Grayson and Walnut Creeks to provide three feet of freeboard, which will protect the site from a 500-year storm event.

CONTRA COSTA WATER DISTRICT

Key contact: Maureen Martin, mmartin@ccwater.com

Water Supply Planning — Includes effects of a changing climate — increasing salinity in Delta (water source), potential flooding during winter/spring runoff from Sierra, increased heat that increases evapotranspiration from reservoirs.

Project Hyperion — CCWD is one of 3 California water agencies (with EBMUD, SFPUC) participating in [3-year national "co-production" project](#) with UC Davis, LBL, and other academic partners to improve climate change/water data products for their planning and operations.

EAST BAY DISCHARGERS ASSOCIATION (EBDA)

Key contact: Jacqueline Zipkin, JZipkin@ebda.org

Oro Loma Experimental Levee — [Project](#) by EBDA, Oro Loma, Save the Bay, UC Berkeley and other partners that converted a 10-acre field along the Bay's edge into an 8 million gallon holding basin connected to a Horizontal Levee.

Transforming Shorelines — Grant proposal for San Leandro-Hayward area project to create critical linkages between wastewater treatment, resilience to sea level rise and water quality improvement.

EBMUD

Key contact: Chandra Johannesson, chandra.johannesson@ebmud.com

Sustainability and Resilience Policy — [Guidance](#) for EBMUD operations and development adopted by EBMUD's board in 2018.

Drought to Deluge — [2016-17 Biennial report](#) shows how EBMUD navigated the shift from prolonged drought to one of the wettest years in Northern California's recorded history.

Water Supply Management Program 2040 — The [program](#) estimates EBMUD's water supply needs over a thirty-year planning horizon and proposes a diverse portfolio of policy initiatives and potential projects to ensure that those needs can be met in dry years.

SAN FRANCISCO

Key contact: David Behar, DBehar@sfwater.org

Guidance for Incorporating Sea Level Rise into Capital Planning — [37-page 2015 document](#) (about to be revised) that includes a checklist to guide departments in addressing sea level rise in their capital planning projects.

Embarcadero Sea Wall Program — The Port of San Francisco is leading the [Embarcadero Seawall Program](#), a citywide effort to strengthen the Embarcadero Seawall and create a more sustainable and resilient waterfront. One of the largest projects in the Bay Area and California.

Adaptation Pathways — SFPUC and partners are planning to use Adaptation Pathways approach for water supply planning and the City is exploring it's use for sea level rise; approach was outlined and discussed in [BayCAN's July 2018 meeting](#) (RAND, Deltares, etc.)

San Francisco Climate & Health Profile — [44-page report](#), prepared by SF Department of Public Health with a Center for Disease Control (CDC) grant, identifies local health impacts from climate change, highlights populations and locations that are especially vulnerable, and paves the way for public health adaptation strategies.

SAN LEANDRO

Key contact: Sally Barros, SBarros@sanleandro.org

Resilient San Leandro — Branding of the city’s various adaptation efforts including a very successful [community event](#) in October, partially funded through a grant from the National League of Cities.

Vulnerability Assessment — [30-page assessment](#) by Four Twenty Seven (part of a countywide project) looking at sea level rise, flooding, extreme heat, wildfires and more for San Leandro.

SF Bay Restoration Authority — \$539,000 grant for [4-acre project](#) to convert a wastewater storage basin to an integrated treatment wetland, habitat restoration and sea level rise project.

SOUTH BAY (SAN MATEO, SANTA CLARA)

BURLINGAME

Key contact: Andrea Pappajohn, apappajohn@burlingame.org

Sea Change Burlingame — A high-level assessment on Burlingame’s Bayfront to inform policies and future planning efforts with a specific focus on identifying a range of implementation options. The project will include community engagement with the intent for the community to gain an understanding of the particular issues involved with the Bayfront in Burlingame, and how that understanding can guide “next steps” and future planning efforts.

CUPERTINO

Key contact: Misty Mersich, MistyM@cupertino.org

Climate Action Plan — Climate adaptation is a chapter in the [Climate Action Plan](#). We included climate adaptation planning on the list of FY 19/20 City Council priorities for consideration.

Climate Equity — All Sustainability staff and some City Manager office staff have completed USDN’s Climate Equity training.

Synergies with Emergency Services Coordinator — Working to include climate impacts and science in City’s emergency planning. At the very beginning stage of this process. Emergency Services Coordinator position was recently moved to City Manager Office where Sustainability Office is already located.

DALY CITY

Key contact: Stephen Stolte, sstolte@dalycity.org

Project Green Space — An effort to engage citizens directly in adaptation (which can be a vague term to many). \$50,000 grant from [Cities of Service](#) to use volunteers to [plant trees and install rain gardens](#) through the city to regrow the urban forest. Daly City is the largest city in the county and the 9th most dense city in the country!

PALO ALTO

Key contact: Julie Weiss, Julie.Weiss@CityofPaloAlto.org

Sea Level Rise Policy — DRAFT sea level policy being developed by staff to eventually guide development of full sea level rise plan and key projects. Will go to city council in next few months. (Sought and received BayCAN member review/comment.)

Horizontal Levee Project — The city and ESA recently completed [conceptual designs](#) for a horizontal levee at the Palo Alto Regional Water Quality Control Plant. Three objectives: Restore historic ecotone transition slope habitat along the Bay's shoreline; Adapt to sea level rise by providing a transitional ecotone slope to keep pace with some level of sea level rise; Provide tertiary-treated wastewater to enhance ecological functionality of the horizontal levee.

SAN MATEO COUNTY

Key contact: Jasneet Sharma, jsharma@smcgov.org

Flood and Sea Level Rise Resiliency Agency — [New agency covering 20 cities](#) — first of its kind in the Bay Area — to deal with sea level rise through a countywide approach. The resolution to move this forward has been approved by C/CAG and the Board of Supervisors. The agency would consolidate the work of the SMC Flood Control District (FCD) and Flood Resiliency Program (FRP) and initiate new countywide efforts to address sea level rise, flooding, coastal erosion, and large-scale stormwater infrastructure improvements through integrated regional planning, project implementation, and long-term maintenance.

Climate Ready SMC Climate Collaborative — Leaders from local government, non-profit and community-based organizations, businesses, and other key partners are joining together to form the [Climate Ready San Mateo County \(SMC\) Collaborative](#). The Collaborative will foster collaboration and collectively find solutions to climate change challenges in San Mateo County.

San Mateo County Bayside Wetlands Vulnerability Assessment — Point Blue, in partnership with local stakeholders, is [quantitatively evaluating](#) the broader ecosystem functions and services of tidal marshes along San Mateo County baylands, and modeling how services

are projected to change with sea level rise. The goal is to provide actionable information to support decisions on where to prioritize adaptation efforts.

SAN MATEO (CITY)

Key contact: Andrea Chow, achow@cityofsanmateo.org

The Clean Water Program — A [comprehensive plan](#) to upgrade aging wastewater collection and treatment system with advanced infrastructure and create long-term benefits. This joint effort with City of Foster City aims to enhance reliability of the collection and treatment system, increase capacity to manage heavy flows, comply with regulations, produce better-quality treated water, while aligning with the City’s sustainability goals. Given the location of the proposed new WWTP, it was also important to consider sea level rise scenarios in the design.

Coyote Point Vulnerability Assessment and Adaptation Plan – The City is collaborating with the County on a vulnerability assessment and adaptation plan for Coyote Point, a park and recreation area on the Bay that sits within the City of San Mateo’s boundaries and where the County of San Mateo is the primary landowner.

SANTA CLARA COUNTY

Key contact: Susan Gilbert-Miller, susan.gilbert-miller@ceo.sccgov.org

Silicon Valley 2.0 — Massive [Project](#) supports Santa Clara County with climate risk assessment, adaptation and resilience planning. Developed by the County’s Office of Sustainability in collaboration with many partners and including: Climate Adaptation Guidebook, which provides key strategies identified for climate change preparedness; and Web-based [Climate Change Decision Support Tool](#), which allows users to run customized queries using regionally-specific data to model future climate change impacts and the resulting financial costs.

Climate Outreach — Innovative collaboration with Al Gore’s [Climate Reality Project](#). The County provided information on local issues and projects for Santa Clara county-based, CRP-trained individuals who are making presentations to groups throughout the South Bay. Low-cost way to build public support for adaptation work.

Internal Mapping — Major focus on identifying all relevant adaptation activities that are being conducted or developed in Santa Clara County’s vast structure.

SFO

Key contact: Martha Whetstone, Martha.Whetstone@flysfo.com

Shoreline Protection Project — A multi-year program to address SFO’s risk of flooding, both storm related and from sea level rise. Phase I was a feasibility study, including an assessment of the Airport’s existing shoreline protection, a deficiencies analysis, a seismic analysis, a bathymetry and wave modelling study, and proposed possible flood protection solutions for consideration. Phase II produced the Conceptual Design Report, which developed the recommendations to a conceptual design level including a ranking matrix. The report also developed budget estimates and program schedules for inclusion in SFO capital planning.

REGIONAL NON-PROFIT MEMBERS

BayCAN’s non-profit members have products and services that can be useful to BayCAN local government members. See the selected projects and programs below as examples of these services.

BAY AREA CLEAN WATER AGENCIES (BACWA)

Key contact: David Williams, dwilliams@bacwa.org

Watershed Nutrient Study — As part of the [1st Nutrient Watershed Permit](#), BACWA members collectively funded a 4-year study on the feasibility and cost of reducing nutrient loads to the Bay from wastewater treatment plants. One part of the study looked at treatment plant susceptibility to sea level rise. That study resulted in maps showing all the Bay Area treatment plants and projecting if and when over the next 100 years they would be susceptible to having their facilities impacted by sea level rise.

The 2nd Nutrient Watershed Permit will go into effect in July. We are negotiating the permit with the Water Board now and envision a requirement to investigate the feasibility and costs to implement nature based solutions (i.e. wetlands, horizontal levees) that, if implemented, could have multiple benefits beyond just reduction of nutrients (i.e. coastal resiliency, sea level rise protection, habitat creation, etc.). This study would be completed by 2024.

FOUR TWENTY SEVEN

Key contact: Yoon Kim, ykim@427mt.com

Integrating Climate Risks into Local Planning in Alameda County — Four Twenty Seven developed a streamlined process to support local governments in their efforts to integrate climate risk into key planning efforts: local hazard mitigation plans, general plans, climate action plans, etc. The [Alameda County project](#) blends modeling and data integration with

policy analysis to help cities and counties develop adaptation strategies that address their most critical risks and leverage local strengths and community needs. The case study presents Four Twenty Seven's work for 8 cities in Alameda County, funded by StopWaste, to respond to California's *Senate Bill No. 379 Land Use: General Plan: Safety Element (Jackson)* (SB 379).

SAN FRANCISCO ESTUARY INSTITUTE (SFEI)

Key contact: Warner Chabot, warnerc@sfei.org

Operational Landscape Units for SF Bay (OLUs) — [The OLU Project](#) (funded by the Regional Water Quality Control Board) aims to define practical, science-based landscape units surrounding the shoreline to facilitate a geographically-specific set of integrated adaptation strategies at the appropriate scale to address issues of both the natural and built environment. These strategies include structural and nonstructural measures that address ecosystem, flood risk management, water quality, land-use planning, and social equity goals.

The project is producing a spatial framework for understanding what kind of adaptations could work for real places in the Bay Area to foster a regional, collaborative, data-driven and long-term vision for regional resilience. The approach is gaining momentum as a useful input to sea-level rise planning processes, and is being integrated with vulnerability analyses in several counties. This framework can also provide guidance for the regulatory community, as well as for landscape designers, planners, and engineers. OLU boundaries can be explored in the map viewer of SFEI's [Resilience Atlas](#).

THE NATURE CONSERVANCY: CALIFORNIA CLIMATE PROGRAM

Key contact: Alex Leumer, aleumer@TNC.ORG

Hope for the Coast Campaign — Formally launched at the Global Climate Action Summit in September. First, TNC and the California State Coastal Conservancy collaborated on [Conserving California's Coastal Habitat: A Legacy and Future with Sea Level Rise](#), the first comprehensive vulnerability assessment of California's coastal habitat in the face of sea level rise. The result is a wall-to-wall conservation blueprint for the entire coast, identifying solutions down to a resolution of 1km². Now, TNC is working with individual California agencies to secure specific, on-the-ground commitments to actions they can take within the next 3-5 years to advance this vision. See more on the [Coastal Resilience website](#).

BAYCAN PARTNERS (REGIONAL, STATE & FEDERAL AGENCIES)

BayCAN's formal partners are **regional, state and federal public agencies**. See below for the partner agencies that are participating to-date in BayCAN.

Bay Area Regional Collaborative (BARC)

Key contact: Allison Brooks, Abrooks@bayareametro.gov

Bay Conservation and Development Commission

Key contact: Dana Brechwald, dana.brechwald@bcdca.gov

California Coastal Commission

Key contact: Sara Pfeifer, Sara.Pfeifer@coastal.ca.gov

California Department of Public Health

Key contact: Meredith Milet, Meredith.Milet@cdph.ca.gov

California State Coastal Conservancy

Key contact: Kelly Malinowski, Kelly.Malinowski@scc.ca.gov

California Strategic Growth Council

Key contact: Louise Bedsworth, Louise.Bedsworth@sgc.ca.gov

Caltrans

Key contact, Dick Fahey, dick.fahey@dot.ca.gov

Governor's Office of Planning and Research

Key contact: Nuin-Tara Key, Nuin-Tara.Key@opr.ca.gov

Lawrence Berkeley Lab

Key contact: Andy Jones, adjones@lbl.gov

UC Berkeley (Goldman School)

Key contact: Steve Weissman, sweissman@berkeley.edu