Regional Water Needs Assessment



San Francisco Bay Area Integrated Regional Water Management: Disadvantaged Communities and Tribal Involvement Program





































Association of Ramaytush Ohlone
Him-r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok
Indian People Organizing for Change (IPOC) / Sogorea Te' Land Trust
Muwékma: Ohlone Tribe of the San Francisco Bay Area









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This report is the product of the collective work of many partners, as led by Disadvantaged Communities and Tribes.

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- Contra Costa Resource Conservation District
- Friends of Sausal Creek
- Greenaction for Health and Environmental Justice
- Marin City Climate Resilience and Health Justice
- Marin County Community Development Agency
- Mujeres Empresarias Tomando Acción
- Multicultural Center of Marin
- Nuestra Casa
- Sonoma Ecology Center/Daily Acts
- The Watershed Project

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i. Acknowledgments



Photo: Ben Botkin

Tribal Introduction

In the spirit of restorative justice, the following land acknowledgment statement evolved out of the collaborative efforts of the original Native Peoples of the Bay region. While merely a symbolic statement, it is intended to foster a recognition of the tragic history and resilience of Native Peoples, to affirm their continued presence and contributions, and to remind non-Natives that the land upon which they live, work, and recreate is stolen from the original stewards of the land. Bay Area Native Peoples' responsibility for stewardship continues as it has with each generation since time immemorial.

Please consider that although this statement acknowledges the ancestral and unceded territories of the original Native Peoples of the Bay Area, additional steps are required to move towards meaningful restorative justice. This can be working with Bay Area Tribes toward ecological restoration, building beneficial and constructive relationships, supporting Tribes in restoring their role as land stewards, etc.

You are welcome to use this acknowledgment, as long as you credit the people who created this document, research the specific Tribal community whose territory encompasses your local city and/or county, and work towards the inclusion of those original Native Peoples and support their efforts towards restorative and continued stewardship. By taking these actions, you illustrate your intent to learn about Tribal and colonial history and show respect for and allyship with Native Peoples to ensure that their experiences are centered and valued.



Photo courtesy MTC Archives

Land Acknowledgment Template Collectively Created by Tribal Partners

We acknowledge that we are on the ancestral territory of the (research what Tribal Territory you are on). We recognize that through a violent history of colonization and dispossession, today, as guests, we (or Name of Organization/Agency/Person) benefit(s) from living and working on the traditional homeland of these Native People. We wish to show our respect to them and their ancestors by acknowledging the injustices inherent to this history and by affirming their sovereign rights and their current efforts to achieve restorative justice.

We want to acknowledge the ancestors, elders, and relatives, and we affirm their Sovereign Rights as First Peoples. We acknowledge that the (Name of Organization/Agency/Person) is benefiting from the displacement and dispossession of Native people from their traditional homelands.

Consistent with our values of community, inclusion, and diversity, it is vitally important that we recognize that the land on which we reside is unceded Tribal territory, and also acknowledge and support the Native Peoples that continue to form a crucial part of our San Francisco Bay Area community today. We also acknowledge that Native Peoples remain dedicated to fulfilling their obligation to Creator to care for Mother Earth and all living things and return sacredness to the land, water and air through the restoration of traditional knowledge and stewardship led by the original SF Bay Areas Tribe(s) of the project location throughout the nine counties of the SF Bay Area region and beyond.

Thank you.

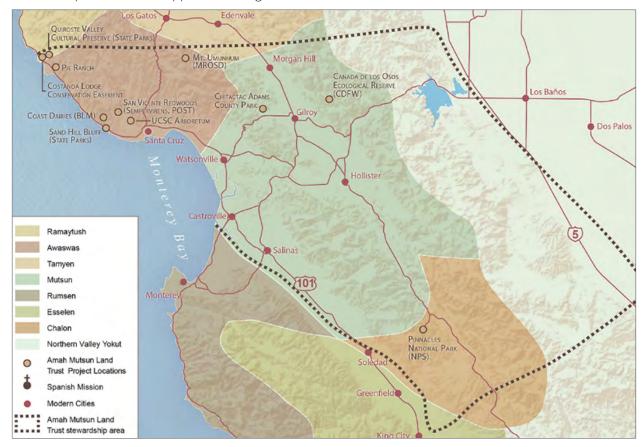


A member of the Amah Mutsun Land Trust's Native Stewardship Corps harvesting tule.

Photo courtesy of the Amah Mutsun Land Trust

Amah Mutsun Tribal Band Land Acknowledgment Statement

Popeloutchom, the ancestral and unceded territory of the Amah Mutsun, encompasses lands and waters within regions of present-day Santa Clara, Santa Cruz, Monterey, and San Benito counties. Today this territory is represented and stewarded by the Amah Mutsun Tribal Band, whose ancestors were taken to Mission Santa Cruz and Mission San Juan Bautista during Spanish colonization of the Central Coast. Currently, the Amah Mutsun are working hard to fulfill their obligation to Creator to care for Mother Earth and all living things and return sacredness to the land through the restoration of traditional knowledge and stewardship. This work is supported through the Amah Mutsun Land Trust.



SOURCE: The stewardship area of the Amah Mutsun Land Trust.

Association of Ramaytush Ohlone Land Acknowledgment Statement

We acknowledge that we are on the unceded ancestral homeland of the Ramaytush Ohlone who are the original inhabitants of the San Francisco Peninsula. As the indigenous stewards of this land and in accordance with their traditions, the Ramaytush Ohlone have never ceded, lost, nor forgotten their responsibilities as the caretakers of this place, as well as for all peoples who reside in their traditional territory. As guests, we recognize that we benefit from living and working on their traditional homeland. We wish to pay our respects by acknowledging the ancestors, elders and relatives of the Ramaytush Community and by affirming their sovereign rights as First Peoples.



SOURCE: Ancestral territory map provided by the Association of Ramaytush Ohlone

Him-rⁿ Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok Land Acknowledgment

My name is Ruth Orta, I am an Ohlone elder from the Him- r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok. I was born in Newark, California August 20th 1934, and I still live in Newark. My mother whose name was Trina Marine Ruano, she was the first generation of our native people who had non-native blood in her, she was born in Pleasanton on June 16, 1902 and her mother Avalina Cornate was full blooded native from Pleasanton in 1863. Therefore, my connection to this land is through my mom and grandmother. I've seen these lands go from an excess of water, fish in the creek, plants, and trees all over it was abundant. I knew I belonged to this part of the world because my mother told us we were native, "this land is our land." I am really concerned on what is happening to it today, we have no water in the creeks, streams, and rivers. Water is important to our native land, life, plants, and animals also the air we breathe. It's important for me to stay connected to the land and protect for my four generations that I have and beyond.



This photo is of Ruth Orta's mother, Trina Marine Ruano, in 1934, who pushed her to always acknowledge and be proud of her Native American Heritage roots.

Photo courtesy of Him-r^n Ohlone



Ruth Orta at Coyote Hills Regional Park presenting how her ancestors would prepare the acorns to eat and what each of the tools on the table were used for.

Photo courtesy of Him-r^n Ohlone

In the early 1990s, my oldest daughter, Ramona Garibay and I became involved with the Coyote Hills Regional Park. Under the leadership of Bev Ortiz, we formed the Ohlone Intern Program. Throughout the program we learned from other Tribes how our ancestors lived. I learned how to prepare and cook the acorn while Ramona learned how to harvest the Soaproot plant and create a Soaproot brush. Ramona has two daughters who also participated in the program. Sabrina Garibay makes cordage out of dogbane. Rita Garabay learned how to create jewelry out of abalone shell and pine nuts. Over time, my two youngest grandchildren Brenda and Davis Morris, as well as Sabrina's two children and Alfred Caldron have all become involved with jewelry making. Our family has been involved for 26 years with Practicing our cultural Practices and presenting them to the general public at the Annual Ohlone Gathering every year for 26 years and continuing.



Ruth's oldest daughter Ramona Garibay as she gathers the Soaproot plant at Coyote Hills Regional Park and prepares it to create a Soaproot brush.

Photo courtesy of Him-r^n Ohlone; Scott Braley Photography

Muwékma Ohlone Tribal Land Acknowledgment

For The City and Counties of San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, and Surrounding Towns Within the Ethnohistoric Yelamu/Aramai, Ssalson, Lamchin Ramaytush Ohlone-Speaking, the Puichon Thámien Ohlone-Speaking, and the Carquin, Huchiun, Jalquin/Yrgin, and Tuibun/Causen Chochenyo Ohlone-Speaking Ancestral Muwékma Ohlone Tribal Territory.

Horše tuuxi! (Hor-sheh troo-hee) We recognize that we are located on the ethnohistoric territory of the Yelamu/Aramai, Ssalson and Lamchin Ramaytush Ohlone-Speaking tribal groups of the San Francisco Peninsula whom were intermarried with the Puichon Thámien Ohlone-Speaking tribal groups of San Mateo and Santa Clara Counties; as well as the Yelamu/Aramai Ramaytush who were also intermarried with the East Bay Carquin, Huchiun, Jalquin/Yrgin and Tuibun/Causen Chochenyo Ohlone-Speaking tribal groups of Alameda and Contra Costa counties. This greater Bay Region's aboriginal territory includes the ancestral and legally unceded lands of the ancestors of the Muwékma Ohlone Tribe of the San Francisco Bay Area whom were missionized into the three Bay Area Missions San Francisco, Santa Clara, and San Jose, and who are the successors of the historic, sovereign, federally recognized Verona Band of Alameda County. Muwékma means La Gente – The People in their traditional Chochenyo-Ohlone language.

This land was and continues to be of great historic significance to the Muwékma Ohlone Tribe, and other familial descendants of the Verona Band whose ancestors appear on the 1900, 1905-06, 1910 Indian census, Bureau of Indian Affairs (BIA) correspondences and annual reports, BIA Indian Boarding Schools, were members of the **Bay Area California Indian Council** (1940s-1950s), and who also enrolled with the BIA from 1928-32, 1948-57, and 1968-71, as part of the 1928 California Indian Jurisdictional Act. Additionally, Muwékma men, and later women, served with honor in all branches of the U.S. Armed Forces from WWI, WWII, Korea, Vietnam, Desert Storm, Iraq and are still serving today.

We recognize that every citizen residing within the greater Bay Area has, and continues to benefit from, the use and occupation of the Tribe's aboriginal **holše warep** (hol-sheh wah-rehp) – **beautiful land**. Consistent with our values of community, inclusion, and diversity, we have a responsibility to acknowledge our relationship to Native Peoples. As members of the Bay Area community, it is vitally important that we not only recognize the history of the land on which we reside, but also, acknowledge that the Muwékma Ohlone People, with an enrolled Bureau of Indian Affairs documented membership of over 600 Tribal members, are alive and flourishing members within the greater San Francisco Bay Area communities today.

Aho!



Muwékma Ohlone Tribal Members pictured at the 26th Annual Gathering of Ohlone Peoples at Coyote Hills Regional Park in Fremont, CA on Sunday, October 6, 2019. It was a celebration of the living cultures and traditional skills of Ohlone Peoples.

Photo courtesy of Muwékma Ohlone Tribal Band



Group picture of Muwékma Ohlone Tribal Members at the Muwékma Ohlone Tribe Town Hall Meeting on Saturday, November 3, 2018. Tribal Members are holding the Muwékma flag. The meeting was held at the Clubhouse Ballroom at Stanford University. The Town Hall meeting provided an update to our Tribal Members on various issues, projects, and activities the Tribe is involved in. The Muwékma Tribal Council hosted the meeting and provided lunch for the members. We also socialized and held a raffle. It was a very good gathering with many enrolled Tribal members and lineages represented at the meeting.

Photo courtesy of Muwékma Ohlone Tribal Band



The Muwékma Ohlone Tribe of the San Francisco Bay Area set up an information and cultural exhibit booth to share information about the Tribe. We also conducted a mini tule boat cultural project demonstration with the public. The Muwékma Ohlone Tribe also offered a Welcoming Declaration to our ancestral homeland and provided a land acknowledgment. The photo represents the Tribal Members who sang the Muwékma Welcoming song as part of our Welcoming Declaration. Our Tribal Youth also helped run the pole and hoop game.

Photo courtesy of Muwékma Ohlone Tribal Band



Photo: Karl Nielsen

DACTI Program Team Land Acknowledgment

We acknowledge that the San Francisco Bay Area Funding Area of the Integrated Regional Water Management Program is on the ancestral territory of the Amah Mutsun Tribal Band, Association of Ramaytush Ohlone, Confederated Villages of Lisjan, Him-r^n Ohlone, Jalquin, Saclan Tribe, Coast Miwok, Plains Miwok, Bay Miwok, Muwékma Ohlone of the San Francisco Bay, Karkin and Chochenyo Ohlone speaking people, Yokuts, Patwin, Wappo, and Tamien Nations Tribes. We recognize that through a violent history of colonization and dispossession, today, as guests, the DACTIP Project Team benefits from living and working on the traditional homeland of these Native People. We wish to show our respect to them and their ancestors by acknowledging the injustices inherent to this history and by affirming their sovereign rights and their current efforts to achieve restorative justice. We want to acknowledge the ancestors, elders, and relatives, and we affirm their Sovereign Rights as First Peoples. We acknowledge that the DACTIP Project Team is benefiting from the displacement and dispossession of Native People from their traditional homelands. Consistent with our values of community, inclusion, and diversity it is vitally important that we recognize that the land on which we reside is unceded Tribal territory, and also acknowledge and support the Native Peoples that continue to form a crucial part of our San Francisco Bay Area community today. We also acknowledge that Native Peoples remain dedicated to fulfilling their obligation to Creator to care for Mother Earth and all living things and return sacredness to the land, water and air through the restoration of traditional knowledge and stewardship led by the original San Francisco Bay Area Tribes of the project location throughout the nine counties of the San Francisco Bay Area region and beyond.

DACTI Program Team Racial Equity Acknowledgment

Institutional and systemic racism, injustice, and resulting inequities from discriminatory policy-making have had severe impacts on the lives, livelihoods, and health of African American, Hispanic and Latino, Asian, Pacific Islander, and Indigenous communities in the U.S., California, and the Bay Area. The Disadvantaged Community and Tribal Involvement Program (DACTIP) recognizes that each of these communities, which are not monoliths within themselves, have experienced racism and racist violence, oppression, and disenfranchisement in unique ways. It is of the utmost importance to understand each community's different histories, experiences, and needs and to prioritize allocating funding specific to those communities most affected by racist processes. Different communities should lead the way on how to best do that for their context and experience.

It is also extremely important, especially in the context of a public agency administering funding for community-based work to address inequities, to explicitly acknowledge that government agencies have played and continue to play an active role in developing, implementing, and perpetuating discriminatory and exclusive policies and practices against African American, Hispanic and Latino, Asian, Pacific Islander, and Indigenous people. Inequity has been explicitly and systematically baked into the way many government agencies undertake planning processes and allocate grant funding, as explored over the course of this report.

This acknowledgment also necessarily implies that government agencies have an immediate responsibility to work to address the inequities they have played a lead role in creating. They need to listen to, engage with, and follow the lead of African American, Hispanic and Latino, Asian, Pacific Islander, and Indigenous communities in dismantling these inequities. Government agencies and other decision-making bodies need to center restorative, participatory, and community-led processes to support communities in both problem identification and solutions development. More funding, time, and support is necessary to begin to address historic injustices that still impact many communities, such as income and wealth inequality due to discriminatory practices including redlining, poorer health outcomes due to toxic waste and other environmental hazards located in their communities, and limited access to receive resources and upgraded infrastructure, among many other injustices. Most of all, agencies need to first listen to and follow communities' lead. The most affected communities should be partners in setting funding priorities so that funding and resources are allocated for meaningful efforts and support communities in developing their own solutions. The current funding structure often necessitates that communities apply for many sources of funding to piece together holistic projects, and often historically disenfranchised and underserved communities must compete against one another for the small amounts of funding to address these pressing needs.

The DACTI Program Team is committed to continuing its efforts to listen to, understand, and work with the Bay Area's African American, Latino and Hispanic, Asian, Pacific Islander, Indigenous and frontline communities to confront and address the legacy of structural and environmental injustice in order to create an equitable future for those that have been structurally and systemically marginalized. We have a long way to go, but we are committed to becoming better partners to frontline communities throughout the Bay Area and beyond, and implementing the Best Practices put forward by community and Tribal partners and repeated in this report to bring equity to our region. This includes an advocacy and education role with other decision-making bodies to ensure these groups work with communities at the outset of planning processes, as well as seeking additional funding to support community-led processes and projects.

Organizational Acknowledgments

DACTI Program Team

The DACTI Program Team would like to recognize and thank the Community and Tribal partners and other key experts who led the needs assessment processes with their communities and provided feedback and expertise at different stages of the program. While this is not a comprehensive list, the following outreach partner organizations and individuals have guided this document:

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- Kaitlyn Byrne (City of Hayward)
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Thank you to DWR and Proposition 1 for making this effort possible.

San Francisco Estuary Partnership

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- San Francisco Estuary Institute (SFEI)
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- Miguel A.Osorio and the Metropolitan Transportation Commission's Graphics team
- Lotus Water and their Community Benefits Program
- Woodard & Curran
- Environmental Justice Coalition for Water

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Association of Ramaytush Ohlone

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City of Hayward

Chabot College and Rising Sun Center for Opportunity

Contra Costa Resource Conservation District

PITTSBURG

El Pueblo Housing Healthy Heart Institute, Pittsburg High School Club POWER, Los Medanos College Hyphae Club, City of Pittsburg

BAY POINT

Eastern Contra Costa Regional Group, East County Resource Collaborative, Ambrose Recreation & Park District, Bay Point Garden Club

ANTIOCH

Antioch First 5 Contra Costa Parents' Group, Antioch High School Earth Team, C Street Neighborhood Watch, City of Antioch

Downtown Streets Team

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Friends of Sausal Creek (FOSC)

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Greenaction for Health and Environmental Justice

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Multicultural Center of Marin

In alignment with our mission: "The Multicultural Center of Marin provides culturally appropriate resources and opportunities in a safe environment to empower and inspire diverse communities to build an inclusive and equitable county they want to live in."

We want to acknowledge and thank James Muller, Josh Bradt, Maddie Duda and Ryan Hirano for supporting our efforts to engage the community in resolving the several water-related issues that were identified. I believe they earnestly listen to the needs of the community and respond accordingly. The Tap Water Quality Testing project is a perfect example of this.

Napa Suscol Intertribal Council

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Nuestra Casa de East Palo Alto

The students of the Environmental Justice Parent Academy

Sonoma Ecology Center/Daily Acts

San Francisco Estuary Partnership, La Luz, Teen Services, Sonoma Valley Community Health Center, North Bay Organizing Project, Vía Esperanza, Altamira Middle School, Redwood Empire Food Bank, McDowell Elementary School, and Santa Rosa Junior College, Springs Municipal Advisory Council, Hannah Boys Center, and Burbank Housing

The Watershed Project

San Francisco Estuary Partnership, Healthy Richmond, Neighborhood House of North Richmond, Verde Elementary School, Urban Tilth, Chesley Mutual Housing Complex, Eren Samano, Contra Costa County, City of Richmond, East Bay Municipal Utility District, East Bay Regional Park District, West County Wastewater, Jeanine Strickland, Wildcat-San Pablo Creeks Watershed Council, Multicultural Senior Center, North Richmond Municipal Advisory Committee, Contra Costa County Supervisor John Gioia, Community Housing Development Corporation

Again, thank you!

ii. Key Acronyms

AB 52	Assembly Bill 52: Native Americans: California Environmental Quality Act (2014)
AB 685	Assembly Bill 685: The Human Right to Water in California
ABAG	Association of Bay Area Governments
ADU	Accessory Dwelling Unit
APP	All Positives Possible
BART	Bay Area Rapid Transit
вунр	Bayview Hunters Point
CARB	California Air Resources Board
СС	Coordinating Committee
CIEA	California Indian Environmental Alliance
CCRC	Canal Community Resilience Council
CCRCD	Contra Costa Resource Conservation District
CDPH	California Department of Public Health
СМЕ	Continuing Medical Education
CWA	Clean Water Act
cws	Community Water System
CYES	California Youth Energy Services
DAC	Disadvantaged Community
DACI	Disadvantaged Community Involvement
DACTIP	Disadvantaged Community and Tribal Involvement Program
DAO	Daily Acts Organization
DE	Department of Education
DOJ	Department of Justice
DWR	Department of Water Resources
DST	Downtown Streets Team
DTSC	Department of Toxic Substances Control

EBEW	East Bay Energy Watch	
EBRPD	East Bay Regional Park District	
EBMUD	East Bay Municipal Utility District	
EJ	Environmental Justice	
EJCW	Environmental Justice Coalition for Water	
EOC	The East Oakland Collective	
EONI	East Oakland Neighborhoods Initiative	
EPA	Environmental Protection Agency	
FOSC	Friends of Sausal Creek	
FEMA	Federal Emergency Management Agency	
GIS	Geographic Information Systems	
HAZWOPER	Hazardous Waste Operation and Emergency Response	
HHS	Health and Human Services	
HUD	Housing and Urban Development	
IPOC	Indian People Organizing for Change	
IRWM	Integrated Regional Water Management	
ISPSA	Brower Dellums Institute for Sustainable Policy Studies and Action	
IVAN	Identifying Violations Affecting Neighborhoods	
LEAP	Latino Environmental Action Project	
MCCDA	Marin County Community Development Agency	
MCCRHJ	Marin City Climate Resilience and Health Justice	
МСМ	Multicultural Center of Marin	
МЕТА	Mujeres Empresarias Tomando Acción	
МНІ	Median Household Income	
MMWD	Marin Municipal Water District	
МТС	Metropolitan Transportation Commission	
NCRP	North Coast Resource Partnership	
NGO	Non-Governmental Organization	
NMWD	North Marin Water District	

ОЕННА	Office of Environmental Health Hazard Assessment
O&M	Operation and Maintenance
РСВ	Polychlorinated Biphenyls
PG&E	Pacific Gas & Electric Company
PII	Personally Identifiable Information
Prop 1	Proposition 1: The Water Quality, Supply, and Infrastructure Improvement Act of 2014
PSP	Project Solicitation Package
RIA	Rural Investment Area
RFP	Request for Proposals
RFQ	Request for Qualifications
RYES	Rising Sun Center for Opportunity
SB 200	Senate Bill 200: Drinking water (2019)
SEC	Sonoma Ecology Center
SF	San Francisco
SFEI	San Francisco Estuary Institute
SFEP	San Francisco Estuary Partnership
SFPUC	San Francisco Public Utilities Commission
SFRWS	San Francisco Regional Water System
SPRAC	Sobrante Park Resident Action Council
SRO	Single Room Occupancy
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
тсс	Transformative Climate Communities
TWP	The Watershed Project
TWQ	Tap Water Quality
WASH	Water Access for Sanitation and Health
VA	Veteran Affairs
voc	Volatile Organic Compound
YUCA	Youth United for Community Action

1. Executive Summary



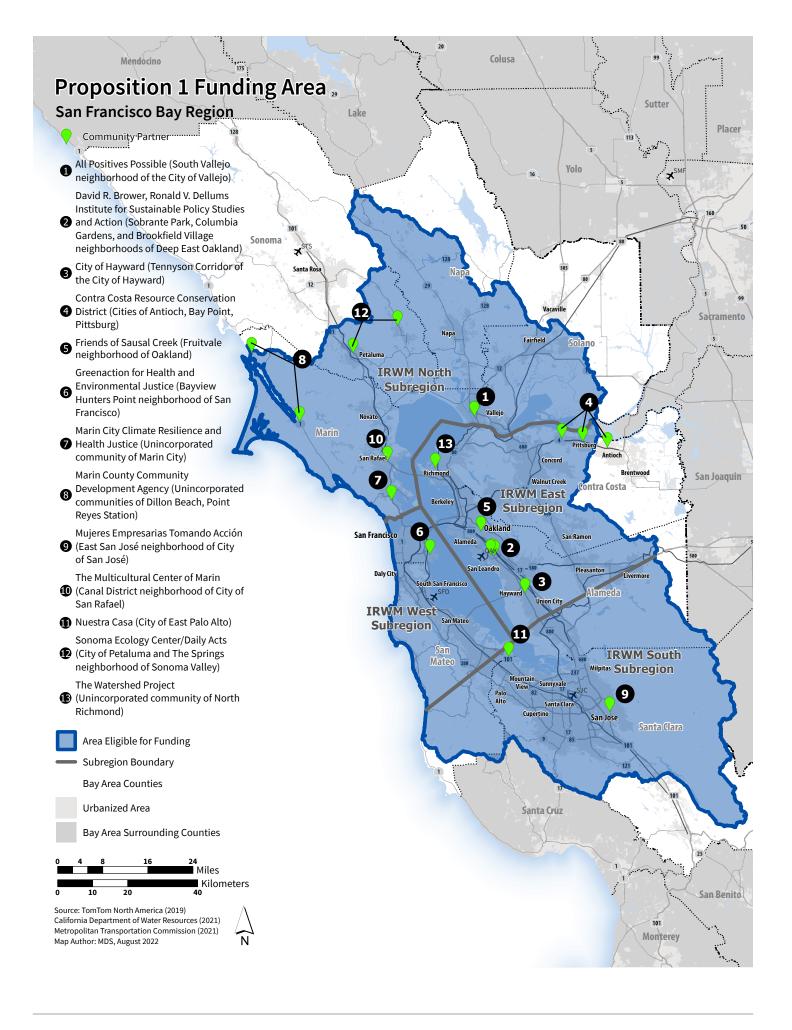
Photo courtesy Friends of Sausal Creek

Introduction

The Integrated Regional Water Management (IRWM) Program, administered by the California Department of Water Resources (DWR), has historically provided funding for regionally driven implementation projects that help meet the long-term water needs of the state, such as recycled water, water conservation, flood protection infrastructure, habitat restoration, and water supply projects. In recent years, recognizing that local and regional water planning and decision-making often overlook Disadvantaged Community-specific needs, there have been efforts to incorporate projects that benefit Disadvantaged Communities into IRWM grant funding rounds. Such efforts have involved setting aside a percentage of funding specifically for these projects, and giving extra evaluation criteria points to, or waiving certain local match and permitting requirements for, projects that benefit Disadvantaged Communities. However, IRWM projects that have in the past claimed to benefit Disadvantaged Communities have often been initiated or fully developed from outside of the communities they were intended to benefit. In addition, these efforts did not explicitly include Tribes.

In 2016, the Department of Water Resources (DWR) granted \$6,500,000 to the San Francisco Bay Funding Area of the IRWM Program as part of the statewide Disadvantaged Community Involvement (DACI) Program. The broad mandate to include Disadvantaged Communities in IRWM planning was implemented differently by the 12 IRWM Funding Areas throughout California. The San Francisco Bay Funding Area, which covers the majority of the nine Bay Area counties, expanded DACI to Disadvantaged Community and Tribal Involvement Program (DACTI Program) to explicitly include Tribes.

The overall goal of the DACTI Program in the Bay Area was to support community-led problem-definition and solutions development processes and to create lasting social infrastructure to integrate Disadvantaged Communities and Tribes into water-related decision-making and planning. The DACTI Program in the Bay Area partnered with community-based organizations, nonprofits, Tribal organizations, and agencies with existing local Disadvantaged Community and Tribal relationships to design and conduct outreach and needs assessments to empower those Disadvantaged Communities and Tribes to define their own water-related challenges and solutions.



This report gives an overview of the individual needs assessments conducted by Disadvantaged Community and Tribal partners between 2017 and 2021, as well as a synthesis of findings and recommendations for the San Francisco Bay Area IRWM Program region. It also includes findings and recommendations from a survey conducted in partnership with two direct service providers to understand Water, Sanitation, and Hygiene (WASH) access from the perspectives of people experiencing homelessness. One intended outcome of this work is to support the development of projects from Disadvantaged Communities and Tribes to address identified issues that could be proposed in future IRWM funding rounds and other funding sources.

To include people experiencing homelessness in the Needs Assessment process, the DACTI Program partnered with:

- · Downtown Streets Team, and
- VOICES Youth Programs (VOICES)

Disadvantaged Community Outreach Partners who completed Needs Assessments in their communities include:

- All Positives Possible (South Vallejo neighborhood of the City of Vallejo)
- City of Hayward (Tennyson Corridor of the City of Hayward)
- Contra Costa Resource Conservation District (Cities of Antioch, Pittsburg, Bay Point)
- Friends of Sausal Creek (Fruitvale neighborhood of Oakland)
- Greenaction for Health and Environmental Justice (Bayview Hunters Point neighborhood of San Francisco)
- Marin City Climate Resilience and Health Justice (Unincorporated community of Marin City)
- Marin County Community Development Agency (Unincorporated communities of Dillon Beach and Point Reyes Station)
- Mujeres Empresarias Tomando Acción (East San Jose neighborhood of City of San Jose)
- The Multicultural Center of Marin (Canal District neighborhood of City of San Rafael)
- Nuestra Casa (City of East Palo Alto)
- David R. Brower, Ronald V. Dellums Institute for Sustainable Policy Studies and Action (Sobrante Park, Columbia Gardens, and Brookfield Village neighborhoods of Deep East Oakland)
- Sonoma Ecology Center/Daily Acts (City of Petaluma and The Springs neighborhood of Sonoma Valley)
- The Watershed Project (Unincorporated community of North Richmond)

California Indian Environmental Alliance (CIEA) partnered with Tribes and Tribal Organizations through all nine counties of the San Francisco Bay Area IRWM to complete the Tribal needs assessment. The Tribes and Tribal Organizations who participated in this process include:

- Amah Mutsun Tribal Band/ Amah Mutsun Land Trust
- Association of Ramaytush Ohlone
- Him-r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok
- Indian People Organizing for Change/ Sogorea Te' Land Trust
- Muwékma Ohlone Tribe of the San Francisco Bay Area,
- Napa Suscol Intertribal Council.



Photo courtesy Downtown Streets Team

Needs Assessment with People Experiencing Homelessness

Background

The California Water Code acknowledges that "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes" (State Water Resources Control Board, 2022). The human right to water extends to all Californians, recognizing that water is necessary for life and integral to health. However, this right has not been realized equally: over one million people in California still lack access to clean drinking water at home, with many more at risk of not being able to pay their monthly water bill (Al Jazeera America, 2015; Mack & Wrase, 2017). People experiencing homelessness – who make up an estimated population of more than 160,000 on any given day in the state of California – have some of the least access to Water, Sanitation, and Hygiene, or WASH (Verbyla et al., 2021; United States Interagency Council on Homelessness, 2022).

To ensure that the voices and perspectives of people experiencing homelessness were included in and elevated through the Bay Area DACTI Program, a survey was developed in collaboration with partners around the state to characterize access to WASH and understand how gaps could be improved from the perspectives of people experiencing homelessness. This peer-to-peer survey was administered to nearly 650 people who had previously experienced or were currently experiencing homelessness from April to July of 2021 in Napa, Marin, and Solano counties, the City and County of San Francisco, and the cities of San Jose, Hayward, and Oakland by Downtown Streets Team (DST) and Voices Youth Programs (VOICES) team members who were or are experiencing homelessness, and who represent many different identities.

VOICES conducted 195 (191 long and 4 short) surveys with people, primarily youth, experiencing homelessness in Alameda, San Francisco, Contra Costa, Solano, Sonoma, and Napa counties. DST conducted 453 (154 long and 299 short) surveys with people, primarily adults, experiencing homelessness in Marin County and the cities of San Jose, Oakland, San Francisco, and Hayward. Approximately 22 additional surveys were started, but information other than demographic data was not collected. Both groups began their outreach for this effort with people they serve and with whom they have ongoing relationships. They then expanded their outreach to people experiencing homelessness at shelters, encampments, mobile showers, churches that provide services, and other areas. In total, 648 surveys were completed, 345 of which were long surveys and 303 were short surveys.

This section of the Regional Needs Assessment report is a synthesis of interviews with people experiencing homelessness to highlight their current lack of access to WASH and elevate their voices in planning processes, as well as to inform next steps toward achieving water as a human right. Additional efforts are needed to understand the scope and settings of the issue to inform and develop meaningful local solutions.

Survey Findings

Results from the assessment show that the human right to water has not been met for people experiencing homelessness, who have difficulty accessing water for drinking, sanitation, and hygiene purposes.

How access to water for drinking, sanitation, and hygiene purposes could be improved from the perspective of people experiencing homelessness

Participants offered many recommendations for improving their access to WASH. These recommendations fell into the following broad categories:

- Develop additional facilities
- Improve and expand services and access at existing facilities
- Maintain facilities, including regular cleaning, keep them well-stocked, and make sure they are safe
- Make necessary water facilities and services reduced-cost or free
- Ensure services are coordinated and well-publicized so people know they exist, as well as where and when they can access them
- Continue access for those who have it
- Ensure housing for all

Many of the recommendations participants provided are interrelated, and participants frequently explicitly highlighted these connections. While additional facilities on their own are a step in the right direction, to meaningfully meet existing needs, these facilities must be in an accessible location, well-maintained and stocked with necessary supplies, safe, free or affordable, and available throughout the day and night. All recommendations should be taken together to holistically address and improve gaps in access to water for people experiencing homelessness. Service providers should also coordinate with one another to cover the most areas at the most times.

Staff from DST and VOICES provided the perspective that for people experiencing homelessness, answering the survey questions that asked for suggestions to improve access to water for different services may have been a challenge. Some respondents may not have the information or experience to consider possibilities beyond existing conditions. Given this, many responses about how access could be improved were within the confines of existing experiences and services: more services, better maintenance, re-opening facilities that were closed due to COVID or other reasons, etc. Some participants simply said, "more access." This directness is very powerful: we do not need imagination to understand what to do to improve the current situation, only the will to create positive change and to allocate resources to meet existing needs.

Recommendations

The following recommendations were formulated to address current gaps in WASH access based on insights from participants experiencing homelessness. Some recommendations were formulated with the additional expertise of direct service providers who contributed insights into the current funding and policy limitations that need to be addressed to realize the human right to water for all.

- Municipalities must formally recognize water as a human right and invest in infrastructure and services to provide safe and accessible water for drinking, sanitation, and hygiene purposes for all people.
- Decision-makers at every level should ensure that all planning commissions and policy development
 processes relating to homelessness meaningfully include people with current or past lived experience
 with homelessness.
- County and municipal governments should directly engage people experiencing homelessness and service providers in their area on how to tailor and implement the broad recommendations provided through this and other efforts regarding how to improve WASH access. This includes exactly which services and facilities would be the most useful in different areas.
- The Point in Time Count should identify one or two questions to add to their yearly or bi-yearly assessment to gather more information on access to WASH to inform service provision and facility development.
- Future research should further investigate how demographic factors, including living situation, and water access are correlated for different people experiencing homelessness to best prioritize those who have the least access.
- Include people experiencing homelessness in the framework and data tool to assess the status of water
 quality, accessibility, and affordability across the state. In 2019, Gov. Newsom signed SB 200 to provide
 funding to "provide safe drinking water in every California community, for every Californian."
- Funding agencies should work directly with service providers to critically examine funding and service
 guidelines and identify and address elements that make it hard for service providers to be reimbursed
 for providing meaningful WASH services. These funding agencies include HUD, state agencies, and
 local governments.
- More general fund dollars should be allocated for people experiencing homelessness. If HUD policies do
 not change, cities and counties should take responsibility to match restrictive HUD dollars with general
 funds through the Request for Proposals (RFP) and contracting process.
- Requests for Proposals (RFPs) to provide WASH facilities such as restrooms and handwashing stations should include maintenance costs and safety measures.
- Funding agencies, researchers, and local stakeholders in all sectors should explore ways to leverage non-traditional funding sources to provide necessary services for people experiencing homelessness.
- Municipalities should rethink how funding related to homelessness is spent. Cities and counties spend
 enormous amounts of money every month and every year on removing encampments and making
 public spaces inhospitable to those experiencing homelessness. Funding strategies need to be reformed
 to be more sustainable and to center human health and dignity.

Some participants expressed the desire to be part of their own solutions—to participate in the maintenance of restrooms and other service facilities. Several participants also explicitly expressed wanting to take care of their needs in a way that is friendly to the environment. Stipends for people experiencing homelessness should be provided for maintaining restrooms and other inclusive solutions that create safe, social centers and invest in the community in more humane and sustainable ways.

Conclusion

The goal of this effort was to elevate the experiences and voices of people experiencing homelessness into planning processes. The survey responses provide insight from people experiencing homelessness about how they are accessing water for drinking, sanitation, and hygiene purposes. Their recommendations for improvements provide a roadmap for future interventions to address existing gaps.

Overall, the results of this assessment demonstrate that the human right to water has not been fully realized in the Bay Area for people experiencing homelessness. While this information is specific to the Bay Area and to those who contributed responses, it could also be applicable to unhoused people in other communities across the U.S.

Respondents with access to a home or shelter, even intermittently, or other access to a building with plumbing through relationships, school, or work generally reported more access to water and were less reliant on public spaces or donations, services, and the kindness of others to meet their basic water needs. These findings support the conclusion that homelessness is ultimately the primary barrier to water access for people experiencing homelessness. Therefore, the most effective long-term solution to meet the human right to water for people experiencing homelessness is permanent housing with adequate water and facilities for drinking, hygiene, and sanitation. In the meantime, water remains a human right, and interim solutions to meet these basic needs for people experiencing homelessness must be implemented and expanded.

The most critical next step should be specific follow-up directly with people experiencing homelessness in each locality to understand where and which of these broad facilities and service recommendations are most helpful in different locations, and how these needs differ by living situation, demographics, and other factors. In tandem, any policy and funding restrictions that currently create barriers to filling existing gaps must be critically examined and reformed.



Amah Mutsun Tribal Band Youth summer camp outing to Pescadero Beach, part of Amah Mutsun Tribal Band's traditional territories. The camp teaches Tribal youth (in bright blue shirts) their Native culture, including language and plants.

Photo courtesy of Alex Tavizon.

Disadvantaged Community and Tribal Partner Regional Findings

The Bay Area DACTI Program, in collaboration with Disadvantaged Community and Tribal Partners, used a community- and Tribal-specific strategy to develop tailored needs assessment surveys for each location. Despite the differences in survey design and methodology, the results showed consistently similar priorities for water management across locations, in particular:

- Drinking Water: including water quality, affordability, and related infrastructure
- Flooding: including flooding as a result of storms, overflowing creeks and storm drains, and sea level rise
- Trash and Litter: including dumping sites and general litter
- Contamination and Pollution: including from industrial sites and other point sources as well as nonpoint sources
- Green Space: including quantity, accessibility, and quality of recreational green space

At the local level, the problems experienced by Disadvantaged Communities and Tribes could be seen as isolated incidents but when reviewed holistically, they present a powerful picture of the systemic effects of decades of disinvestment in these communities. These priorities intersect with one another, often as the result of decades of systemic inequality and injustice. Most importantly, all of these issues identified by Disadvantaged Communities and Tribes in the Bay are intimately connected to public health and safety.



Drinking Water

Many Disadvantaged Communities and Tribes in the Bay Area reported concerns about the safety and quality of drinking water from the tap. Some expressed concern about the role that aging infrastructure plays in water quality, and concern about the lack of agency renters have to address infrastructure issues. Many community members reported relying on bottled water for cooking and drinking.

In addition to drinking water quality, many Disadvantaged Communities and Tribes also mentioned concerns about water affordability, which has been highlighted by the COVID-19 pandemic. The unaffordability of water necessitates calculated trade-offs with other needs for those on tight budgets. This is exacerbated for groups with concerns about the quality of their tap water who, in addition to a water bill, buy bottled water for cooking or drinking.



Flooding

Many Disadvantaged Communities and Tribes in the Bay Area reported concerns about flooding related to storm surges, sea level rise, and groundwater rise. Flooding also causes a variety of other issues related to:

1) Public Health: Flood waters mix with contaminated materials that communities and Tribes are exposed to, or must wade through.

- 2) Transportation Access: Flooding cuts off access to homes, community centers, grocery stores, doctor's offices, and other important areas.
- 3) Infrastructure: Flooding damages or destroys critical infrastructure, including utilities such as electricity and gas, which can endanger public health.

Many Disadvantaged Communities and Tribes also express concern over trash, illegal dumping and storm drains clogging with debris during flood events.



|| 🄼 Trash and Litter

Many Disadvantaged Communities and Tribes in the Bay Area report concerns about illegal dumping and trash in streets that ends up in storm drains and surrounding water bodies. This concern was often linked to crime, disinvestment, and lack of services as well as to housing insecurity. Trash and litter that backs up storm drains can exacerbate flooding issues and result in Disadvantaged Communities and Tribal members wading through contaminated standing water.

Waterway pollution and contamination – including oil, plastic, and paint - was further detailed under this problem, as Disadvantaged Communities and Tribal members connected the street level trash with their concerns with the pollution and contamination in creeks and other waterways. One community member summed up the health effect on the community, "Fish eat the plastic, and then we eat the fish, and the other animals and everyone gets sick...".



Industrial Contamination

Many Disadvantaged Communities and Tribes in the Bay Area report concerns about industrial and hazardous contamination, and how this contamination and pollution can get into waterways, and ultimately into peoples' bodies through exposure and/or ingestion.

There are many sources of hazardous and industrial contamination and pollution in communities: old gas stations, dry cleaners, and highways contaminate groundwater and pollute stormwater runoff, exposing Disadvantaged Communities and Tribal members to toxins in waterways and possibly leaching into drinking water supplies.

Clogged storm drains from trash and illegal dumping can cause contaminated runoff and flood waters to back up in Disadvantaged Communities and Tribal areas, resulting in residents wading through these contaminated waters to access important services such as grocery stores and work.



Green Space

Disadvantaged Communities and Tribes in the Bay Area report concerns about lack of access to green space and nature for recreation. Many Disadvantaged Communities and Tribal members felt that there were few well-lit, safe, nearby green spaces where children and families can recreate. There is also limited access to existing spaces: folks don't know where to go or how to get there, or parks that are considered safe are too far away. This includes bodies of water such as creeks, waterways, and the ocean.

Many Disadvantaged Communities and Tribes that participated in the Bay Area DACTI Program have historically been excluded from green public spaces, and/or have been the last to receive green infrastructure improvements. Disadvantaged Communities and Tribal members mentioned lack of trees and plants along sidewalks in their areas. Lack of greenery is also connected to lower physical and mental health.

More on these regional priorities, including highlights from around the region, can be found in the Regional Connections chapter on page 291.

Best Practices for Making Grant Processes Inclusive

Disadvantaged Communities and Tribes in the Bay Area have experienced institutional discrimination, disinvestment, and exclusion, and the resulting inequities have had severe health and water impacts, as explored over the course of this report. This inequity has also been implicitly and systematically baked into the way many government agencies undertake planning processes and allocate grant funding.

Throughout the DACTI Program needs assessment process, different Disadvantaged Communities and Tribes reiterated many of the same issues they have experienced with previous grant programs and planning processes and put forward recommendations for addressing them. These best practices are not new, but because they have not been sufficiently implemented or addressed, they are restated in the report. Issues Disadvantaged Communities and Tribes have experienced and recommendations for addressing them are detailed in the Best Practices section of this report, and summarized below:

Address Funding Insufficiency and Inequity

Not enough funding goes to programs that directly benefit Disadvantaged Communities and Tribes. The funding that is available often goes to outside groups, doesn't cover necessities for grassroots work such as 1) stable funding for full time positions, 2) stipends for community members to pay them for their time and expertise, or 3) food and childcare, and there is not much funding available for planning or other activities to cover the gap between identifying needs and developing a shovel-ready implementation project. Additionally, funding programs often aren't structured to address inequities as they exist, and some eligibility metrics are exclusive of Disadvantaged Communities and Tribes who would qualify as Disadvantaged by many other metrics. Government agencies and grantmaking institutions should:

Increase the amount of funding for disadvantaged, frontline, and marginalized communities and for Tribes

Begin grant development processes with Disadvantaged Communities and Tribes and support them in leading these programs to ensure funding is allocated to meaningfully address issues

Target grant funding to increase economic impact specifically in Disadvantaged Communities and Tribes

Allow expenses that increase Disadvantaged Communities and Tribal engagement, including food and child care

Ensure Disadvantaged Communities and Tribes can access awarded funding expeditiously through initiatives including advanced payment

Proactively support Disadvantaged Communities and Tribes in accessing funding through providing technical support, longer application lead times, and streamlining application processes

Ensure grant programs are inclusive by ensuring qualifying requirements do not unintentionally disqualify some Disadvantaged Communities and Tribes

Build Relationships and Earn Trust

Government agencies have not supported Disadvantaged Communities and Tribes to lead the way on engagement with and improvements in their communities. Those involved in decision-making and planning, however well-intentioned, rarely come from the Disadvantaged Communities and Tribes who experience the impacts of the proposed solutions and resulting projects. Many efforts led by outside entities presuppose needs, desired solutions, and preferred ways of engaging. Additionally, technical and outside perspectives are often prioritized over the local expertise and lived experience of Disadvantaged Community and Tribal members in defining the problem and developing solutions. Outside entities will often be paid to engage with and gather ideas from Disadvantaged Communities and Tribes without understanding or addressing the historic context and barriers to participation, and without taking the time and resources to build meaningful partnerships and trust. Finally, many conversations with Outreach Partners have highlighted the importance of explicitly acknowledging the different histories, experiences, and needs of each Disadvantaged Community or Tribe, as well as the importance of self-determination and self-description, rather than the state or other outside actors projecting labels onto these Disadvantaged Communities and Tribes.

Government agencies and other outside entities can work to rectify these past practices with the following:

Take the time to learn about the unique histories and challenges of Disadvantaged Communities and Tribes you are working with, don't overpromise, and invest your time to build trust

Do not apply labels: Disadvantaged Communities and Tribes have the right to self determination

Respect Disadvantaged Community and Tribal expertise: it is critical to success

Step back and support by following a Disadvantaged Communities or Tribes' lead

Understand and address barriers to participation, including ensuring materials are translated into relevant languages; that food, childcare, and interpretation are provided at meetings; and outreach materials are disseminated widely, not just through traditional channels

Work with Disadvantaged Community and Tribal partners to understand how to engage, develop engagement tools and surveys, and hold meetings in their communities

Follow Tribes' lead on tribal-specific engagement, including ensuring meaningful partnership and endorsement from Tribal leadership

In addition to elevating Best Practices for bringing equity from Disadvantaged Community and Tribal Partners, the report includes administrative lessons learned on funding allocation and distribution, contracting, and invoicing, as well as the amount of time and dedication it takes to engage in this work, for the benefit of other agencies who are engaged in or are working to engage in meaningfully including Disadvantaged Communities and Tribes in planning processes.

Next Steps

The needs assessment is one step in understanding and elevating water-related issues from the perspective of the Disadvantaged Communities and Tribes who experience them. Important next steps to follow-up on specific priorities can be found in the Disadvantaged Community and Tribal sections of this report. These next steps are moving forward quickly as Disadvantaged Communities and Tribes work to develop projects for IRWM Implementation and other funding sources to address identified needs.

Important alongside project development work is further capacity building and technical assistance to ensure Disadvantaged Communities and Tribes can participate in water-related decision-making and planning processes.

DACTI Program: Next Steps

Following the results of the needs assessments, the Disadvantaged Community and Tribal Outreach Partners identified these priority areas for the remainder of the DACTI Program funding:

Tap Water Quality Testing Program

One concern that was expressed by participants from nearly every Disadvantaged Community and Tribe who participated in the DACTI Program was a distrust in tap water. The DACTI Program worked with Disadvantaged Community and Tribal outreach partners to launch a grant funded tap water quality testing effort throughout the Bay Area. Community, Tribal members, and Tribal Organizations were able to test their water and collect detailed feedback on water quality experiences and perceptions to provide comparative information for future educational and advocacy efforts. In addition to supporting Disadvantaged Communities and Tribes in the development and implementation of their tap water quality testing programs, the DACTI Program is developing educational information regarding tap water quality, water sources, and in-home filtration options to address unsafe or flawed tap water. A roll-up of these findings and lessons learned will be summarized in a future report.

Grantwriting

Disadvantaged Community and Tribal partners also expressed an interest in grant-writing support, particularly to apply for Round 2 of the Proposition 1 IRWM Implementation Funding. The DACTI Program is working to provide individualized grant-writing support to each of the partners, which includes direct grant writing and application review with technical experts. A collated list of funding opportunities is maintained by the DACTI Program Team along with a weekly email highlighting upcoming funding webinars and workshops. These resources will serve as additional supports to help Disadvantaged Community and Tribal partners identify funding opportunities outside of IRWM to address identified issues.

Capacity-building

Capacity building is a key facet of the DACTI Program to equip Disadvantaged Community and Tribal partners with the knowledge and skills needed to continue participation. The DACTI Program Team created a survey of capacity building needs heard through conversations with Disadvantaged Community and Tribal partners were then asked to rank their needs. The top identified needs were workshops with DWR to understand project eligibility and local project sponsor expectations, graphics/conceptual design support, engineering/design-build support, and an online collaborative forum. The DACTI Program Team launched a shared Google Drive, the DACTI Program Collaborative Space, to serve as the online collaborative forum and a resource sharing space. The DACTI Program Collaborative Space will continue to be available to partners past the end of the grant and the DACTI Program Team is continuing work to load resources into the Drive to address other needs.



Photo courtesy of The Watershed Project

Beyond the DACTI Program

While the DACTI Program is limited in duration and scope, the needs and priorities identified through this assessment remain urgent and unaddressed. The results of this assessment should guide water planning efforts throughout the region. Any implementation should include the following:

Adopting/advocating for wide implementation of Best Practices elevated by Disadvantaged Community and Tribal Partners

The DACTI Program Team encourages the wide implementation of the Best Practices for Equitable and Accessible Grant Programs that have been highlighted again and again by Disadvantaged Community and Tribal partners. The Best Practices section lays out issues Disadvantaged Communities and Tribes have experienced with grant programs and planning processes, and best practices for making these processes more equitable.

Continued support after the DACTI Program funding ends

Currently, there is no funding in the pipeline for IRWM after Proposition 1 funding for IRWM Implementation round 2 and the DACTI Program ends.

Through the DACTI Program, the Bay Area IRWM Coordinating Committee governance structure has been updated to include Tribal and Disadvantaged Community members, and the evaluation criteria are being updated in partnership with Disadvantaged Community and Tribal members to ensure projects that meaningfully benefit Disadvantaged Communities and Tribes are funded. These advances will, however, only be able to continue if there is additional funding through IRWM. The Bay Area IRWM is advocating for the continuation of funding for IRWM to support the development of these important relationships and programs.

This Regional Needs Assessment, and the individual needs assessments of the Disadvantaged Community and Tribal Outreach Partners, represent just one step to identify and highlight the impacts of historic and current inequities systemically embedded in regional water management in the Bay Area. The real work will happen when regional leaders, government agencies, and utilities address these impacts under the leadership of Disadvantaged Communities and Tribes.

2. Introduction

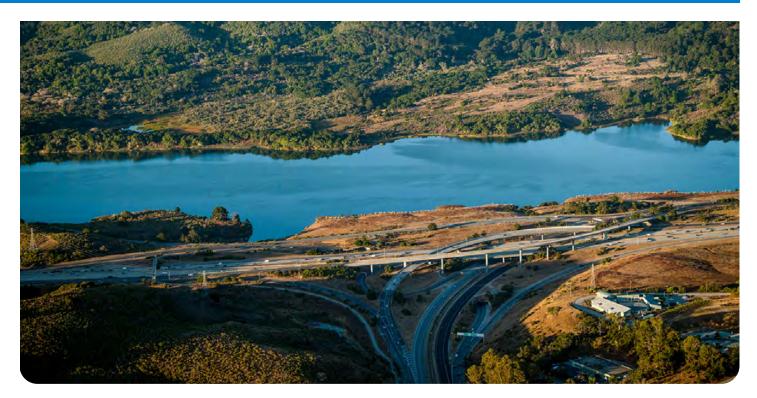


Photo: Karl Nielsen

Background

The Integrated Regional Water Management (IRWM) Program, administered by the California Department of Water Resources (DWR), has historically provided funding for regionally driven implementation projects that help meet the long-term water needs of the state, such as recycled water, water conservation, flood protection infrastructure, habitat restoration, and water supply projects. In recent years, recognizing that local and regional water planning and decision-making often overlook Disadvantaged Community-specific needs, there have been efforts to include and elevate projects that benefit Disadvantaged Communities into IRWM grant funding rounds. Such efforts have involved setting aside a percentage of funding specifically for these projects, and giving extra evaluation criteria points to, or waiving certain local match and permitting requirements for, projects that benefit Disadvantaged Communities. However, these efforts did not explicitly include Tribes, and IRWM projects that have in the past claimed to benefit Disadvantaged Communities have been initiated or fully developed from outside of the communities they were intended to benefit.

On November 4, 2014, California voters approved the Water Quality, Supply, and Infrastructure Improvement Act (Proposition 1). Proposition 1 authorized \$510 million to the Integrated Regional Water Management (IRWM) Program. 10% of this funding (\$51 million) was allocated across the 12 IRWM Funding Areas to the Disadvantaged Community Involvement (DACI) Program, the first round of outreach funding administered through IRWM. The DACI Program was designed to ensure the involvement of disadvantaged communities, economically distressed areas, and underrepresented communities (collectively referred to as Disadvantaged Communities) in IRWM planning efforts. The remainder of Proposition 1 funding for IRWM was allocated for implementation projects.

San Francisco Bay Area DACTI Program

In 2016, the Department of Water Resources (DWR) granted \$6,500,000 to the San Francisco Bay Funding Area of the IRWM Program as part of the statewide DACI Program. The broad mandate to include Disadvantaged Communities in IRWM planning was implemented differently by the 12 IRWM Funding Areas throughout California. The San Francisco Bay Funding Area, which covers the majority of the nine Bay Area counties, expanded DACI to Disadvantaged Community and Tribal Involvement Program (DACTI Program) to explicitly include Tribes.

Structure

The San Francisco Bay DACTI Program Manager and Grant Administrator—initially, the Environmental Justice Coalition for Water (EJCW)—partnered with the California Indian Environmental Alliance (CIEA) and selected a suite of Outreach Partners to directly receive funding to conduct outreach and community-based needs assessments with Disadvantaged Communities and Tribes around the Bay Area. This funding structure was maintained when the program management and administration transitioned to the San Francisco Estuary Partnership (SFEP) in 2019. The Outreach Partners, consisting of community-based organizations, nonprofits, Tribal organizations, and agencies with existing relationships with Disadvantaged Communities and Tribes throughout the Bay Area, then designed and conducted outreach and assessments to empower those Disadvantaged Communities and Tribes to define their own water-related challenges and solutions.

Goals

Despite many decades of advocacy by environmental justice leaders around the world, Disadvantaged Community and Tribal expertise and lived experience rarely drive project development in water resources management. Those involved in decision-making and planning, however well-intentioned, rarely come from the communities and Tribes who experience the impacts of the proposed solutions and resulting projects, despite these groups having deeply embedded knowledge and experience to identify their own needs and lead project development. The very definition of the problem, and the process to address it, often gets developed by outside agencies without the meaningful inclusion or leadership of the people most affected. Most often, communities and Tribes are brought in to give feedback on an already established project, long after the initial stages of development. These projects then may claim to benefit the Disadvantaged Community or Tribe, while in reality, the resulting solution misses the mark on addressing real, community-identified needs.

As one example, Marin City experiences chronic flooding from stormwater and lack of drainage and is vulnerable to groundwater rise and sea level rise. In 2014, 2017, and 2021 these factors combined to flood Highway 101 and block the only entry to and exit from Marin City. One of the proposed solutions was to raise the freeway, which solves the problem of flooding for highway commuters but does nothing to address the flooding, lack of drainage, and resulting public health problems for the Marin City community. In contrast, Marin City Climate Resilience and Health Justice, a community-based organization made up of Marin City community members and allies, has led efforts to re-imagine and revitalize the drainage pond next to Highway 101 as a multi-benefit site for flood mitigation, restored wetland habitat, and much needed recreational outdoor green space in the community. Processes such as this that are led by Disadvantaged Communities and Tribes can ensure that issues are identified and addressed in ways that are meaningful to the people most impacted.



Photo: San Francisco Estuary Partnership

Intended Outcomes

The intended outcomes of the DACTI Program in the Bay Area are to:

- 1. Identify, understand, and assess water-related issues and challenges and assets in the Bay Area from the perspective of Disadvantaged Communities and Tribes, including the impacts of these challenges and community preferences on how these issues should be addressed.
- 2. Connect Disadvantaged Communities, Tribes, and organizations with each other, building networks and campaigns to advocate for equitable inclusion of Disadvantaged Community and Tribal voices in water-related policy and planning decision-making processes.
- 3. Inform the creation of lasting social infrastructure to elevate Disadvantaged Community and Tribal voices. This includes connecting Disadvantaged Communities and Tribes to relevant agents of change (e.g., local water utilities and municipal governments) who can support them in addressing identified challenges and implement desired changes, as well as developing formal ways to include Disadvantaged Communities and Tribes in governance processes, ensuring that Disadvantaged Community and Tribal voices and priorities are part of future water-related decision-making processes.
- 4. Support the capacity of community-based organizations, Tribes, and Disadvantaged Community members to participate in IRWM and other water-related planning and policy decision-making processes and promote community-led change.
- 5. Collaboratively develop solutions to Disadvantaged Community and Tribal-identified water-related issues by supporting Disadvantaged Communities and Tribes to develop priority projects that can be funded in the next IRWM implementation round as well as other sources.
- 6. Connect Tribes and Disadvantaged Communities to additional funding sources to address their water-related priorities outside of the IRWM Grant Program.
- 7. Derive and amplify Best Practices from the needs assessment process so that this work can be understood by entities striving to address inequities in planning and policy decision-making processes, especially in Disadvantaged and underrepresented Communities and Tribes.

- 8. Educate the public about the particular impacts of flooding, sea level rise, water quality and availability and the related issues that will be exacerbated by climate change as they are faced by Disadvantaged Communities and Tribes.
- 9. Recognize, respect, and amplify Disadvantaged Community and Tribal self-determination and Tribal sovereignty and support Disadvantaged Communities and the Bay Area California Tribes to accurately represent their neighborhoods and Traditional Lands.
- 10. Support the First Peoples of the lands in accurately representing their Traditional Lands and providing Traditional Ecological Knowledge throughout the IRWM as they feel appropriate. Support Disadvantaged Communities in providing their lived expertise.

Needs Assessments

The needs assessments, undertaken by Outreach Partners through the DACTI Program, are integral to these overall goals by supporting Disadvantaged Communities and Tribes in defining their own water-related challenges and priorities. Understanding the issues that Disadvantaged Communities and Tribes face, as well as the systemic and historical barriers to participation in decision-making processes, is a necessary step in addressing these issues and creating lasting and resilient social infrastructure.

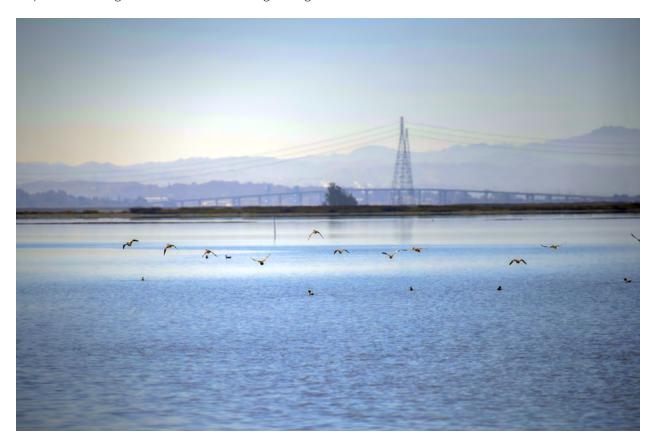


Photo: Karl Nielsen

Needs Assessment Structure and Process

Outreach Partners: Disadvantaged Communities and Tribes and their Locations

Disadvantaged Community Partners

In 2017, to carry out the Regional Needs Assessment with Disadvantaged Community partners, EJCW originally partnered with and passed funding through to 14 groups (Outreach Partners) working within more than 20 Disadvantaged Communities in the Bay Area, to do outreach and needs assessments.

These groups included:

- All Positives Possible (South Vallejo neighborhood of the City of Vallejo)
- City of Hayward (Tennyson Corridor of the City of Hayward)
- Contra Costa Resource Conservation District (Cities of Antioch, Pittsburg, Bay Point)
- David R. Brower, Ronald V. Dellums Institute for Sustainable Policy Studies and Action (Sobrante Park, Columbia Gardens, and Brookfield Village neighborhoods of Deep East Oakland)
- Friends of Sausal Creek (Fruitvale neighborhood of Oakland)
- Greenaction for Health and Environmental Justice (Bayview Hunters Point neighborhood of San Francisco)
- Keep Coyote Creek Beautiful (City of San Jose along Coyote Creek)
- Marin County Community Development Agency (Unincorporated communities of Dillon Beach, Point Reyes Station)
- Resilient Communities Initiative (Regionwide)
- Shore Up Marin (Unincorporated community of Marin City; the Canal District neighborhood of the City of San Rafael)
- Sonoma Ecology Center/Daily Acts (City of Petaluma and the Springs neighborhood of Sonoma Valley)
- The Watershed Project/San Francisco Estuary Partnership (Unincorporated community of North Richmond)
- Youth United for Community Action/Nuestra Casa (City of East Palo Alto)



Photo courtesy of Contra Costa Resource Conservation District

Most of these original Disadvantaged Community Outreach Partners were selected through a Request for Qualifications (RFQ) process administered by the Bay Area IRWM Region Coordinating Committee. Three of these partners (in South Vallejo, East Palo Alto, Antioch/Pittsburg/Bay Point) were identified through an initial "gap analysis" of high priority Disadvantaged Communities not covered by the initial 10 Disadvantaged Community Outreach Partners selected through the RFQ process.

Since the inception of the grant, the group of Disadvantaged Community Outreach Partners has changed. Nuestra Casa took over their collaborative effort with Youth United for Community Action (YUCA) in East Palo Alto. In the transfer of Grant Administration and Program Management from EJCW to SFEP in 2019, Keep Coyote Creek Beautiful and Resilient Communities Initiative discontinued their involvement in the Program. SFEP stepped out of its role as an Outreach Partner with The Watershed Project to be Project Administrator. Shore Up Marin split into two groups, each focused on one of the two Disadvantaged Communities they were working in: the Multicultural Center of Marin in the Canal District of San Rafael, and Marin City Climate Justice and Health Justice (Previously Shore Up Marin City) in Marin City. Additionally, prior to the transfer, All Positives Possible and the City of Hayward completed their needs assessment activities. After SFEP took the role of Grant Administrator and Program Manager, a new South Bay partner, Mujeres Empresarias Tomando Acción (META), was recruited to ensure representation of Disadvantaged Communities from all sub-areas of the Bay (East, South, West, North).

The final list of Disadvantaged Community Outreach Partners that completed Needs Assessments is:

- All Positives Possible (South Vallejo neighborhood of the City of Vallejo)
- City of Hayward (Tennyson Corridor of the City of Hayward)
- Contra Costa Resource Conservation District (Cities of Antioch, Pittsburg, Bay Point)
- David R. Brower, Ronald V. Dellums Institute for Sustainable Policy Studies and Action (Sobrante Park, Columbia Gardens, and Brookfield Village neighborhoods of Deep East Oakland)

- Friends of Sausal Creek (Fruitvale neighborhood of Oakland)
- Greenaction for Health and Environmental Justice (Bayview Hunters Point neighborhood of San Francisco)
- Marin City Climate Resilience and Health Justice (Marin City)
- Marin County Community Development Agency (Unincorporated communities of Dillon Beach, Point Reyes Station)
- Mujeres Empresarias Tomando Acción (East San Jose neighborhood of the City of San Jose)
- The Multicultural Center of Marin (Canal District of San Rafael)
- Nuestra Casa (East Palo Alto)
- Sonoma Ecology Center/Daily Acts (City of Petaluma and the Springs neighborhood of Sonoma Valley)
- The Watershed Project/San Francisco Estuary Partnership (Unincorporated community of North Richmond)



Photo courtesy of The Watershed Project

Tribal Partners

California Indian Environmental Alliance (CIEA) worked with the following six Tribal partners to develop the Tribal needs assessment survey:

- Amah Mutsun Tribal Band/ Amah Mutsun Land Trust
- Association of Ramaytush Ohlone
- Him-r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok
- Indian People Organizing for Change (IPOC) / Sogorea Te' Land Trust
- Muwékma Ohlone Tribe of the San Francisco Bay Area
- Napa Suscol Intertribal Council

Five of these Tribal partners administered the needs assessment surveys to their Tribal communities, including:

- Amah Mutsun Tribal Band/ Amah Mutsun Land Trust
- · Association of Ramaytush Ohlone
- Him-r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok
- Muwékma Ohlone Tribe of the San Francisco Bay Area
- Napa Suscol Intertribal Council
- The condensed Tribal Partner Needs Assessment section is an initial assessment of the results of the
 targeted Tribal Needs Assessment surveys, follow-up interviews and meetings that were completed from
 April 24, 2019 through December 1, 2020 by CIEA. The full San Francisco Bay Area Funding Area
 (SF Bay Area) Tribal Needs Assessment Report is available in Appendix A.

CIEA acknowledges that the San Francisco Bay is home to many Tribes. During initial outreach, CIEA reached out to all Tribes with ties to historical use and subsequent management responsibilities in the Bay Area, including Federated Indians of Graton Rancheria, Lytton Band of Pomo Indians, Kashia Band of Pomo Indians of the Stewarts Point Rancheria, and Mishewal Wappo of Alexander Valley. Some of these Tribes expressed interest in participating but due to capacity issues were not able to join. Others wanted to provide other Tribes within the San Francisco Bay Area the opportunity to expand and grow their capacity but wanted to be kept informed as the work continues.



Photo courtesy of Alex Tavizon

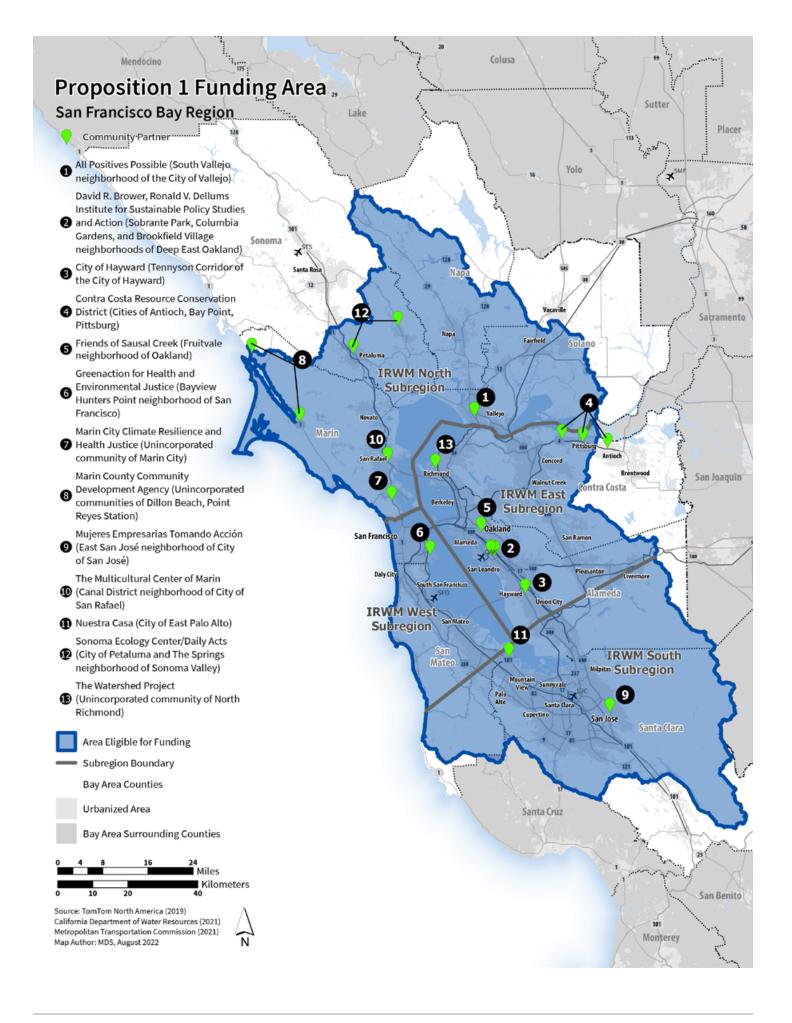




Photo: Peter Beeler

People Experiencing Homelessness

Homelessness was brought up in conversations with Disadvantaged Community members through Outreach Partners' needs assessment processes as a concern relating to water quality, environmental impacts, and safety. The Bay Area DACTI Program wanted to ensure the inclusion and elevate the direct perspectives of people experiencing homelessness, one of the communities most often overlooked in planning processes, even in efforts meant to benefit the most underserved communities.

To do so, the Bay Area DACTI Program partnered with two direct service providers, Downtown Streets Team and VOICES Youth Programs (VOICES), to conduct a survey to understand challenges to access to water for drinking, sanitation, and hygiene services from the perspectives of people experiencing homelessness. Downtown Streets Team and VOICES team members who are or were experiencing homelessness, and who represent many different identities, conducted peer-to-peer surveys with over 650 people experiencing homelessness in Napa County, Marin County, Solano County, and the cities of San Jose, San Francisco, Hayward, and Oakland.

Follow Up

Since the completion of the needs assessments, the San Francisco Bay Funding Area DACTI Program has been supporting Outreach Partners in developing Disadvantaged Community and Tribal-driven projects to address water-related issues that were prioritized in the needs assessments for the next rounds of IRWM Implementation funding and other funding sources.

Existing and Concurrent Equity and Environmental Justice Efforts

The DACTI Program is one of many programs and processes earmarked to benefit Disadvantaged and Underrepresented Communities and Tribes, and many local groups are already leading work to improve conditions in their communities. The DACTI Program is focused specifically on water, and there are many parallel programs that focus on overlapping issues, such as climate change. Appendix B demonstrates a snapshot of the many efforts that Outreach Partners are involved in or aware of, although it is not an exhaustive list of equity or EJ efforts taking place in the Bay Area.

Too often, parallel efforts are undertaken in silos in the same Disadvantaged Communities and Tribes, without awareness of or coordination with each other. Many of these efforts often ask for similar information, forcing community members and Tribes to repeatedly provide local context and perspective. Many Disadvantaged Communities experience fatigue from contributing to many uncoordinated efforts which mine community knowledge without acknowledgment or compensation and with little to no follow-up.

It was particularly important for this program to coordinate with existing efforts because water intersects with most other issues, including housing, health, and climate change. As an example, the DACTI Program collaborated with the Bay Area Regional Health Inequities Initiative (BARHII), the Bay Conservation and Development Commission (BCDC), and Nuestra Casa to hold listening sessions for both groups' efforts around Environmental Justice (EJ) and equity in East Palo Alto. However, there is a long way to go.

New programs or projects should continue to build on previously collected information and existing efforts, and agencies should coordinate with one another. Coordinated efforts allow agencies to learn from each other and make use of community and Tribal members' limited time. As part of these processes, agencies should ensure there is follow-up and follow-through on all commitments.

Ultimately, funding programs need to base funding priorities on Disadvantaged Community- and Tribal-led priorities, and directly fund community and Tribal members for their time and expertise. This will ensure funding meaningfully addresses current and future needs. Too often, the burden falls on Disadvantaged Communities and Tribes to apply for many types of funding to address interconnected and intersectional issues.

Definitions of Disadvantaged Community and Eligibility for Funding

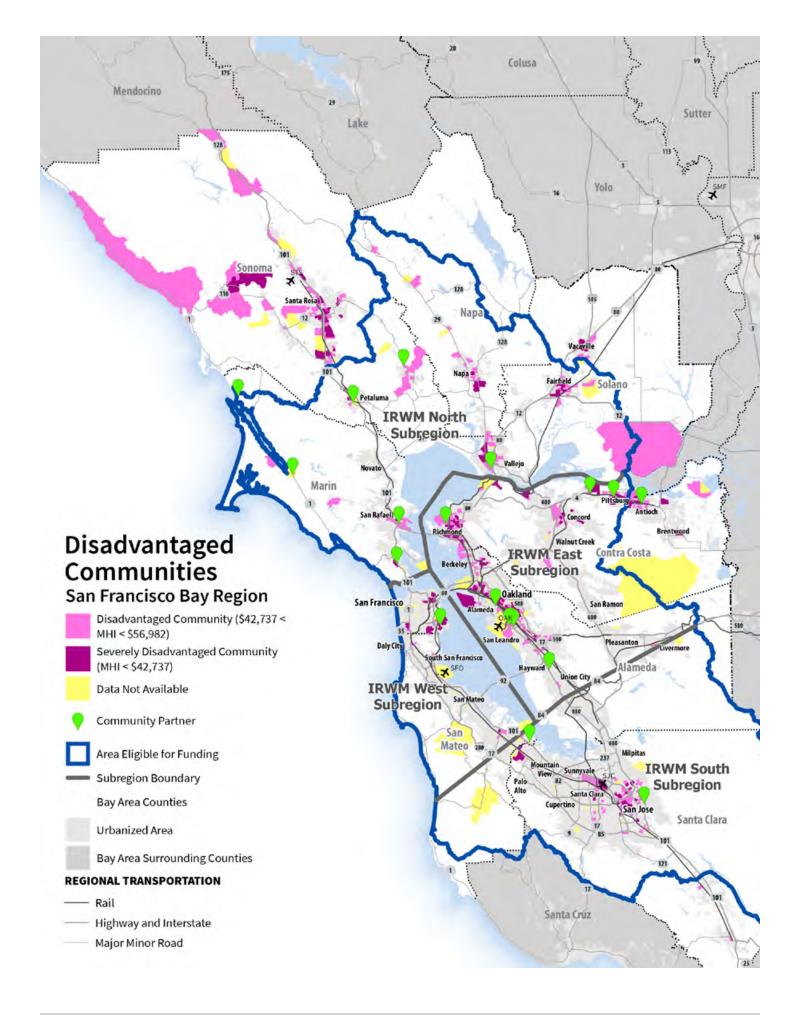
The definition Proposition 1 uses for a Disadvantaged Community is below 80% of the state median household income (MHI). This report acknowledges the one-dimensional nature of defining disadvantages only in terms of income for the purposes of prioritizing funding allocation. This is particularly true in densely populated places like the Bay Area where there is extreme wealth in close proximity to deprivation. Depending on how dividing lines are drawn around different geographic areas, the median income of an area might be significantly higher than the majority of the population or might not reflect cumulative burdens such as historic discrimination and other environmental challenges, including lack of drainage infrastructure and flooding.

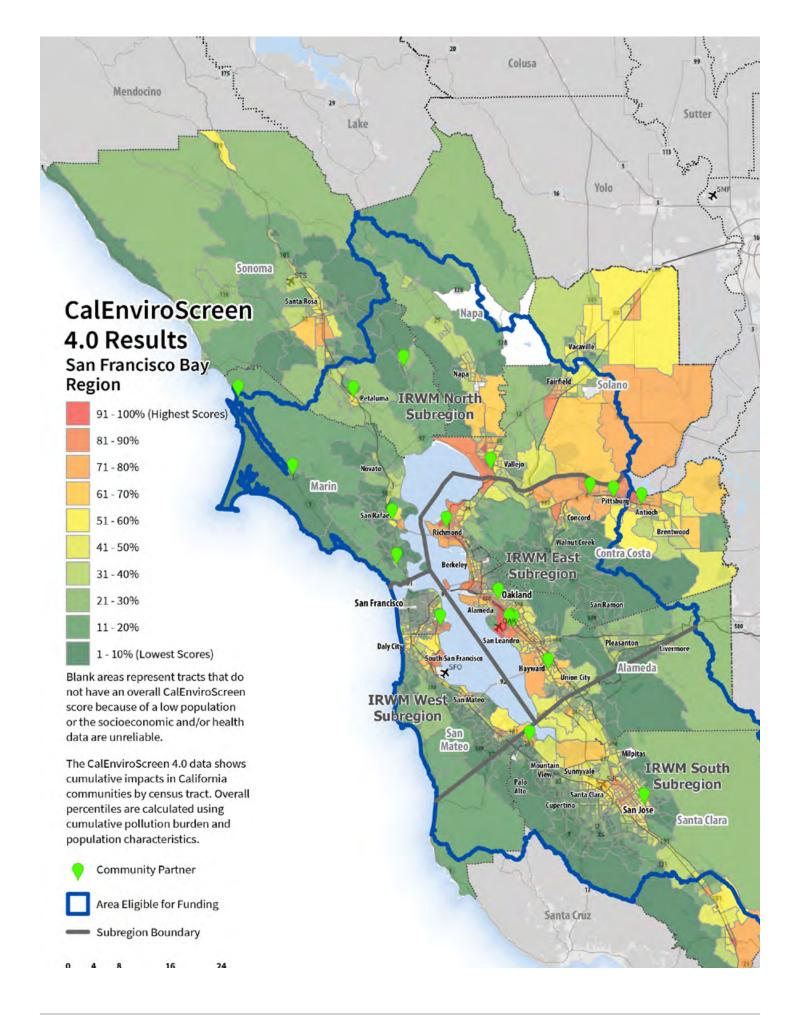
Poignantly, over the course of the DACTI Program in the Bay Area, the data used to calculate MHI has been updated from further American Community Survey (ACS) and census data. Some communities that qualified as a Disadvantaged Community based on income at the start of the DACTI Program no longer do because their average area income has moved from below to just above the cut-off, and therefore no longer qualify for Disadvantaged Community-specific funding. Additionally, Tribes are not recognized by the American Community Survey if they are not federally recognized. This prevents these Tribes from being identified as below median household income, making them ineligible for prioritized funding allocation.

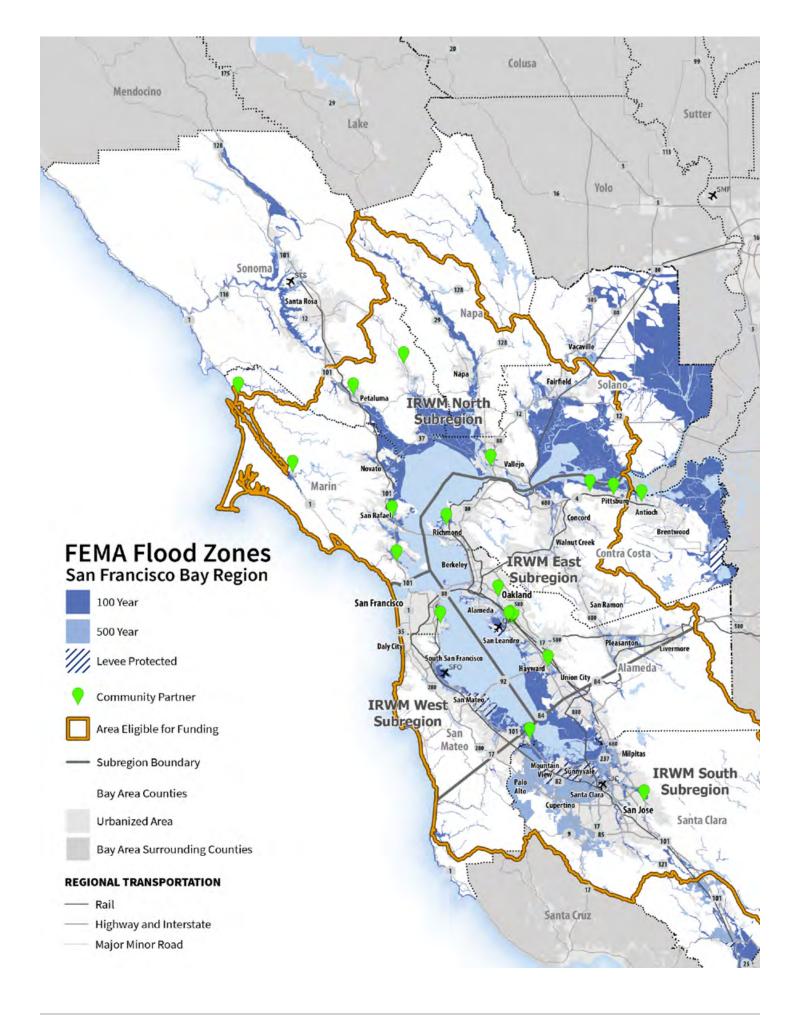
CalEnviroScreen and other tools like the Distressed Communities Index provide a more robust measure of the cumulative burdens Disadvantaged Communities and Tribes in California face from pollution, discrimination, disinvestment, and other outside forces that are not captured solely by income. However, these tools are not without their limitations. They aggregate data, and therefore do not capture impacts that are only evident at a smaller geographic scale than a census tract or county. They do not include all environmental hazards and burdens such as sea level rise and flood risk, or some important socioeconomic factors such as average lifespan. They also do not include Tribes at all, which ignores the Tribal sovereignty of both government-recognized and non-recognized Tribes. As a result of these shortcomings, many Disadvantaged Communities and Tribes are excluded from the funding programs that use these tools for eligibility requirements. Many of these issues stem from an apparent disconnect between decision-makers and those developing these tools and the intended beneficiaries.



Photo courtesy of Brower Dellums Institute of Sustainable Policy Studies and Action







The Disadvantaged Communities and Tribes that participated in the DACTI Program have experienced discrimination and disinvestment in unique ways, resulting in diverse perspectives regarding key terminology. For example, throughout the course of the program, participating Outreach Partner organizations used different and sometimes conflicting terms to describe the Disadvantaged Communities and Tribes they represent. For some Outreach Partners, systemic discrimination, disinvestment, and exclusion are best expressed with the term "disadvantaged;" others, the prefer terms "overburdened", "frontline," "underrepresented," or "historically marginalized." Furthermore, the communities themselves are made up of diverse residents with varied perspectives and preferences regarding community identification. For many Outreach Partners, the term "Disadvantaged Community" is important because of its use in funding allocation decisions, though these terms and the corresponding metrics to determine eligibility have often been applied and decided on outside of these communities. The DACTI Program supports community and Tribal self-determination and encourages funding and decision-making bodies to follow community and Tribes' lead on how they identify, whether by the terms "Disadvantaged', "frontline", "historically marginalized", "overburdened", or others, and the connected metrics. Supporting community and Tribal self-determination also includes respecting the unique histories of different communities and Tribes and Tribal sovereignty. Different Disadvantaged Communities and their respective needs should not be lumped together, nor different Tribes or communities with Tribes.

This report uses "Disadvantaged Community" in the sections that are not Disadvantaged Community or Tribal specific because it is the term used in Proposition 1. In the Disadvantaged Community and Tribal-specific sections of the report, different terms are used by different Outreach Partners to describe their community or Tribe. Other identifying terms, such as Latinx/Latino/Latina or Black/African American, reflect the usage preference of each Outreach Partner in the Community Partner sections.

It is important to emphasize that while the DACTI Program included Tribes and underrepresented communities, including cumulatively burdened communities and unincorporated communities without equal representation in decision-making that do not meet the State's definition of a Disadvantaged Community by MHI, these DACTI Program participants do not qualify for funding earmarked for Disadvantaged Communities for IRWM Implementation funding. This means that Disadvantaged Communities and Tribes that do not qualify based on income must meet all of the additional local match and permitting requirements that apply to general applicants. These metrics are thus extremely important because they dictate which areas and groups qualify for funding, and they should be evaluated and reevaluated to ensure they are capturing those communities and Tribes who have historically been excluded and are most overburdened. An important next step for the Legislature and other state agencies is to update and revise the requirements and any metrics used for prioritizing funding allocation for underrepresented and overburdened communities. These decisions should ensure the inclusion of Tribes and follow the lead of Disadvantaged Communities and Tribes.

Report Overview

This Regional Needs Assessment report presents the findings from 13 individual needs assessment processes that were conducted between 2017 and 2021 by the Disadvantaged Community Outreach Partners, from a Tribal needs assessment process administered by five Tribal Outreach Partners, and from the peer-to-peer needs assessment to understand how people experiencing homelessness are accessing water for drinking, sanitation, and hygiene.

The needs assessment with people experiencing homelessness is presented first to elevate these voices because often people experiencing homelessness are not included in problem-identification or solutions-development processes. After the needs assessment with people experiencing homelessness, findings from the Disadvantaged Community and Tribal partners' needs assessments are presented, followed by a Regional Connections section summarizing the consistently similar priorities for water management across participating Communities and Tribes. Best Practices for making grant programs more equitable and accessible to Disadvantaged Community groups and Tribes and other overall recommendations from the San Francisco Bay Area IRWM Region DACTI Program are presented at the end of this report.

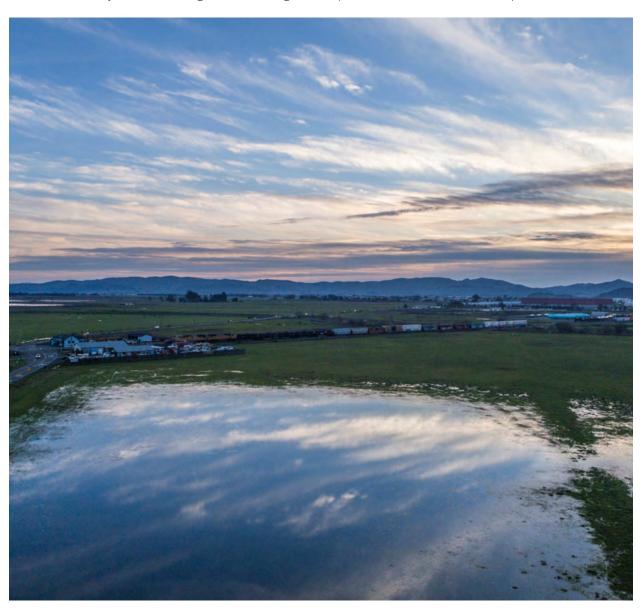


Photo: Karl Nielsen

3. Needs Assessment with People Experiencing Homelessness



Photo: Peter Beeler

Understanding access to Water, Sanitation, and Hygiene (WASH) and how identified issues can be addressed from the perspectives of people experiencing homelessness.

Background and Context

Background

On September 25, 2012, Governor Edmund G. Brown Jr. signed Assembly Bill (AB) 685, which made California the first state in the U.S. to pass legislation recognizing the human right to water. Today, Section 106.3 of the California Water Code acknowledges that "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes" (State Water Resources Control Board, 2022). The human right to water extends to all Californians, recognizing that water is necessary for life and integral to health. However, this right has not been realized equally: over one million people in California still lack access to clean drinking water at home, with many more at risk of not being able to pay their monthly water bill (Al Jazeera America, 2015; Mack & Wrase, 2017). Additionally, a recent study found that nearly one million people in the U.S. lack sustained access to at least basic sanitation, a large portion of whom were people experiencing homelessness (Verbyla et al., 2021).

People experiencing homelessness – who make up an estimated population of more than 160,000 on any given day in the state of California – have some of the worst access to Water, Sanitation, and Hygiene (WASH) (Verbyla et al., 2021; United States Interagency Council on Homelessness, 2022).

One recent study by the San Francisco Coalition on Homelessness examined WASH access and barriers through surveys with 73 people experiencing homelessness in San Francisco. The study highlights the extent to which water access is a problem in San Francisco: 68% of respondents experiencing homelessness face barriers to accessing their daily water needs and 74% access less than the urban minimum standard of 50 liters (13.21 gallons) of water per day (San Francisco Coalition on Homelessness, 2021).

Though people experiencing homelessness have some of the worst access, they are not yet included in the state's efforts to monitor progress in achieving the human right to water (OEHHA).

Context

Varying definitions of homelessness are used by different federal agencies. The U.S. Department of Housing and Urban Development (HUD), Department of Veteran Affairs (VA) and the housing assistance programs they administer consider someone to be experiencing homelessness if they are living on the street or in another place not meant for long-term human habitation, such as emergency shelters or transitional housing. They also include people who will "imminently lose" their housing within 14 days or are fleeing domestic violence. Other federal agencies and their programs, such as the Department of Education (ED), use definitions that are broader, including children and youth who are sharing housing with other people due to loss of housing or economic hardship. The U.S. Department of Health and Human Services' (HHS) Runaway and Homeless Youth program considers youth homeless if they are not able to live in a safe environment with a relative and if there is no other safe alternative living arrangement for them (Congressional Research Service, 2020). The varying definitions of homelessness used in these contexts determine who can receive housing assistance and/or other services: under broader definitions, more people are eligible; under narrower definitions, more vulnerable people are excluded from beneficial support services.

Further complicating this landscape, some people might see their own living situation in ways that do not align with definitions of homelessness used by federal agencies and other programs. As one example, some people who meet these definitions might not identify as being homeless. This report uses the term **people experiencing homelessness** to broadly encompass the definitions used by different federal agencies as well as people who are experiencing varying degrees of housing insecurity.

To ensure that the voice and perspectives of people experiencing homelessness were included in and elevated through the Bay Area DACTI Program, a survey was developed in collaboration with partners around the state to characterize access to WASH and understand how gaps could be improved from the perspectives of people experiencing homelessness. This survey was administered to nearly 650 people who had previously experienced or were currently experiencing homelessness from April to July of 2021 in Napa, Marin, and Solano counties, the City and County of San Francisco, and the cities of San Jose, Hayward, and Oakland by two groups that provide direct services and peer-to-peer outreach: the Downtown Streets Team (DST) and Voices Youth Programs (VOICES).

This section of the Regional Needs Assessment report is a synthesis of interviews with people experiencing homelessness to highlight their current lack of access to WASH and elevate their voices in planning processes, as well as to inform next steps toward achieving the human right to water. Additional efforts are needed to understand the scope and settings of the issue to inform and develop meaningful local solutions.

Service Provider Overview



Downtown Streets Team in San Francisco.

Photo Courtesy of Downtown Streets Team

Downtown Streets Team (DST) was founded in 2005 in Palo Alto and now serves 750 unhoused people a year in 16 Bay Area communities. DST believes in treating people with dignity and empowering them to be a part of the solutions to their struggles. DST works with their Team Members, who are volunteers experiencing homelessness or at-risk of experiencing homelessness, on collaborative beautification projects. Team Members receive non-cash stipends to help cover their basic needs, while being able to meet with case managers and employment services to find housing and employment. DST also works to build partnerships between the private sector, government agencies, social service agencies, and communities centered on compassionate and innovative leadership.



VOICES team.

Photo Courtesy of VOICES

The mission of **VOICES Youth Programs' (VOICES)** is to empower underserved youth, ages 16-24, by utilizing holistic services throughout their transition from systems of care, while building a loving community and establishing a solid foundation for a healthy future. At the core of VOICES are youth-led programs designed to address the independent living, housing, education, employment, and wellness needs of transition-age youth. Since 2005, VOICES has provided comprehensive services to over 6,000 young people exiting various systems of care. Over the last ten years, VOICES has successfully expanded its programs into Napa, Sonoma, Santa Clara, Solano, and Monterey counties. This growth has allowed VOICES to broaden its work beyond being a service provider and leader in youth-led programming to being an important advocacy body that empowers and prepares young people to confront tough policy issues that impact their lives and opportunities.

Methodology

Survey Design

Many groups and individuals supported the development of this survey effort by providing thoughtful feedback and sharing details about their work and experiences. This effort is bolstered by their insights and contributions and stands on the shoulders of the efforts of many others.

Two surveys, a short and an extended version, were designed in partnership with DST, VOICES, and other thought partners around the state to gather perspectives and recommendations for improving access to WASH from people experiencing homelessness.

Both surveys included multiple-choice and open-ended questions about access to water for drinking, sanitation, and hygiene. Open-ended questions regarding how people experiencing homelessness are accessing water for various purposes provided qualitative insights, allowed participants to drive the conversation, and did not limit possible answers to only those that were pre-determined. Multiple choice questions about how participants access water for that purpose were based on service ladders developed by the Pacific Institute to adapt the United Nations and World Health Organization WASH standards to the California context (Feinstein, 2018). The short version was meant to make the survey more accessible and gather more responses.

Data Collection

VOICES conducted 195 (191 long and 4 short) surveys with people, primarily youth, experiencing homelessness in Alameda, San Francisco, Contra Costa, Solano, Sonoma, and Napa counties. DST conducted 453 (154 long and 299 short) surveys with people, primarily adults, experiencing homelessness in Marin County and the cities of San Jose, Oakland, San Francisco, and Hayward. Approximately 22 additional surveys were started, but information other than demographic data was not collected. Both groups began their outreach for this effort with people they serve and with whom they have ongoing relationships. They then expanded their outreach to people experiencing homelessness at shelters, encampments, mobile showers, churches that provide services, and other areas. In total, 648 surveys were completed, 345 of which were long surveys and 303 were short surveys.

Stipends or hygiene kits were provided for all participants to compensate them for their time and for sharing their experiences. Blue Shield of California graciously provided funding for stipends to the Downtown Streets Team effort, since the DACTI Program was unable to do so due to grant restrictions that prohibit the use of grant funds for stipends, food, and childcare. VOICES provided hygiene kits to participants.

Data Analysis

Multiple-choice questions were analyzed quantitatively. Open-ended responses were categorized by theme and analyzed for frequency of each category. Survey questions that were the same in both the long and short surveys were analyzed together. Results for all participants are reported in the text and are broken down by those who participated in the VOICES effort and the DST effort in graphs to compare differences in the populations with whom each service provider engaged. DST primarily works with adults, and VOICES primarily works with youth, though there is a small amount of overlap in age between the two groups that participated. This approach, informed by VOICES staff, was used because of the unique ways youth can experience homelessness or housing instability. Cross-tabulations were run to gain a more granular understanding of how factors such as living situation intersect with barriers to WASH access.

Limitations and Lessons Learned from DST and VOICES

Although DST team members and youth served by VOICES reviewed and gave feedback on survey drafts, the survey was not piloted due to time constraints, and valuable lessons could have been learned prior to the full effort, as detailed below.

In designing the survey, the DACTI Program Team and thought partners tried to balance the goals of gathering detailed information to inform solutions and next steps with a survey that would take a minimal amount of time, to avoid survey attrition. Still, some participants provided fewer or no responses toward the end of the survey. Some participants did not respond to certain questions for other stated reasons, such as not answering demographic questions because they did not want to provide personal information. Some questions were misinterpreted; for example, some participants simply responded, "yes" or "no" to the question, "How has your access to water...changed since the beginning of the COVID-19 pandemic," rather than providing details about how. Some participants answered follow-up questions but not the initial question; for example, some participants answered, "If yes, where?" but not the prior question, "Do you have access to a shower or bath?". In general, more multiple-choice questions, rather than openended questions, were answered. From the perspective of DST and VOICES staff, participants with whom they had existing relationships were more likely to finish the survey, rather than participants who were approached at service areas without a preexisting relationship.

Additionally, with limited time and resources available, surveys were conducted using paper and pencil, with varying levels of legibility in recorded responses. This resulted in the loss of some answers. Surveys were also conducted in English; as a result, those with limited English proficiency were not able to participate. In some cases, it would have been helpful to have been able to follow up with participants to learn more about their experience and specifically where particular services would be most useful to them.

The DACTI Program team recommends that any follow-up efforts:

- use electronic surveys to avoid varying levels of legibility in recorded responses;
- conduct surveys in other languages in addition to English to ensure perspectives from different languages are included;
- record interviews so answers can be reviewed;
- plan to have multiple conversations with respondents to follow-up on any answers that lead to further questions;
- and ask about the services needed in specific locations to inform solutions.

Follow-up efforts could also benefit from using a shorter, multiple-choice survey conducted with someone who has gained the trust of the person responding. Of course, an advantage in one arena could be a limitation in another. This effort only reached certain people, and likely oversampled for people who do have access to some services, as many were connected already to DST and VOICES or surveyed at a shelter. It is important to consider how the response might be influenced by who is asking the questions.

The DACTI Program team worked to ensure that the survey process itself could provide a small benefit to the participants in exchange for their time spent, in the form of a stipend or hygiene kit provided by Blue Shield of California and VOICES. However, it is possible that the stipend functioned as an incentive, which could have biased respondent groups. Some surveys were filled out minimally, potentially due to interest in the incentive and not in the survey.

The findings from this assessment are best understood within the context of these circumstances and limitations.

Please see pages 72-73 for examples of short and long survey questions.

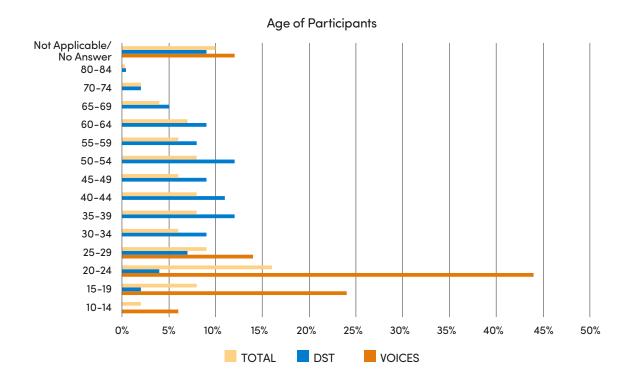
Results: Summary of Responses

(Percentages presented in graphs below represent percentages of participants who were asked each question).

Demographics of Participants

Age

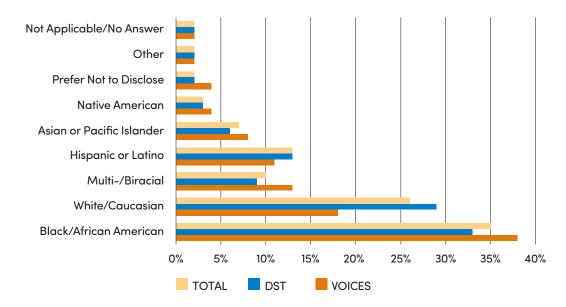
The overall age range of participants was 10 to 82. The age range of the 195 people who participated in the VOICES effort was 10 to 29 years, with the majority of participants aged between 15 and 24. The age range of the 453 people who participated in the DST effort was 17 to 82, with the majority of participants aged between 30 and 64.



Race/Ethnicity

As noted elsewhere and underlined in this study, experiencing homelessness and lack of access to water intersect with disability justice and racial equity. Of those participants who answered and disclosed (n=618), the majority (72.8%) identified as either a race other than white or as biracial (including white and another race), reflecting a much larger proportion of people of color in the unhoused population. In particular, the Black or African American population is overrepresented, especially in the VOICES effort (38%), where this population represents more than double the second most frequently specified race or ethnicity: white (18%). For comparison, according to the 2020 census, 35.8% of Bay Area residents identify as white, 27.7% Asian, 24.4% Latino, 6.5% other, and 5.6% Black.

Race/Ethnicity of Participants





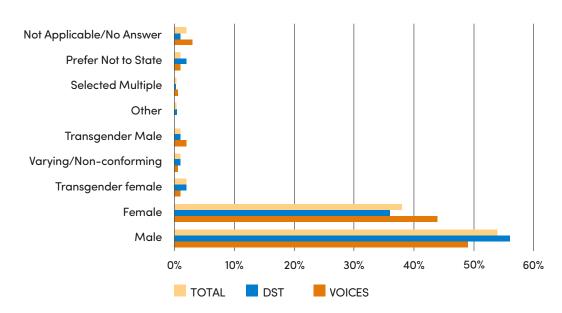
Michelle and Austin Blue, living in a van in San Francisco during the COVID-19 epidemic, worry about their health and safety with limited ability to shelter in place.

Photo: Karl Nielsen

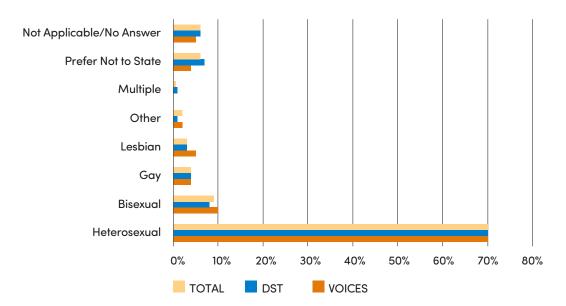
Gender

The majority of both VOICES and DST respondents identified as male, though the relative proportion of male respondents was higher in the DST effort.

Gender Identity of Participants

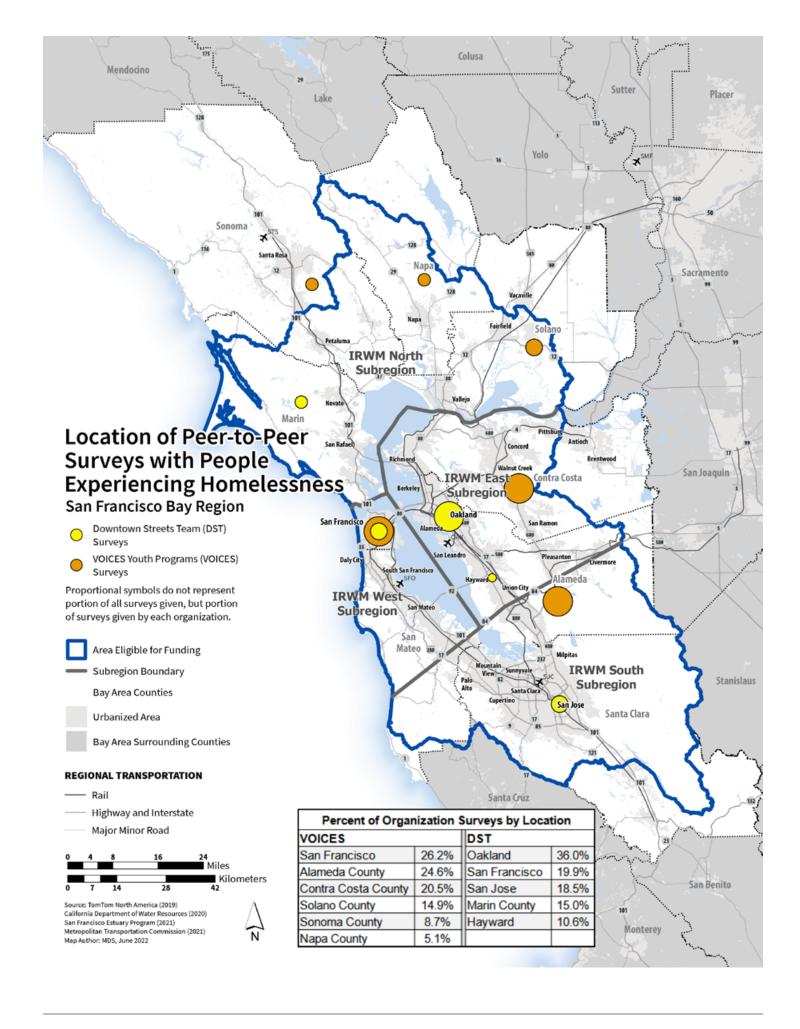


Sexual Orientation of Participants



Locations of Surveys

The surveys were conducted in many locations: on the street, at welfare offices, at the VOICES office, in shelters or other service centers, at hotels, Single Room Occupancies (SROs), shopping centers, stores, cafés, encampments, parks, freeway underpasses, boats, hospitals, churches, Quaker meeting houses, markets, methadone clinics, libraries, BART stations, schools, and other locations. Additionally, some of the VOICES surveys were conducted by phone with youth who are part of their programs. Some surveys didn't share a location that was more specific than the city or county in which it was conducted because participants did not want to provide more specific information.



How Respondents are Experiencing Homelessness

The first question surveyors asked participants was, "Are you currently experiencing homelessness?"

Overall, participants most frequently (44.6%) responded "yes", they are currently experiencing homelessness. Some participants (12.8%) responded "no", including some who explicitly said they used to or are not currently. A few participants (0.5%) responded kind of or sometimes, and a few (0.5%) – all from the DST effort – wrote in a specific living situation, including board and care (nonmedical community-based residential settings that provide some services such as meals), a Shelter in Place (SIP) site, and temporary housing. Many (41.7%) participants did not respond to this question or their responses were not applicable.

Not Applicable/No Answer Temporary Housing Shelter in Place (SIP) Site **Board and Care** Sometimes/Kind of No Yes 10% 15% 20% 25% 30% 35% 40% TOTAL DST VOICES

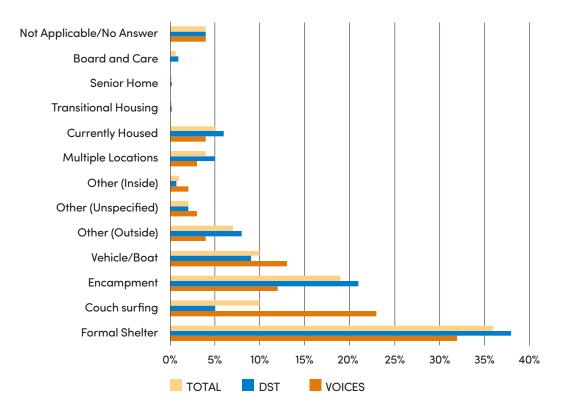
"Are you currently experiencing homelessness?"

This question was followed by asking about the participant's current living situation. Notably, some who responded that "no" they are not currently experiencing homelessness reported living in formal shelters, couch surfing, in vehicles/boats, outside, or in other unstable living situations. While 23 (28%) of the 82 participants who responded "no" they are not currently experiencing homelessness reported being currently housed, 26 (31.7%) reported staying in a formal shelter, eight (9.8%) were couch surfing, and twelve (14.6%) did not specify their living situation. The rest were living in "room/board" or board and care (3.7%), SROs (2.4%), encampments (2.4%), a senior home (1.2%), outside (1.2%), and foster care (1.2%) and "other" (4.9%). Those who responded they are "kind of" or "sometimes" experiencing homelessness all said they were in living in multiple locations or in a formal shelter.

Clearly, different people and groups define homelessness differently, and how the federal and state government views homelessness might not align with how people see themselves or their situation. For example, for some people who are living in shelters or couch surfing, the phrase "experiencing homelessness" is equated to living on the street. Additionally, many people who are unhoused might not want to see themselves as unhoused, even if they are only able to be in a shelter at night. Potentially due to these reasons, "are you currently experiencing homelessness?" was one question most frequently left unanswered.

This reluctance of many respondents to identify as experiencing homelessness has implications for how qualifiers for receiving WASH services are communicated. If they are not communicated inclusively, some people might not believe that they qualify. Additionally, if WASH services are only targeted at people who are living in encampments or on the street, some people who do not have adequate access will not be reached.

Current Living Situation of Participants



Participants most frequently reported living in a formal shelter (36%), including being housed through a SIP site or a hotel housing people during COVID. Some of these participants specified that they are living in a winter or temporary shelter, meaning that they do not stay in a shelter year-round.

For VOICES participants, the next most common response was couch surfing (23.1%), compared to only 4.9% of the DST responses, highlighting the reliance of the population that participated in the VOICES effort on relationships for shelter. VOICES participants were next most often housed through living in a vehicle or boat (12.8%), encampment (12.3%), or outside (4.1%%), including on streets, benches, BART stations, and parks.

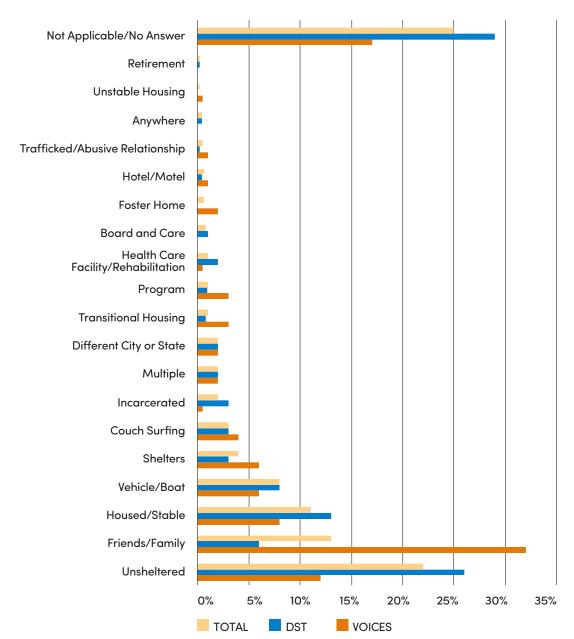
The second most common living situation of the DST participants was staying at an encampment (21.2%), compared with only 12.3% of VOICES participants. DST participants were next most often housed through vehicles or boats (9.1%) or outside (8.4%). Several DST respondents wrote in a specific living situation, including transitional housing, senior home, and board and care.

VOICES and DST staff provided the perspective that some of their participants who said they are now housed have experienced homelessness in the past or are currently in unstable housing. A few (4%) of participants responded with an answer that was not applicable or did not respond.

Previous living situation

Participants reported living in many different situations before their current situation. VOICES participants were most frequently previously living with family or friends, and DST participants were most frequently unsheltered. This question was often left unanswered.





Quotes from participants regarding their previous living situation:

"I was staying with my parents but then they kicked me out."

"Lived with father since 2000. Found him dead in bed, house torn down and here I am."

"Housed, [I lost] my place because the pandemic, job."

"\$130,000 a year income, 3 bd home, Full time work as a Women's Prison Substance Abuse Counselor."

"College housing situation."

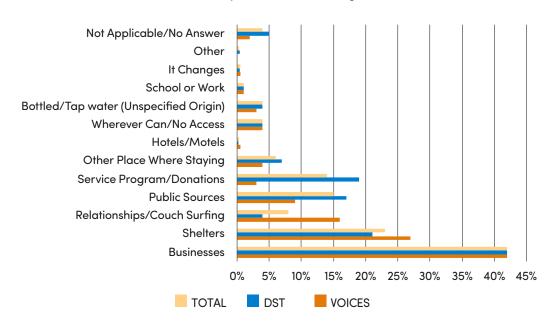
"Homeless with mom."

"San Francisco living in my car that is now impounded."

"I got sick and lost my place."

Access to Drinking Water

How Participants Access Drinking Water



Participants most frequently said they access drinking water through businesses (42%), including through buying it, asking for it for free, using free outdoor spigots at gas stations, looking for thrown away empty bottles in store bathrooms, or stealing it. Business frequently mentioned by participants include gas stations, grocery stores, liquor stores, corner stores, and fast-food restaurants.

For those with limited resources who do not have access to another source of drinking water, buying water can necessitate trade-offs. Some participants specifically mentioned buying water with food stamps, which are limited and needed to purchase food. Additionally, when asked how their access to drinking water has changed due to the COVID-19 pandemic, some said that they had to pay for water more during COVID due to less access to free sources. Those who do not have enough money to buy water or cannot make these trade-offs are forced to go without or to ask for and rely on the kindness of others, which can be embarrassing, or put them at risk by stealing to meet a basic need. Some participants mentioned being turned away or discriminated against, which was also heightened by the pandemic. Many participants living in shelters said they get drinking water from the store, potentially highlighting a gap in meaningful service.

Next most frequently (23%), participants reported accessing drinking water through shelters (e.g., the fridge, tap, filters, getting water from staff, vending machine, water bottles). Slightly more VOICES participants rely on accessing water through shelters (27%) than DST participants (21%). Most often, it was participants staying at shelters who responded that they rely on shelters for water access, though some living in encampments, in vehicles/boats, and in multiple situations also said they access drinking water through shelters. If shelters are not continuously open or accessible, this can limit many peoples' primary access to drinking water.

Participants next most frequently responded that they access drinking water through public sources (15%), followed by service programs or donations (14%), then relationships (8%), including couch surfing, family, friends, neighbors, and significant others.

While only 2.6% of participants in the VOICES effort said they get water from a service program or through donations, 19% of DST participants rely on donations or service centers, including churches such as Glide in San Francisco, and health facilities for drinking water, highlighting the large role service providers are playing in providing access to drinking water in this population. Additionally, nearly twice as many DST participants (17% DST compared to 9% of VOICES participants) said they access drinking water through public sources, including drinking fountains and spigots in libraries, parks and yards, as well as fire hydrants. In both populations, public sources were most often mentioned by people living in encampments, vehicles or boats, or other places outside not meant for human habitation, highlighting the challenges of accessing water for drinking, sanitation, and hygiene purposes for those without access to a building with plumbing. Conversely, in the VOICES effort, informal networks of family and friends were found to be filling many gaps in existing services that provide access to water (16%). Only 4.4% of DST participants said they get drinking water through relationships.

A few participants (4%) participants said they access drinking water anywhere they can and whenever they come across it, including finding water bottles and natural sources such as creeks. Of these, one participant specifically mentioned collecting and filtering water from natural sources such as creeks, and one said they get water from the ocean, highlighting the lack of a clear, reliable source of drinking water for some people experiencing homelessness. One participant mentioned that to drink water, they must beg for it.

A few participants (3.5%) said they drink bottled water or from the tap or water tank but didn't specify where these sources are or how they access them. A small portion of respondents get drinking water from school or work (1%), and for a few, it changes (0.5%).

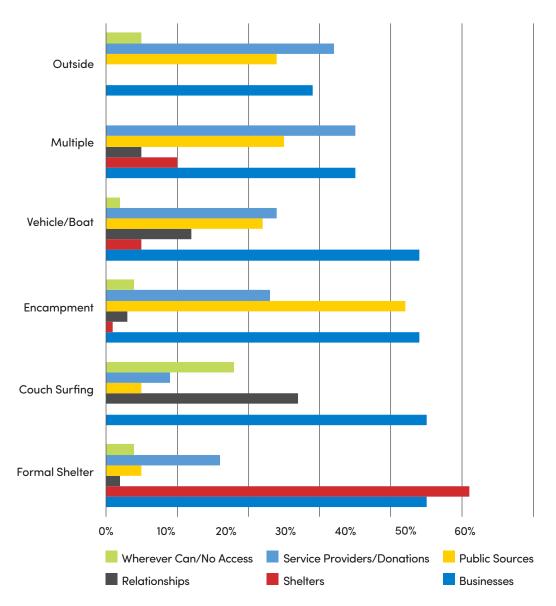
Two DST participants (0.3%) gave "other" answers, one who said they are living in an encampment and one who said they are living in a vehicle or boat both said they get their drinking water from a "room." 4% of participants did not respond.

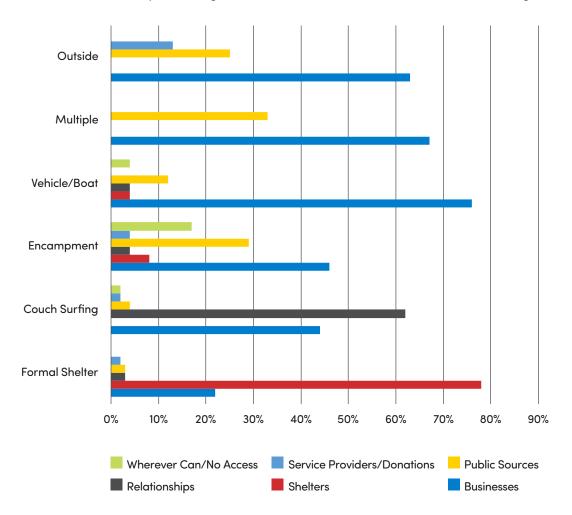
Some participants reported that they access drinking water through multiple means. Findings about drinking water sources do not add up to 100% because percentages represent the number of participants who mentioned each source.

Quotes from participants about access to drinking water:

- "I don't have any access to any water to wash, clean, or drink. Access to it all is a step for me."
- "Water shouldn't be a luxury, but it is."
- "[I get my water from] church. No money means no water. [Water costs] \$7.00 at least."
- "While I was living in a tent, I would get water from people who do homelessness outreach i.e. Lifelong Medical trust. Today I get water bottles and through [trailer] faucet."
- "Now on site [at the shelter], but before I use to go to grocery stores, fast food restaurants or steal it."
- "Faucets in peoples' yards."
- "Anywhere from creek, residential, park, store if able or possible."

How DST Participants Living in Most Common Situations Access Water for Drinking





Living situations and access to water are closely connected. Overall, most participants who had access to a building with plumbing—through a shelter, relationships (friends, family, neighbors), school, work, or a service provider—reported being able to access drinking water through it, at least some of the time.

Notably, participants who were living in encampments, vehicles/boats, in multiple situations, or outside (on the street, on BART benches, etc) were much more reliant on public sources and service providers than those living in formal shelters or couch surfing.

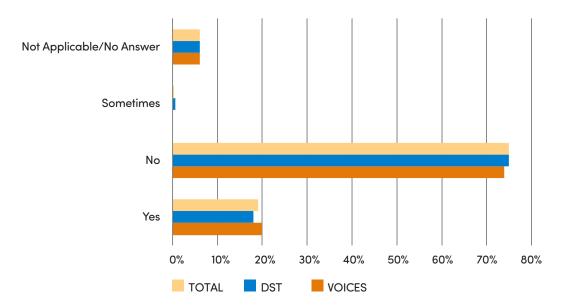


Photo Courtesy of Downtown Streets Team

Concern about drinking water safety

Almost one-fifth (18.8%) of long survey participants expressed concern about the safety of their drinking water or their ability to safely access it.





Those who answered the follow-up question, "if yes, why?" often mentioned they were concerned for their safety due to lack of access, water being too expensive, or concerns regarding water quality. Some participants mentioned natural sources of water that are not meant for human consumption, which can have implications for their health. Some who said "no" they are not concerned for their safety explained that if you are thirsty enough you will drink anything, or that they do not have a choice.

Quotes from participants about concerns regarding safety of drinking water:

"Due to covid fountains were closed and I [am] worried about safe water."

"Absolutely I do not have choice or autonomy leaving me to make decisions based on survival."

"It's hard when you always have to buy it."

"Yes, everything they give us is polluted."

"There is rust and dirt in the water from the spigot."

"Sometimes I don't have money to buy water and don't think the local water fountains are healthy."

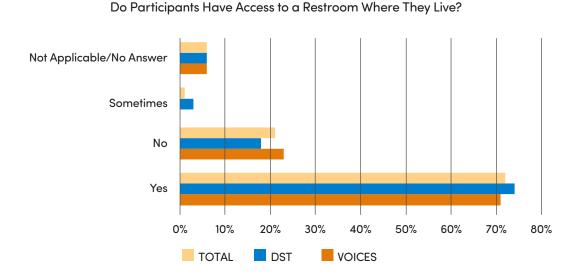
"I know it's dirty but that's what I can get."

Access to Sanitation and Hygiene Facilities

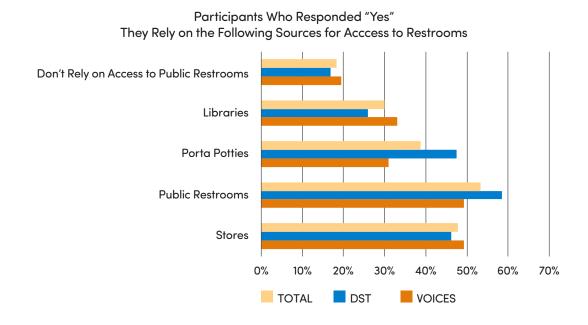
Water is one of the most fundamental resources for maintaining health and hygiene. Participants were asked separately about access to restrooms and handwashing, showers, and laundry facilities to understand any differences in access, and how these services can each be improved from the perspective of people experiencing homelessness.

Access to restroom and handwashing facilities

The majority (72%) of long survey participants responded "yes" they have access to a restroom where they live, though a few (1.2% overall) specifically mentioned that their access where they live is outside or at a gas station nearby. Just over one-fifth (21%) of participants said "no" they do not have access to a restroom where they live, most of whom were living in vehicles or boats, or outside, in encampments, on streets and other outdoor places. A few (1.2%) participants said they have access where they live "sometimes" and 6% did not respond, or their answers were not applicable or illegible.



While most participants reported having access to restroom facilities where they live, a significant number said "yes" when asked if they rely on public restrooms (53%), stores (48%), and porta-potties (39%). Some (30%) rely on libraries. Almost one-fifth said they do not rely on public restrooms. Some participants did not select yes or no for any of the prompts regarding reliance on specific restroom sources.



Long survey participants were asked if there are ways they access restrooms that were not mentioned, and short survey participants were asked where and how they usually access restroom and handwashing facilities. In response to these related questions developed to gather additional details about access to restrooms, participants often said they use public facilities such as BART stations, access restrooms through relationships (friends, family), service providers, businesses, and work or school, or use the outdoors.

Quotes from participants about access to restrooms:

"[I] trespass on construction sites, lucky's, safeway, parks."

"Park bathroom, hotel, or bush. Water bottle or sink."

"Greyhound bus station."

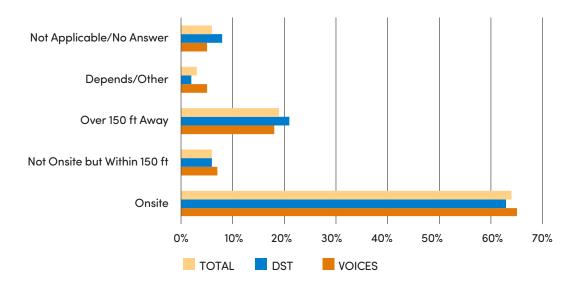
"Uses coffee cups (self-contained)."

"Washes hands in bay, goes to bathroom in bay."

"When I was homeless I would get a gym membership."

When asked about the proximity of the nearest restroom facility to where they live, only 64% of long survey respondents said they have access to a restroom onsite. Almost one-fifth (19.4%) of participants must travel over 150 feet for access, some of whom mentioned needing to take public transportation to use the restroom. Some (6%) participants have access within 150 feet but not onsite. For 3% of participants, the distance they must travel changes based on where they are staying at the time, is "within walking distance", or they use whatever restroom they can find (Depends/Other). The response options were based on U.N. Standards adapted to the California Context (see Feinstein, 2018).

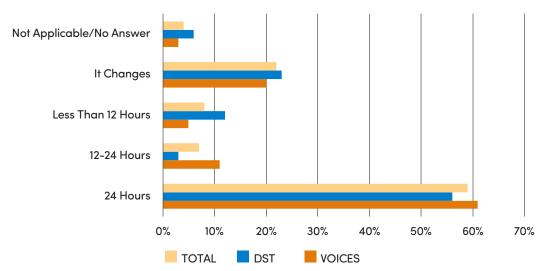
Distance to Nearest Restroom From Where Participants Live



As detailed above, some participants who explicitly said "yes" they have a restroom where they live provided details that this access is "outside" or in a nearby store or gas station. Similarly, some of those who chose "on site," when asked about the distance the nearest restroom from where they live, explained that they were speaking about a restroom that is one block away, providing insight into how participants think about having access to a restroom where they live.

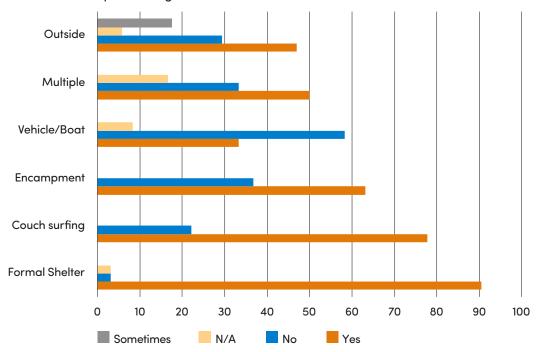
Most participants (59%) have 24-hour access to restrooms. However, many do not: 7.2% have access between 12 and 24 hours a day, 7.8% have access for less than 12 hours a day (when they don't have access to businesses, work, or other spaces with limited hours), and for 22% of respondents, it changes, highlighting the tenuousness of access to restrooms for many people experiencing homelessness. Some participants who said they have 24-hour access included in their response that their access is 24 hours because it is on the street. For those who do not have access to restroom facilities and need to use the street, this puts them at risk to meet a basic need. 4.1% of participants did not respond or their response was not applicable.



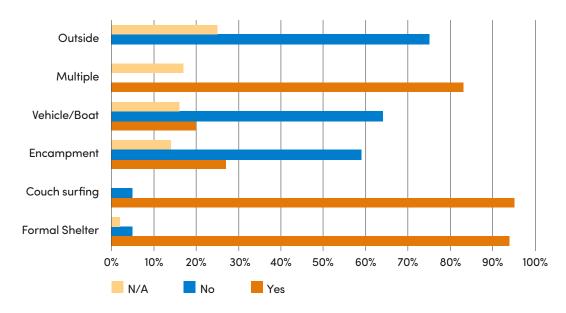


Similar to access for drinking water, access to restrooms is also closely related to living situations. Those living in situations without access to a building with plumbing were much more likely to not have access to a restroom where they live and to rely on businesses, public restrooms, service providers and programs like churches, or relationships or couch surfing to access restrooms. Participants in the DST effort who were living in encampments or outside were more likely than those in the same living situations in the VOICES effort to respond that "yes" they have access to a restroom where they live.

Do DST Participants Living in Common Situations Have Access to a Restroom On Site?



Do VOICES Participants Living in Common Situations Have Access to a Restroom On Site?

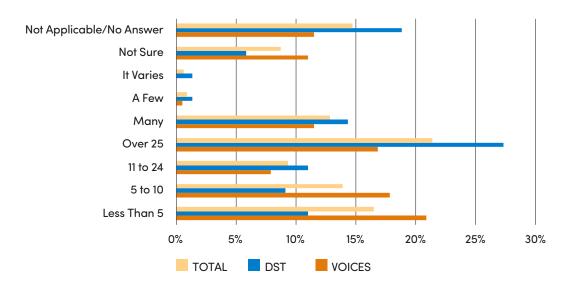


Maintenance, cleanliness, and safety of restroom facilities

Maintenance, cleanliness, and safety are important parts of accessibility because they ensure that restrooms are meaningfully usable.

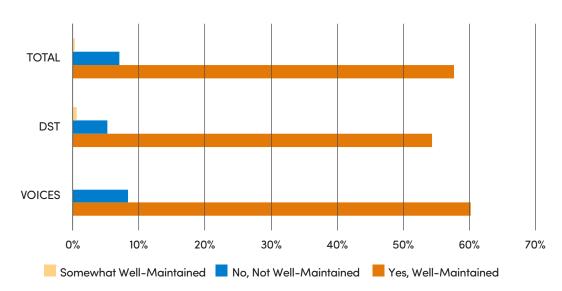
The number of other people using the same facility can impact its cleanliness. Participants reported that they share restroom facilities with a widely varying number of other people – from 1-2 other people to "everyone," "a lot," and "the entire public." Most participants overall and the most in the DST effort share the restrooms they use most frequently with over 25 other people. Conversely, the most VOICES participants said they share with less than 5 other people.





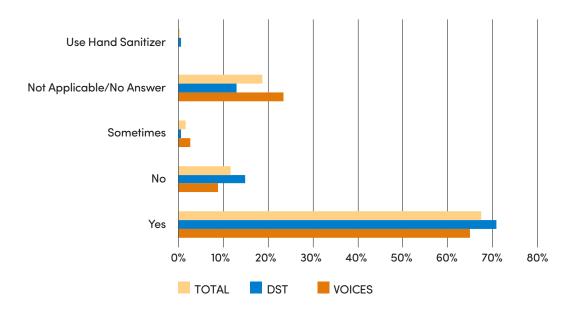
Most long survey respondents said "yes", the facility they have access to is well-maintained. One VOICES participant said yes but that it was "barely cleaned." Some respondents who did not answer the first part of the question, "do you have access?" answered this question, "if yes, is the facility well-maintained?".

Maintenance of Restroom Facilities Participants Have Access to



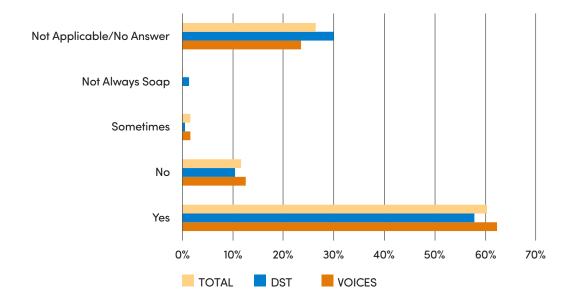
Handwashing facilities and access to soap are an important part of access to WASH. While most participants (68%) responded "yes" they do have regular access to handwashing facilities where they use the restroom, some (12%) do not have access. Slightly more VOICES participants said they have access than DST participants. One participant who said "yes" they have access clarified that they "use a bottle of water daily just [to wash their hands]."





Most participants (60.3%) said "yes" to the follow-up question asking if there is always soap/water available where they have regular access to handwashing facilities. Of those who said yes, three (1.9%) DST participants gave details such as "there is soap" and "I bring my own supply".

Do Participants Have Access to Soap/Water Where They Access to Handwashing?



When asked to rate the cleanliness of and their access to restroom and handwashing facilities on a scale of 1 to 10 (with 1 being very unclean/very difficult to access and 10 being very clean/very easy to access), the average ratings were 7.3 for cleanliness, and 7.4 out for access.

Quotes from participants about ratings given for cleanliness of and their access to restrooms they most often use:

"Negative. No one cleans it or stocks it."

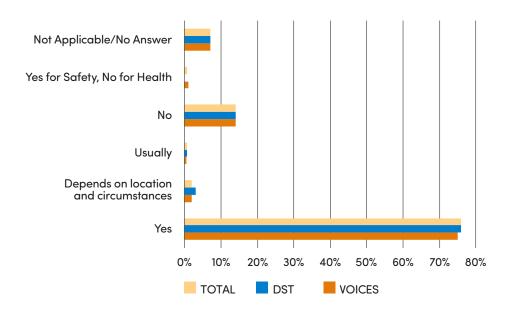
"Poor. My access is not consistent"

"Very happy with the porta potties. Running water would be the next best thing"

"Some restaurants don't allow homeless people to use their restroom. You sometimes have to be a customer to use the restroom. If I needed to wash up I would carry moist towelette."

Critically, 14% of long survey participants said they do not feel safe when using the restroom facility they most often access. Participants who do not feel safe cited using outside bathrooms without doors that lock, feeling like they are not welcome, that they are turned away or discriminated against, the police harass them, and COVID-19. An additional 2.3% said they sometimes feel safe, but that it depends on the location and circumstances, and 0.6% said they usually feel safe. Three-quarters (76%) of participants said they are not concerned for their safety, though one who said "yes" specifically mentioned that they do not feel safe at night. 7% of respondents did not respond.

Do Participants Feel Safe Using the Restroom They Most Often Do?



Quotes from participants about not feeling safe using restrooms:

"No, not outside bathrooms (no locks on doors)."

"No, I can tell they don't want me there."

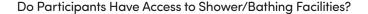
"No, not safe, often turned away/discriminated against."

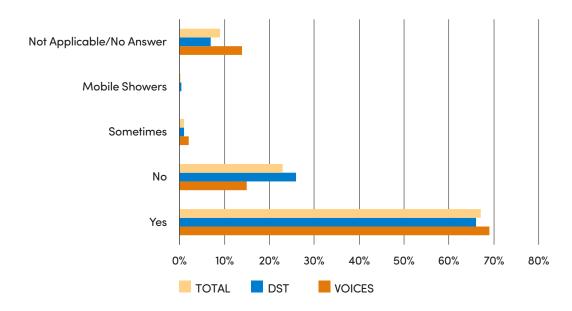
Access to Shower/Bathing Facilities and Soap

Most participants (66.7%) said they have access to shower/bathing facilities, though almost one-quarter (22.7%) said they do not. A few (1.5%) said they have access sometimes or not enough, and 8.6% did not answer.



Photo courtesy of Downtown Streets Team

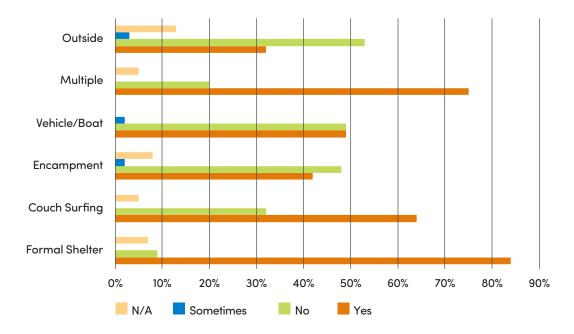




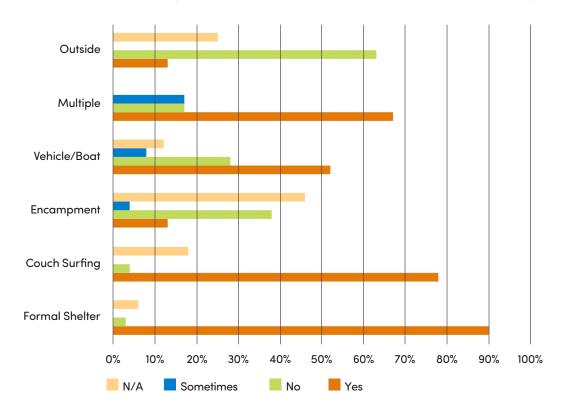
Access to shower/bathing facilities and soap was often related to a participant's living situation. Those who do not have access or only have access sometimes were primarily living in encampments, vehicles/boats, couch surfing, outside, or in multiple places. Overall, a higher percentage of participants in the DST effort did not have access than in the VOICES effort, across living situations.

Many of those who said they do not have access to a shower said that they bathe using sinks, wipes, paper towels, and soap in public bathrooms, as well as using streams, lakes, and the Bay. Some say they rent motel rooms when they can (drawing on limited resources – and some pooling with family to do so), drop into shelters, or use gyms.

Do DST Participants Living in Most Common Situations Have Access to Showers/Bathing?



Do VOICES Participants Living in Most Common Situations Have Access to Showers/Bathing?



Those with access said that they primarily can shower or bathe at a shelter, through a service provider or program like mobile showers, or with friends and family/couch surfing.

For some who said "yes" they do have access to showers/bathing, it is limited to once or twice a week at a shelter or through another service, such as mobile showers. Overall, 14% of participants said they only have access to bathing 1-2 times per week or less – significantly more in the DST population (17.9%) than the VOICES population (5.1%). In addition, some participants did not give specific numerical answers, but said "sometimes" or "occasionally", "baby wipes", or "not often enough."

Quotes from participants about access to bathing/showers:

"Use buckets and water."

"Monday and Thursday Dignity [on Wheels] shower truck here at shelter."

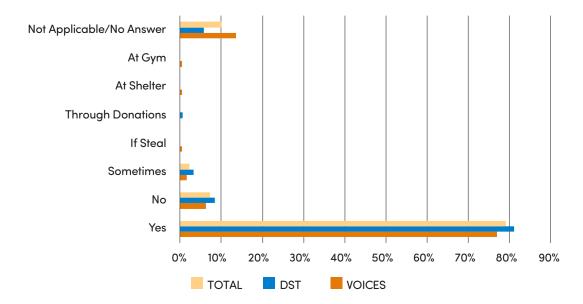
"I don't use the mobile showers, I don't feel safe. I use my friends."

"Hotel sometimes...once feel too dirty."

"Yes, but to shower miss out on bed/hot dinner."

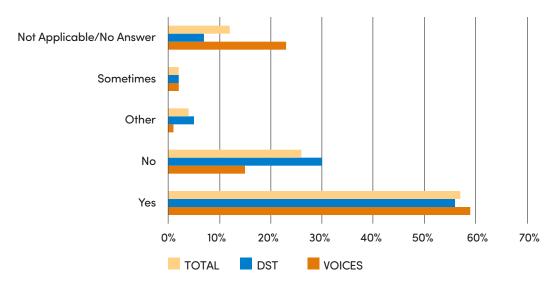
Access to soap for washing is critical for hygiene. Most long survey participants (79.1%) said they have access to soap for washing their body, and those who specified said they buy it or get it from shelters, service centers, or gyms. Some (7.2%) said they do not have access, and 2.3% have access sometimes.

Do Participants Have Access to Soap for Washing?



Access to Laundry/Clothes Washing

Do Participants Have Access to Laundry/Clothes Washing?



Most participants (58.5%) said they have access to laundry/clothes washing. Of those who said "yes" they have access to laundry/clothes washing, some elaborated that this access is through laundromats (which some mentioned were prohibitively expensive, particularly when living without income), hotels, family and friends, mobile laundry services, churches, shelters, or that they wash by hand.

Approximately one quarter of participants (25.9%) do not have regular access to clothes washing. This was particularly true in the DST participant population (30.5%), where the percentage of participants who said they do not have access was double that of VOICES participants (15.4%). Some participants who said they do not have access explained that they use rivers or wash their clothes by hand. A few participants (1.9%) said they sometimes have access to laundry/clothes washing.

Some participants who included in their response that they rely on laundromats said "yes" they have access, and some said "no" they don't have access because they have to use the laundromat. Some participants did not answer "yes" or "no" and wrote in a specific place where they access laundry/clothes washing (other), including in church, a friend's house or with family, a hotel, a caseworker's office, a shelter, mobile showers, or that they pay to wash, or a specific day they have access.

Quotes from participants about access to laundry/clothes washing:

"Yes – laundromat but it is so expensive, living without income."

"No, laundromat is too expensive."

"Used to go to shelters on a wait list. But now I have full access."

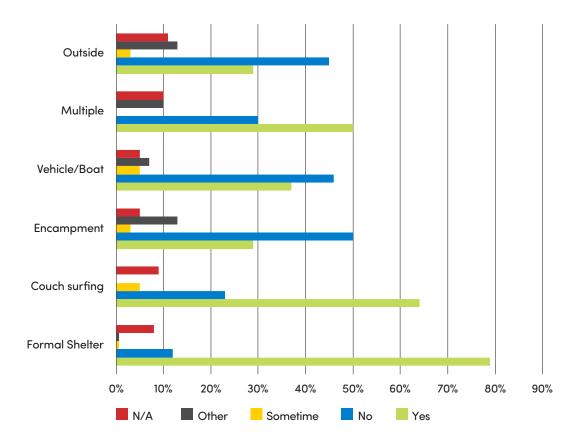
"Lavamae is great. We need more like it. But now I have access to free washing."

"Yes, I use unemployment \$ and go to laundromat."

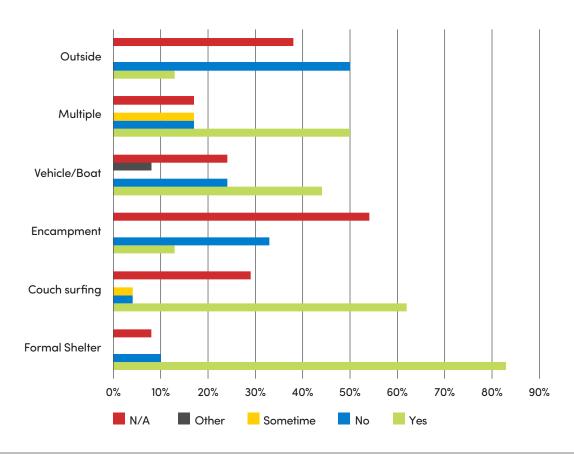
"Some 3 times a week mobile services [but they] can not wash sleeping bags or blankets."

"Yes with help of women's safe house they give me quarters for laundromat."

As with access to drinking water, restrooms, and showers/bathing, access to laundry/clothes washing is closely connected to living situation. Participants living in encampments, vehicles/boats, in multiple situations, and outside were more likely to not have access than those who have access to a building with plumbing.

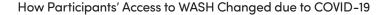


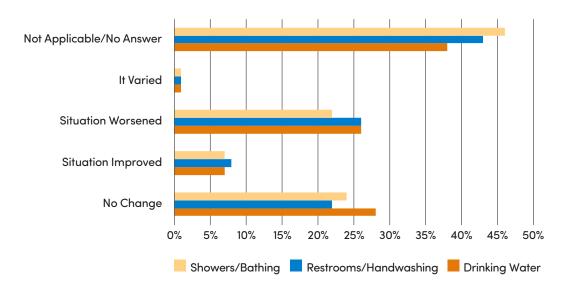
How VOICES Participants Living in Most Common Situations Access Laundry/Clothes Washing



Changes since COVID-19 pandemic

COVID interrupted many services, including closing businesses and public spaces.





Many participants said they had seen their access to WASH change due to COVID-19. For some whose access had changed, access improved for drinking water (7%), restrooms (8%), and showers/bathing (7%), often through services provided to address the pandemic, such as temporary housing in hotels and the availability of additional bottled water. A few participants noted that though access had improved due to COVID, it was still not enough.

Many participants reported having less or worsened access to drinking water (26%), restrooms (26%), and showers/bathing (22%) due to reduced hours and closed restrooms at stores, and closures of some public facilities such as restrooms and water fountains. Some whose situation worsened reported losing their jobs and housing due to the pandemic. Responding to a question asking how access to toilets and handwashing could be made better, easier, or safer, one participant said, "get the COVID-19 under control." For a few participants (1%), the affect COVID had on their access varied, with some saying that at first their access was worse, but then it improved.

Most participants who responded said they had not experienced a change in access to drinking water (28%), restrooms (22%), and showers/bathing (24%) due to COVID-19, with some highlighting that they are still experiencing the same issues and that it is still hard.

Many participants interpreted this question asking how access has changed due to COVID as, "Has your access changed during COVID?" and simply wrote yes or no, rather than explaining how, or did not respond.

Overall, COVID-19 served to highlight the tenuousness of water access for many people experiencing homelessness who rely on businesses and service providers or donations. COVID disrupted the informal safety net that many rely on—help from friends, relatives, neighbors, service providers, and the kindness of strangers—which often sustains WASH access for many people experiencing homelessness in the absence of other support.

"People aren't as friendly. Not willing to talk to you or help. They won't allow you in outside."

"Most public restrooms have been shut down making it harder."

"It increased my needs as parks shut off faucets."

"I haven't seen any of those portable showers/laundry service available since COVID."

"Less donations are given."

"No different if you have a home. But being homeless it's not too affordable because money goes on bigger things especially trying to put a warm meal in your stomach and finding shelter to sleep and keep warm."

"It got easier with the community help."

"This is the best its been for me-so I'm ok," — participant staying in a formal shelter

DST staff noted that while some interim services that were provided during COVID were positive, like hotels and additional temporary facilities for some people experiencing homelessness, some services, such as providing hoses at fire hydrants for drinking water access, were not provided in a way that promoted human dignity. Although hoses at fire hydrants can greatly increase access to fresh water in emergencies, these services need to be provided in ways that promote privacy and do not discourage use.

How access to water for drinking, sanitation, and hygiene purposes could be improved from the perspective of people experiencing homelessness

Participants offered many recommendations for improving their access to WASH. These recommendations fell into the following broad categories:

- Develop additional facilities
- Improve and expand services and access at existing facilities
- Maintain facilities, including regular cleaning, keep them well-stocked, and make sure they are safe
- Make necessary water facilities and services reduced-cost or free
- Ensure services are coordinated and well-publicized so people know they exist, as well as where and when they can access them
- Continue access for those who have it
- Ensure housing for all

Many of the recommendations participants provided are interrelated, and participants often explicitly highlighted these connections. While additional facilities on their own are a step in the right direction, to meaningfully meet existing needs, these facilities must be in an accessible location, well-maintained and stocked with necessary supplies, safe, free or affordable, and available throughout the day and night. All recommendations should be taken together to holistically address and improve gaps in access to water for people experiencing homelessness. Implicit in these recommendations is the need for service providers to coordinate with one another to cover the most areas at the most times.

Staff from DST and VOICES provided the perspective that for people experiencing homelessness, answering the survey questions that asked for suggestions to improve access to water for different services might have been a challenge. Some respondents might not have the information or experience to consider possibilities beyond existing conditions. Given this, many responses about how access could be improved were within the confines of existing experiences and services: more services, better maintenance, re-opening facilities that were closed due to COVID or other reasons, etc. Some participants simply said, "more access." This directness is very powerful: we do not need imagination to understand what to do to improve the current situation, just the will to create positive change and to allocate resources to meet existing needs.

Develop additional facilities and services

When asked about how to improve access to water for each specific use, participants most frequently responded that additional public facilities and services are needed. Participants spoke of the need for both additional short-term and more permanent solutions in locations that are nearby and accessible to all people.

Additional long-term facilities needed:

- Water fountains and bottle refill stations
- Public restrooms
- Handwashing facilities
- Stand-alone outdoor showering facilities, especially near parks and where people experiencing homelessness live
- Showering and laundry facilities in shelters
- Drop-in service centers where participants can access a suite of WASH services

Additional short-term services needed:

- Mobile/pop up services including showers and laundry
- Potable handwashing stations with touchless soap dispensers
- Bathroom pit-stops / mobile public restroom program
- Bottled water distribution
- Distribution of supplies to support access, including receptacles for drinking water, laundry detergent, and quarters for laundromats. Specific to showers, participants mentioned the need for supplies including soap, wipes, hygiene bags, and others to be able to clean themselves and their things.
- Transportation to existing facilities

"More donations. We could use a gallon a day for each [encampment] resident."

"Laundry coins donated and mobile laundry van to help transport."

"Compostable toilets- benefit earth, people + the environment- use for gardening."

"Bottled water assists during non-shelter hours."

"Every measured distance per capita should require access to toilets and water."

"More portable sinks with touchless soap dispensers."

"Sections of neighborhoods should have sun showers, like for surfers at the beach"

"Mobile showers or have a space where they have bathrooms, showers, laundry all at the same time."

Improve and expand services and access at existing facilities

Many participants specifically mentioned wanting improvements or expanded access to existing facilities and services. Specific recommendations included calls to:

- Re-open facilities that were closed due to COVID, such as public restrooms and showers at gyms, that people rely on for WASH services
- Remove locks and codes for facility use
- Extend facility hours (many participants specifically requested all-day/24-hour access to facilities, including libraries, laundromats, and for showers in shelters, rather than only having access for part of the day)

- Increase the frequency of currently available services, such as increasing the number of days shelters that
 already have laundry services offer them, increase the number of showers people can take at shelters per
 week (many participants said currently they can take showers one to two times per week), and lengthen
 the amount of time people can spend in the shower at shelters
- Make interim services that are currently available in some places, such as showers and mobile laundry, permanent and on site at shelters and other locations like encampments
- Add useful elements to existing facilities and services, such as temporary storage space with locks
- Allow public use at more business facilities, such as store restrooms where there is currently limited access

Some participants who had very limited access wanted to be able to bathe or wash clothes at least once a week. Others who already had this level of access wanted their access to be expanded to three days a week, and some wanted to be able to access washing facilities every day. Many want to have facilities that are used by fewer people.

"More shelters to offer baths/wash clothes. Have services be outdoors so they can be accessed when buildings close."

"Need more donations of wipes."

"More days that the showers are available."

"More public bathrooms in the park/by me! Open the park bathrooms back up! Many park bathrooms are closed."

"Make all water accesses available for all. Put taps back on."

"A safe available place that has good clean water and access free if possible or ask for it. Just being able to use clean water."

"Something closer; it's too far to carry clothes."

"24 hour access, no purchase necessary."

"More porta potties. 3 for 50 people isn't enough."

"Bring showers [to the encampment] 1x/week."

Maintain facilities, including regular cleaning, keep them well-stocked, and make sure they are safe Participants highlighted the need for maintenance at existing facilities, for all facilities to be cleaned regularly, stocked with necessary supplies such as soap and toilet paper, and for these facilities to be made safer for use. The need for more frequent sanitation of facilities was highlighted particularly given the context of the COVID-19 pandemic.

Specific to drinking water, participants mentioned that they want their water to be cleaner, and recommended water filters that are maintained and water quality monitors for water fountains.

Specific to restroom and handwashing facilities, participants recommended better lighting, single stalls with locks on doors, and monitors/security to make restroom facilities safer for use and ensure they are not vandalized. DST staff provided the perspective that porta-potties are much more likely to be used if they are monitored by someone present to ensure that users and their belongings are safe. Participants also recommended better and more regular maintenance to ensure facilities are clean and well stocked with toilet paper, hand soap, and other necessary supplies, such as feminine hygiene products. Additionally, several participants mentioned the need for regular running water for handwashing, citing that during the pandemic some sources have been shut off.

Specific to showers, participants expressed the need for showering facilities to be safe, secure, and private. Specific recommendations included having single stalls with doors, secure temporary storage, monitors or guards to ensure peoples' belongings do not get stolen, and well-lit facilities.

Specific to laundry/clothes washing, some participants suggested providing free or donated laundry detergent or quarters/laundry vouchers so people experiencing homelessness can use laundromats.

DST and VOICES staff provided the perspective that it can be very difficult for some people to feel safe getting into showers, due to mental health histories, trauma, and not wanting their possessions to be stolen. Given this, it is particularly important to create environments that are safe and have the necessary resources for people to clean themselves.

- "More places with security outside to keep it safe and not vandalized."
- "Needs more service/liquid soap/hand sanitizer. Needs more toilet paper, clorox wipe to wipe down toilet seats."
- "More public restrooms that are cleaned by us. We can give homeless people jobs to maintain the bathrooms."
- "Better lighting and not so secluded."
- "Make sure water is on, toilet is clean, and access is given."
- "I have kids, public bathrooms are not safe."
- "Need real restrooms, easier to clean."

Make necessary water facilities and services reduced-cost or free

Participants requested that necessary water services be made cheaper or free, including free bottles of drinking water and receptacles for storing publicly available water, and lower cost or free opportunities to shower and bathe. Specific to laundry, some participants recommended donating quarters and laundry vouchers for people experiencing homelessness, reduced-cost days at existing laundromats for people experiencing homelessness, and free laundromats for those who cannot afford them. Some participants also expressed the need for money to be able to buy cleaning supplies and to be able to wash clothes at laundromats or in buildings. Some participants recommended motel vouchers so people can wash clothes, bathe, and use restrooms.

- "I do not know anywhere where I can wash my clothes for free. If someone provided that service, it would help a lot."
- "More free water spots around town."
- "Money for laundry and monthly bus passes."
- "The public laundrymats should have a program that allows for a homeless person to get their clothes washed for free."
- "Maybe a EBT card for hygiene for showers."
- "Giving out bottled water at encampments."
- "Community tokens for homeless at laundromats."
- "The city be more responsive to homeless basic needs."

Ensure services are coordinated and well-publicized so people know they exist, as well as where and when they can access them

Participants want to know more about the resources that are currently being offered near them. Some recommended good coordination and outreach: making sure that temporary or interim services, such as mobile shower pop-ups, are widely publicized and provided on a regular schedule so people know where, when, and how to access them, and can count on them being there. Implicit in these recommendations is the need for service providers to coordinate with one another to cover the most areas at the most times. When possible, multiple services that meet different needs should be available at the same time.

"Knowing about more resources that are around."

"... Have a cycle of format so people know these places will be there for a certain time."

Continue access for those who have it

There were participants who said that they have access to WASH, that their access is fine now, or that nothing needs to be changed to improve their access. Some who said their access is fine now have access through housing and shelters, though some who said they have good access rely on family and friends or service providers and donations. A few participants staying at an encampment who indicated good access said they were very happy with the porta potties onsite. Other participants who said their access is good now were living in a vehicle or boat, using hand sanitizer and soap dispensers for access. Some who responded that "yes," they have access to restrooms, bathing, and laundry services, gave details that they access these services through public restrooms, mobile showers, and laundromats. It is important that current access is continued. The pandemic (and droughts before it which cut back on available and reliable public water sources) interrupted access for some who access water through public spaces, highlighting the importance of developing resilient, well-maintained public facilities.

"Access is fine because of donations."

"It's impressively convenient and I'm happy to know I can find my way to it (person with a sight disability living in an encampment using a public restroom)."

Lack of housing is the root of barriers to access

Some participants spoke to the very root of the problem: they said they want a home and a stable place to live to access water for drinking, restrooms, handwashing, showers, and bathing, and for doing laundry for themselves at any and all times, so they do not need to rely on the kindness of others or have their access limited by service schedules and store hours. Some participants who previously were unsheltered and now were sheltered through renting a room, in a shelter, or couch surfing expressed that their access is now good specifically because they have shelter.

"Everything is good now that I'm indoors [staying in a hotel provided due to the COVID-19 pandemic]."

"Really accessible and safe as long as I am not living outside," - participant living in a trailer



Photo courtesy of Downtown Streets Team

Recommendations

One participant, responding to the question asking how their drinking water access could be made better, easier, or safer, answered, "They could make it so access to free clean water is law." Safe, clean, affordable water is a human right in California. It is written—as law—into the California water code. However, without further action, funding, and policy implementation, the human right to water will remain unrealized for many people experiencing homelessness and other marginalized communities in California.

The following recommendations were formulated to address current gaps in WASH access based on insights from participants experiencing homelessness. Some recommendations were formulated with the additional expertise of direct service providers who contributed insights into the current funding and policy limitations that need to be addressed to realize the human right to water for all.

Municipalities must formally recognize water as a human right and invest in infrastructure and services to provide safe and accessible water for drinking, sanitation, and hygiene purposes for all people. While there are municipalities that provide some services and are working to expand access, particularly due to the COVID-19 pandemic, it is clear from this and other concurrent efforts that presently there are not enough facilities or services to meet existing needs. Many informal networks of family, friends, businesses and service providers are currently filling gaps to provide access to WASH for people experiencing homelessness, though it is a human right. Local governments should step up to fill, or support service providers in filling, evidenced gaps.

Decision-makers at every level should ensure that all planning commissions and policy development processes relating to homelessness meaningfully include people with current or past lived experience with homelessness. Including people experiencing homelessness in water-related planning will ensure that service provision and facilities are of the kind and quantity, as well as in the locations, that will best increase access.

County and municipal governments should directly engage people experiencing homelessness and service providers in their area on how to tailor and implement the broad recommendations provided through this and other efforts regarding how to improve WASH access. This includes exactly where and exactly which services and facilities would be the most useful in different areas. While there is a large and evidenced need for additional and improved WASH services for people experiencing homelessness, there is not a "one-size fits all" solution to current gaps in access. Specific challenges vary based on location and individual needs. Specific recommendations, such as "develop additional facilities" must be tailored to local conditions with input from those affected regarding exactly where and what kind of facility. The San Francisco Coalition on Homelessness' Water for All (2021) report is particularly useful because it focused on one locality and specifically asked people experiencing homelessness about the locations in which they would like to see additional or improved services in San Francisco. Understanding which WASH services are needed most in specific areas is an important next step to address local issues.

The Point in Time Count should identify one or two questions to add to their yearly or bi-yearly assessment to gather more information on access to WASH to inform service provision and facility development. Additional information is needed to better understand WASH access and gaps in service for different people experiencing homelessness. The Homeless Point in Time Count, conducted every other year in some counties and yearly in others, works to understand the number of people experiencing homelessness in the state. However, it does not capture specific information about access to WASH, or how these services could be improved. The Point in Time Count provides a unique opportunity to gather information from many people experiencing homelessness and could provide necessary follow-up information at the local level to tailor and apply the broad recommendations provided by DST and VOICES survey participants.

Future research should further investigate how demographic factors, including living situation, and water access are correlated for different people experiencing homelessness to best prioritize those who have the least access. Those who participated in this effort and had access to a home, shelter, or other access to a building with plumbing through relationships, school, or work, even intermittently, generally reported they had more access to water and were less reliant on public services and spaces, donations, or the kindness of others to meet their basic water needs. Although these pathways to obtaining water are beneficial to people experiencing homelessness, many are incredibly vulnerable to changing circumstances and represent short-term solutions to a chronic problem. Additional research should investigate how access to WASH varies for people experiencing varying levels of housing insecurity and based on other demographic factors so that services can be tailored to those who need them the most. Additional insights and information can be gained through further analysis of data collected for this effort beyond the scope of this report.



Photo courtesy of Downtown Streets Team

Include people experiencing homelessness into the framework and data tool to assess the status of water quality, accessibility, and affordability across the state. In 2019, Gov. Newsom signed SB 200 to provide funding to "provide safe drinking water in every California community, for every Californian." The Office of Environmental Health Hazard Assessment (OEHHA) was tasked by the California Environmental Protection Agency and the State Water Resources Control Board to monitor progress in achieving the human right to water in California and developed a framework and data tool to assess the status of water quality, accessibility, and affordability across the state. Unfortunately, the way OEHHA measures accessibility and affordability of drinking water is based on Community Water Systems (CWS), to which most people experiencing homelessness do not formally have access. In OEHHA's report, people experiencing homelessness are merely mentioned within the appendix section "Additional Groups or Units of Analysis or Topics to Consider." People experiencing homelessness must be included (ideally from the outset) in this and other processes that strive to define problems. If people experiencing homelessness are not included in the problem definition process, likely the solutions that are developed will also not meaningfully meet their needs.

Funding agencies should work directly with service providers to critically examine funding and service guidelines and identify and address elements that make it hard for service providers to be reimbursed for providing meaningful WASH services. These funding agencies include HUD, state agencies, and local governments. Well-meaning policies to reduce plastic waste have put service providers in the position of having to pay for bottled water out of their own pockets because they are often not able to be reimbursed for it, even though they are able to get reimbursed for juice or other sugary drinks. Additionally, contracts that do not allow for service providers to get cash, and therefore provide quarters for people experiencing homelessness to do laundry, create situations where service providers must go to great lengths to provide what could be a simple service. Laundromats take quarters and rarely provide receipts, making it difficult for service providers to get reimbursed. Funding agencies should work with service providers to identify specific policies like these and reform or create exceptions to them to be able to best fill existing gaps in WASH access. As shown in this assessment, service providers and donations are already filling a number of gaps in access to WASH for many people experiencing homelessness. Funding and expanding existing services, and making offering these services easier for service providers, can efficiently improve access.

More general fund dollars should be allocated for people experiencing homelessness. If HUD policies do not change, cities and counties should take responsibility to match restrictive HUD dollars with general funds through the Request for Proposals (RFP) and contracting process. This can allow service providers to provide and be reimbursed for more flexible services such as distributing bottled water and providing quarters for laundry.

Requests for Proposals (RFPs) to provide WASH facilities such as restrooms and handwashing stations should include maintenance costs and safety measures. Maintenance and safety were brought up by participants as issues to address and as recommendations for improving their current access to WASH services. These costs should be seen as a fundamental component of safe and functioning restroom and handwashing stations and therefore should be included in RFPs.

Funding agencies, researchers, and local stakeholders in all sectors should explore ways to leverage non-traditional funding sources to provide necessary services for people experiencing homelessness.

Concern about the environmental impacts of those experiencing homelessness frequently arises in the environmental sector. This includes debris from encampments, ecosystem impacts in riparian corridors, and other potential impacts. Despite this recognition, little to none of the funding earmarked for environmental purposes is used for solutions to homelessness. At the same time, advocates for ending homelessness are also concerned that using funding for impermanent solutions such as water access will take away from already limited funding for housing and addressing the core causes of homelessness. Environmental and other related funding could be used to address environmental impacts and promote human wellbeing in a comprehensive manner that can yield long-term results, without taking away from funding for long term solutions for housing. For example, funding for water quality could be used to provide services at a riparian encampment to reduce any impacts.

Municipalities should rethink how funding related to homelessness is spent. Cities and counties spend enormous amounts of money every month and every year on removing encampments and making public spaces inhospitable to those experiencing homelessness. For people experiencing homelessness, their existence and efforts to survive are criminalized without supportive alternatives. People experiencing homelessness have reported that the worst part of being homeless is being ignored and treated as less than human. Participants in this effort expressed that they are often not allowed access to business facilities precisely because they are experiencing homelessness. Funding strategies need to be reformed to be more sustainable and to center human health and dignity. For example, the funding that is currently spent on removing encampments could be repurposed to fund holistic services and pathways out of homelessness.

Some participants expressed the desire to be part of their own solutions—to participate in the maintenance of restrooms and other service facilities. Several participants also explicitly expressed wanting to take care of their needs in a way that is friendly to the environment. Stipends for people experiencing homelessness should be provided for maintaining restrooms and other inclusive solutions that create safe, social centers and invest in the community in more humane and sustainable ways.

Conclusion

The goal of this effort was to elevate the experiences and voices of people experiencing homelessness into planning processes. The survey responses provide insight from people experiencing homelessness about how they are accessing water for drinking, sanitation, and hygiene purposes. Their recommendations for improvements provide a roadmap for future interventions to address existing gaps.

Overall, the results of this assessment demonstrate that the human right to water has not been fully realized in the Bay Area for people experiencing homelessness. While this information is specific to the Bay Area and to those who contributed responses, it could also be applicable to unhoused people in other communities across the U.S.

Respondents with access to a home or shelter, even intermittently, or other access to a building with plumbing through relationships, school, or work generally reported more access to water and were less reliant on public spaces or donations, services, and the kindness of others to meet their basic water needs. These findings support the conclusion that homelessness is ultimately the primary barrier to water access for people experiencing homelessness. Therefore, the most effective long-term solution to meet the human right to water for people experiencing homelessness is permanent housing with adequate water and facilities for drinking, hygiene, and sanitation. In the meantime, water remains a human right, and interim solutions to meet these basic needs for people experiencing homelessness must be implemented and expanded.

The most critical next step will be specific follow-up directly with people experiencing homelessness in each locality to understand where and which of these broad facilities and service recommendations are most helpful in different locations, and how these needs differ by living situation, demographics, and other factors. In tandem, any policy and funding restrictions that currently create barriers to filling existing gaps must be critically examined and reformed.

References

Al Jazeera America. "More than 1 million people in California don't have reliable access to clean water." April 6, 2015. Available at: https://communitywatercenter.nationbuilder.com/more_than_1_million_californians#gsc.tab=0.

Congressional Research Service. 2020. Homelessness and COVID-19. Homelessness and COVID-19 (congress.gov).

Feinstein, L. 2018. Measuring Progress Toward Universal Access to Water and Sanitation in California. Pacific Institute: Oakland. Available at: https://pacinst.org/wp-content/uploads/2018/09/Measuring-Progress-2018.pdf.

Pacific-Institute Sep-2018.pdf.

Mack, EA and Wrase, S. 2017. A Burgeoning Crisis? A Nationwise Assessment of the Geogrpahy of Water Affordability in the United States. PLOS ONE 12(4): e0176645. https://doi.org/10.1371/journal.pone.0176645.

San Francisco Coalition on Homelessness. 2021. Water for All report. Available at: https://www.cohsf.org/water-report-2021/.

State Water Resources Control Board Human Right to Water Data Portal. 2022. Available at: https://bit.lv/2TAntx4.

United States Interagency Council on Homelessness (USICH). California Homelessness Statistics. 2022. Available at: https://bit.ly/3wtLTHk.

Verbyla, et al. 2021. An Assessment of Ambient Water Quality and Challenges with Access to Water and Sanitation Services for Individuals Experiencing Homelessness in Riverine Encampments. <u>Environ Eng Sci.</u> 38(5): 389–401. Published online 2021 May 24. doi: <u>10.1089/ees.2020.0319</u>.

Short and Long Assessment Questions For Needs Assessment With People Experiencing Homelessness

Demographic Questions Asked in Both Surveys

Age Race/Ethnicity Gender Sexual Orientation

Long Survey Questions:

Are you currently experiencing homelessness?
What is your current living situation?
How long have you been staying there?
What was your living situation prior to your current situation?

Questions about Drinking Water

Where and how do you usually get your water for drinking?

Do you have any concerns about the safety of the drinking water or your ability to safely access it? How could access to drinking water be made better, easier, or safer for you?

How has your access to drinking water changed since the beginning of the COVID-19 pandemic?

Questions about Restrooms and Handwashing

Do you have access to a restroom where you live?

If yes, is the facility maintained? (stocked with toilet paper, cleaned regularly)

If yes, is it a portable (porta potty) or a flushing toilet?

How far from where you're living is the closest toilet you can access?

How often do you have access to this restroom?

Do you regularly rely on any of the following for access to a restroom?

Stores?

Public Restrooms?

Porta-potties?

Libraries?

Is there a way you currently access a restroom not mentioned above? If yes, please specify Do you feel safe/secure when you use the restroom facilities you most often use?

What is your best estimate of how many other folks use the same restroom facilities as you do?

Do you have regular access to water to wash your hands at the place where you use a toilet?

If yes, is there always soap/water available?

If no, do you have access to handwashing elsewhere?

How would you rate the cleanliness of the toilet and handwashing facilities you use, 1-10?

How would you rate your access to toilets and handwashing facilities?

If less than 5 for either, why?

How could access or the experience of using toilets and handwashing facilities be made better, easier, or safer for you?

How has your access to toilets and handwashing facilities shifted since the beginning of the COVID-19 pandemic?

Questions about Showers and Washing Clothes

Do you have access to a shower or bath?

If yes, where?

If yes, how often can you access?

If no, how do you bathe?

Do you have access to soap for washing your body?

How could access to bathing be made better/easier/safer?

How has your access to water for bathing shifted since the beginning of the COVID-19 pandemic?

Do you have access to a clothes washer (laundry services)?

How could access to water for clothes washing be made better, easier, or safer for you?

Questions about Trash

How do you dispose of trash?

How close are the nearest public trash cans to where you stay?

Is there a trash removal service available where you stay?

What would make disposing of trash easier or better for you?

Closing Questions

Are there any other ways you interact with water that you'd like to share?

Is there anything we haven't asked you about that you think we should have related to issues with water? Is there anyone else you recommend we talk with?

Short Survey Questions:

Are you currently experiencing homelessness?

What is your current living situation?

How long have you been staying there?

What was your living situation prior to your current situation?

Questions about Drinking Water

Where and how do you usually get your water for drinking?

How could access to drinking water be made better, easier, or safer for you?

Questions about Restrooms and Handwashing

Where and how do you usually access toilet and handwashing facilities?

How could access or the experience of using toilets and handwashing facilities be made better, easier, or safer for you?

Questions about Showers and Washing Clothes

Do you have access to a shower or bath?

If yes, where?

If yes, how often can you access?

If no, how do you bathe?

How could access to bathing be made better/easier/safer?

Do you have access to a clothes washer (laundry services)?

How could access to water for clothes washing be made better, easier, or safer for you?

Questions about Trash

How do you dispose of trash?

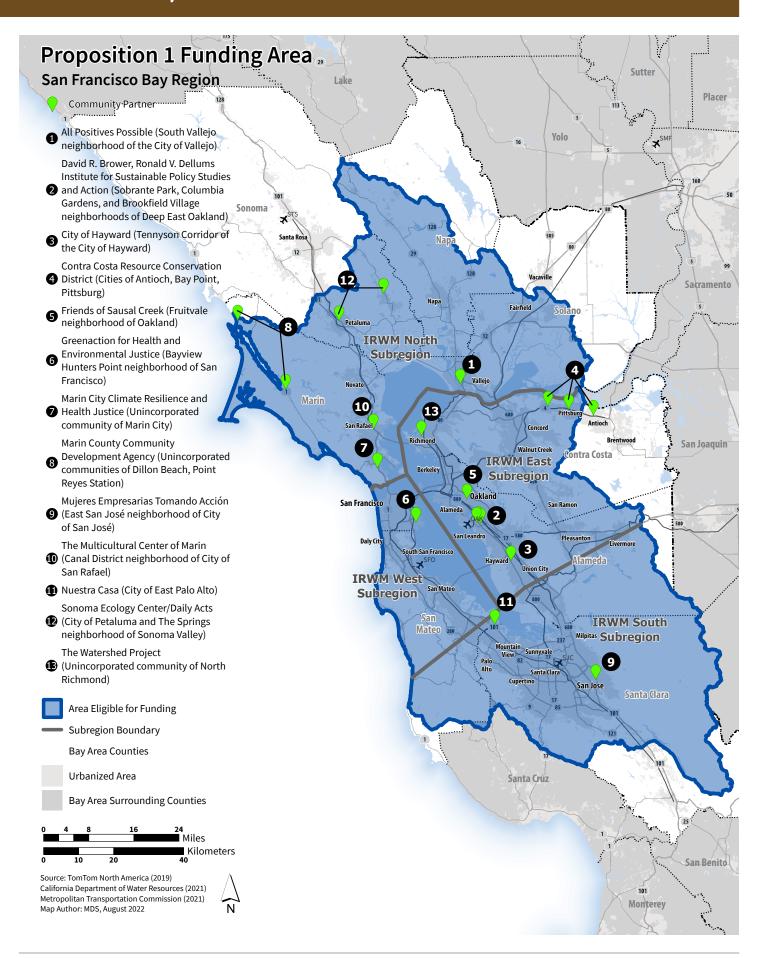
Is there a trash removal service available where you stay?

What would make disposing of trash easier or better for you?

Closing Questions

Is there anything we haven't asked you about that you think we should have related to issues with water?

4. Community Outreach Partner Needs Assessments



Overview

All Disadvantaged Community Outreach Partners undertook data collection for the water-related Needs Assessment as part of a coordinated overall regional strategy. The needs assessment was envisioned as a process driven and led by Disadvantaged Communities, and Outreach Partners tailored their coordinated processes to the community and the methods that worked for them. Each needs assessment was intended to be a case study, to take into account the Outreach Partner's positionality, history and relationships in the Disadvantaged Community in which they work as well as community characteristics and expressed preferences for engagement methods. This strategy was chosen to give the best picture of which water issues are most pressing and how they are manifesting from the perspective of Disadvantaged Community members, as well as how they would like to see them addressed.

For example, in some Disadvantaged Communities, outreach and needs assessment activities were most appropriately brought to community members through door-to-door outreach and surveys. In other Disadvantaged Communities where immigration status is a concern and community partners actively advise community members not to answer their door, outreach, listening sessions, and surveys were held at places where community members frequent. Some Disadvantaged Community Outreach Partners, who have been having ongoing conversations with community members for years about related issues, focused their processes on generating data to quantify these issues and on solutions. Other Outreach Partners, who have not had conversations with Disadvantaged Community members about water issues in the past or who had relationships only in parts of the community, attended existing events with trusted community groups to build trust and engage with community members in starting these conversations. In most cases, mixed methods were used and qualitative and quantitative information was collected through many conversations and surveys with Disadvantaged Community members to understand water needs and priorities. The needs assessments were overall structured to recognize, respect, and amplify Disadvantaged Community voices and self-determination.

While the needs assessment was specifically oriented toward water, water is tied to everything. All other issues, including affordable housing, jobs, and health, have a connection to water. The needs assessment process was leveraged to have conversations with Disadvantaged Community members about overall top priorities, and efforts were made to connect many of these issues—in the hopes of addressing them through IRWM or other funding—to water.

There are pitfalls in all centralized engagement efforts. Disadvantaged Communities are not monoliths, and often those able to be involved are those with time and interest, which can skew responses to prioritize certain issues. This report acknowledges the Disadvantaged Community members and perspectives that were not reached. Absence of identification of an issue in these assessments does not necessarily mean it is not a priority for some in that Disadvantaged Community.

The Needs Assessment and solution identification is an important first step. These conversations need to continue to gather more information where necessary, along with capacity building, technical assistance, and project development support. Getting from needs to shovel ready projects is no small task, particularly for low-resourced groups and Disadvantaged Communities.

In this section of this report, the process, findings, and next steps of each Disadvantaged Community Outreach Partners' needs assessment are presented. These sections were authored by each Community Outreach Partner and reflect their views.

All Positives Possible



Photo courtesy of All Positives Possible



All Positives Possible's mission is to promote positive community and environmental health, environmental and social involvement, and to develop strategies such as second chance and positive change to protect our environment and health locally and worldwide.

All Positives Possible (APP) is a 501c(3) non-profit and a grassroots community-based organization based in Richmond California, serving the greater Bay Area, including Sacramento and surrounding communities. It was created in 2009 to assist the efforts of low-income communities of color to confront growing environmental health, social justice, and economic crises and the negative effects of these crises on human health, particularly within low-income, disenfranchised, and underserved communities of color. All Positives Possible's staff provide outreach, educational, trainings, organizing, advocacy and mentoring support to affected communities and underserved populations of color. Their mission is to promote positive community and environmental health, and environmental and social involvement, and to develop strategies such as second chance and positive change to protect the environment and health locally and worldwide. They especially promote non-violent action, organizing, and advocacy as a means of community empowerment designed to bring about positive changes and second chance opportunities in their communities for those who have been incarcerated but pose no threat to society. They work to ensure that impacted communities and underserved populations of color have a voice and participate in all processes, policies or decisions that affect their health and quality of life, so that they too are a part of rebuilding their communities.



Project Description

All Positives Possible built on its foundation of sustained, grassroots community work to gather additional data on South Vallejo's water issues and priorities through surveys, interviews, and informational and listening sessions with impacted South Vallejo community members, agencies, and elected officials. They also reviewed documents and research related to water quality.



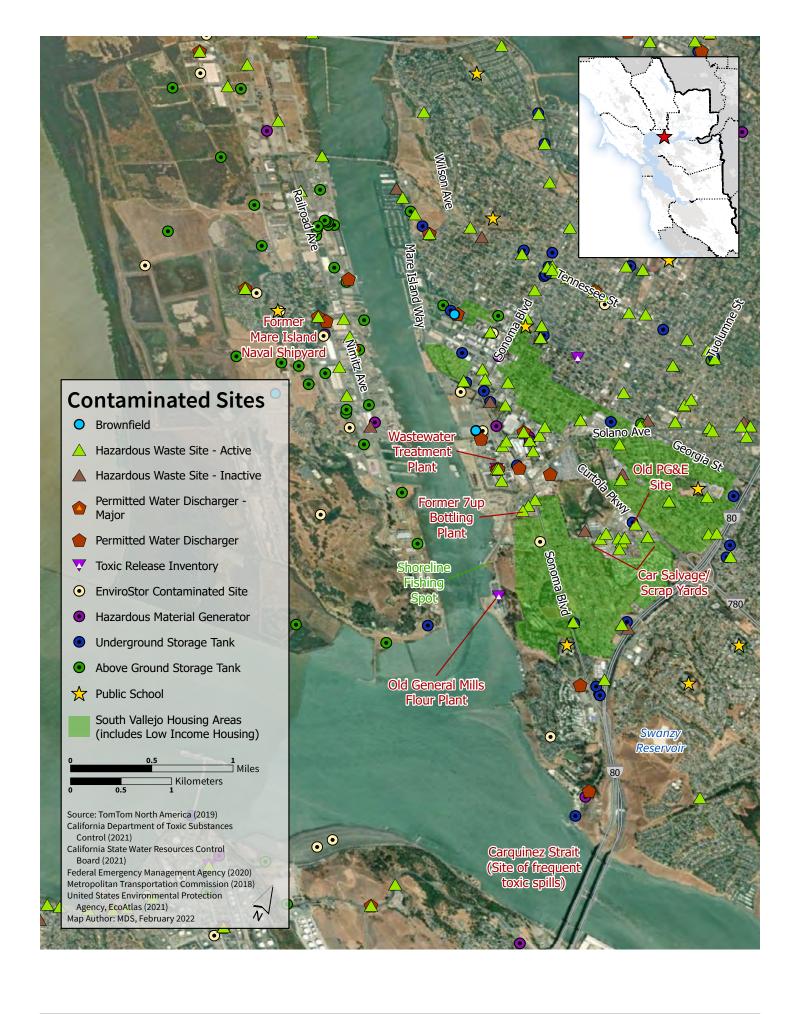
Old Sperry Flour Mill Fishing Spot

Just feet to the left side of the tree pictured is the Old Sperry Flour Mill property. Photo shows adjacency of the mill, which was a major polluter and is now no longer operating but remains highly contaminated, to the shoreline where community members recreate. This spot is now occupied by the Vallejo Marine Terminal. Both owners were recently indicted by the FBI as part of the bribery scandal at San Francisco City Hall, and one has been sentenced to two years in prison and a \$127,000 fine (Bay City News 2021). This is a regular fishing spot that many community members use to feed themselves and their families.



Proximity of the community fishing spot to the Old Sperry Flour Mill site.

Photos courtesy of All Positives Possible



Background on South Vallejo

Demographics

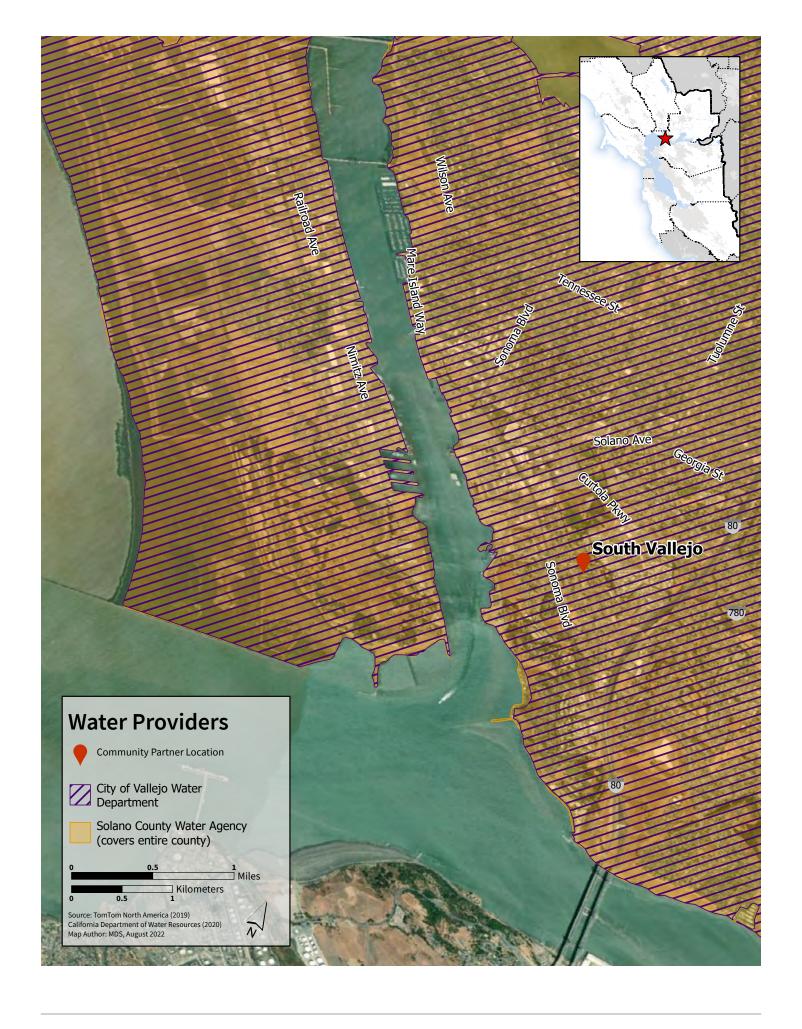
The City of Vallejo, California has a population of 120,095, with 35% of the population identifying as white, 26% Hispanic or Latino, 20% African American, 23% Asian, 1% Native Hawaiian and other Pacific Islander, and <1% American Indian and Alaskan Native (U.S. Census, 2021). Vallejo ranks in the upper quartile of the Population Density and Diversity Index when compared to other areas in California. A 2019 University of California Berkeley study showed that Vallejo is a very diverse city, with one of the two highest populations of African Americans in Solano County, but is segregated. Resources are not dispersed equally, and there is limited access to resources, better jobs, and public services, including schools, with negative consequences for overall wellbeing in areas including South Vallejo (Raskin-Zrihen, 2019).

The median household income in 2019 of South Vallejo was \$58,952, compared with \$71,265 for the City of Vallejo as a whole—a nearly 20% difference (City-Data, 2019). The area is subject to some of the worst water and air quality in the state, ranking in the highest percentiles of the California EPA's CalEnviroscreen, which identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. Vallejo ranks in the 86-90% overall, 95% for low birth weight, 94% for cardiovascular disease, and 99% for groundwater threat. Vallejo ranks in the 99th percentile for asthma, and rates of respiratory illness are also among the highest in California (Raskin-Zrihen, 2010).

History of Environmental Injustice and Inequity in South Vallejo

South Vallejo is a front-line, historically disadvantaged long term exposure high risk primarily low-income Black American community located a quarter mile from the Carquinez Strait in Solano County. There are two elementary schools, Grace Logan Patterson and Beverly Hills Elementary, in addition to several elderly and disabled care homes located within a quarter mile of the Phillips 66 (Formerly ConocoPhillips) San Francisco Refinery in Rodeo, within five miles of NuStar Energy Gas & Oil Refinery in Selby and the Valero Refinery in Benicia, and downwind of the Chevron Refinery in Richmond. In 2016, 2017, and 2021 toxic spills occurred in the Carquinez Strait, which is used for transport to and from the nearby refineries. In 2016, Vallejo residents reported a petroleum smell at the same time a tanker was unloading crude oil at the Phillips 66 Refinery, and dozens were hospitalized after the fumes made them sick. In 2017, a pipeline leak released oil into the waterway. In 2021, the Chevron refinery spilled oil in the same month Phillips 66 released toxic fumes into the air. In addition to negative public health impacts, oil spills are often unable to be entirely cleaned up and cause long-term damage to the ecosystem (Clyde & Snow, 2016; Hurd, 2017; BAAQMD, 2021).

South Vallejo has long been a toxic dumping ground for polluters, which have negatively impacted health and shortened lives. The area has historical and present pollution from the Old Sperry (General Mills) Flour Mill, former Mare Island Naval Base, Phillips 66 Refinery, Selby Slag Smelting & Lead Co, the Ryder Wastewater Sewage Treatment Plant, the old 7-Up Plant, the former Pacific Gas & Electric Manufacturing Gas Plant, old railroads, and other toxic companies. Many of these are Superfund sites. Some of these polluters have closed, leaving their contamination behind, while others remain operating and further negatively affecting the community's health. South Vallejo's already unhealthy air quality was further impacted on October 15, 2019, when explosions at NuStar Energy Gas & Oil in Rodeo sent large, toxic black clouds into the air, which directly hit the City of Vallejo and particularly South Vallejo. In addition, the recent severe wildfire seasons have forced residents to stay indoors, wear masks, and put wet towels against door cracks and window seals to avoid breathing in particulate matter.



Additional polluters have made attempts to set up shop in Vallejo. In 2003, Shell and Bechtel attempted to set up a Liquified Natural Gas Plant less than 1,000 feet away from residents' homes. In 2016, an Irish company, Orcem, proposed to set up a cement factory at the old Sperry Flour Mill site, which, according to the draft environmental report, would have brought in over 500 trucks a day with 60 tons of fugitive dust released into the community, 24 hours per day, seven days per week, 365 days per year, for over 65 years. There was also a proposal put forward by the U.S. Army Corps of Engineers and the ports to dredge six to ten additional feet between San Francisco Bay and Stockton so larger tankers could pass through, carrying more toxic substances on the waterway. Community members, living one-quarter mile from the water, organized against these proposals and were able to keep additional polluters out, at least for now (California Department of Justice, 2020; All Positives Possible, 2021; Martichoux, 2019; Sunflower Alliance, 2020).

South Vallejo continues to feel the effects of polluters located in their community, and animals have been harbingers of how these pollutants can affect residents. In February of 2021, a dead sea lion was found days after the Phillips 66 Toxic Release (see photo). In addition to the environmental pollution that affects community members' health, in 2018, sediment was found in the Swanzy Reservoir in South Vallejo due to a false reading from the reservoir's closed system. This caused sediment to be sucked from the bottom into the system, affecting the drinking water of 1,000 households in the area. City officials told residents that the water is safe to drink, "despite debris and discoloration," but also that residents should limit usage, which community members report seeded distrust (KTVU FOX 2, 2018). The recent severe wildfire seasons and COVID-19 pandemic have also highlighted the need for better water quality and more reliable water at home.



A dead sea lion was found days after the Phillips 66 toxic release.

Photo courtesy of All Positives Possible



Community-Identified Strengths and Assets

The community in South Vallejo came together to fight for their health—and win—against additional sources of pollution that have threatened their community. Community members fought against the Orcem cement plant every day for four years: developing postcards and other informational materials to give people a clear picture about what they were up against, knocking on doors to ask if their neighbors knew about the cement plant plans, and uncovering more and more sickness in the community that they suspect is related to the area's already heavy pollution burden. Community members realized that they needed data to push back, so activists and community members installed 25 monitors to track air quality. Eventually, the California Department of Justice (DOJ) investigated and found the impact of the cement plant on South Vallejo would be as severe as the community had believed. With the support of the DOJ, the community won the fight against Orcem cement and their plans to open in South Vallejo. Community members also banded with other threatened frontline communities in San Francisco, Rodeo, and Richmond to defeat a proposal from the U.S. Army Corps of Engineers and ports in the area to dredge the Carquinez Strait to allow bigger tankers carrying oil and gas to pass through waters from Stockton to San Francisco. The communities worked with the University of California, Berkeley to oppose the dredging, and the proponents decided to withdraw the proposal, at least for now. South Vallejo is not giving up the fight to continue to work to improve the health of their community.

Additionally, through All Positives Possible's commitment to ensure that drinking water in their community is safe, South Vallejo community members first identified and recognized tap water quality as a priority issue. They began the conversation about testing tap water to ground truth what community members are experiencing. All Positives Possible's efforts pushed the Bay Area DACTI Program in its early stages to conduct a tap water testing program.

Summary of Outreach and Education Efforts

Through the needs assessment process, All Positives Possible conducted surveys, canvassed, held four community listening and information sessions with impacted community members, and held three agency meetings. They identified two new community partners—Junior's Haircuts and Whip It Up—who they partnered with to host community information and listening sessions; and two new non-community partners: University of California, Davis, and the California Air Resources Board (CARB) Environmental Justice Department A.B. 617 liaison. All Positives Possible also developed outreach and engagement materials including postcards, flyers, newspaper, radio, social media, and TV interviews to help inform, educate, and increase participation of South Vallejo residents. All Positives Possible additionally identified more trainings and educational workshop sessions that are needed for continued support in South Vallejo.

All Positives Possible led community tours of the tidelands and waterways on Derr Street where the Old Sperry Flour Mill is located, where the City of Vallejo was proposing to allow the Orcem toxic cement plant, and where many homeless and poor residents rely on subsistence fishing and eating what they catch. They also led tours of Lake Dalgwick, Cal Maritime, and other impacted areas in South Vallejo.

In 2018-2019 All Positives Possible conducted water sampling in historically disadvantaged low-income neighborhoods in South Vallejo and led community toxic tours in in South Vallejo and in neighboring Bayo Vista public housing, both being historically disadvantaged, high risk, long-term exposed communities.



Photo of people experiencing homelessness along the Rodeo shoreline, a quarter mile across the Carquinez Strait, feet away from the Phillips 66 Refinery. Rodeo is another nearby historically severely disadvantaged community of color that has not been prioritized and is exposed to pollution in the area.

Photo courtesy of All Positives Possible

All Positives Possible worked to have effective engagement with the City of Vallejo Water Agency and Solano County Environmental Health Division Investigative Branch to work toward more health protective and preventative measures for residents, as well as better responsiveness to South Vallejo and other Disadvantaged Community neighborhoods in Vallejo. All Positives Possible also worked to engage with the Attorney General's new Environmental Justice Bureau.

Needs Assessment Findings

South Vallejo community members identified drinking water quality and the pollution of water bodies and air from many toxic burdens as top priority issues. Additionally, access to natural areas is being threatened by projects that restrict residents' ability to visit the shoreline, and subsistence fishers are at risk of harmful health impacts from ingesting fish from water polluted with toxic materials. On top of these issues, community members stressed the negative impacts of these issues on human health, the way the elderly and disabled populations are overlooked, as well as the impact of pollutants in the environment on animals/pets.



Drinking water

Community members reported that their tap water is brownish/discolored and foul smelling. Community members also reported being met generally with flippant, rude, and/or unsupportive responses to specific concerns and inquiries they have brought to their water and health agencies about tap water quality. This has created further community distrust in the water agency, on top of the Swanzy Reservoir incident, where sediment affected the taps of 1,000 households.

Some residents reported feeling that their negative health effects are connected to poor water quality, which causes extreme anxiety and stress when drinking water, cooking, or bathing. Due to this concern, many residents felt they have no choice but to purchase bottled water, causing further financial burdens on low-income residents, many of whom already have compromised health.

The issue of drinking water quality was further exacerbated by the COVID-19 pandemic. Residents have been homebound during the pandemic, and nearly everyone's water use has been higher, for drinking, wiping things down, etc., making the quality of water community members are in constant contact with even more important. Past severe fire seasons, where community members have gone without electricity and phones, have also increased the urgency of concern about drinking water quality—community members said the current poor quality of water prevents them from being able to use it in the ways they need.

Contaminants community members reported they are specifically concerned about include:

- Lead
- Tetrachloroethylene (TCE/PCE)
- Trichloroethylene
- Historic silver
- Microbial or Biological Contaminants
- Bacteria
- Viruses
- Parasites
- Perchlorate
- Selenium
- Chromium VI
- Volatile Organic Compounds (VOCs)
- Perfluorooctanesulfonic acid (PFOS)/Per- and polyfluoroalkyl substances (PFAS)
- · Gas, Oils and more

Community members expressed specific concern about VOCs. While lead has been a major focus of investigations in schools, community members worry about vapor intrusions from old polluting facilities like dry cleaners and gas stations that have shut down but never had their polluting source addressed. Instead of water flushing the toxic vapor out into the Bay, community members expressed concern that it sits in pipes and backs up into homes and schools.



Residents describe the residue pictured above, left in sinks from tap water, as looking like dirt but having the feel of an oily substance. Community members have reported that water agency staff came to look, but said this substance wasn't from the pipes. This experience is described in Black Tears, Blue Fears video (link included at end of report).

Photos courtesy of All Positives Possible



Water And Air Pollution

There have been many known refinery mishaps, including oil spills and malfunctions that have caused toxic gas expulsions that have sent residents to the hospital. Oily substances were observed in the Carquinez Strait and surrounding shorelines. Many residents report rotten egg and heavy oil odors in the air regularly throughout the day, in addition to nauseous raw sewage odors. Water and air pollution becomes human body pollution in the surrounding communities. Additionally, community members have reported raw sewage around their homes and in their yards (Goldberg, 2017).



> Access to Green/Open Space

Community members expressed concern about efforts by nonprofits and city/elected officials that would cut off South Vallejo residents' access to the waterfront and tidelands, denying South Vallejo residents access to their own living environment and water resources.



Through surveys and conversations with subsistence fishers and residents who fish for sustenance and recreation, All Positive Possible identified polluted fish being a major concern. Residents feel they have no alternatives to eat if they want freshly caught fish for subsistence in the South Vallejo, Bayo Vista, and Carquinez Strait. All Positives Possible identified no fish testing has occurred in the Carquinez Strait for 29 years.

Public Health

An overarching theme that arose in conversations with community members was the connection between water-related issues and personal health. Many community members have specific negative health impacts they worry are connected to poor air and water quality. If so, they want to make sure that the root causes are addressed. All Positives Possible took time through their needs assessment process to document specific health effects community members identified:

- One resident described an abscess on their hand with skin itching that was made worse when their hand
 came into contact with tap water. Tests on the abscess came back inconclusive, and their doctor told them
 it could be from pollutants in the water or air, and likely their body is reacting to it the best way it can. Until
 this resident understands what is going on and what her body is reacting to, she can't address the excessive
 itching and resulting scratching to the point her hands—including between her fingers—are raw.
- Another resident described sores on their head from washing their hair, and headaches, and said they had questions about these health issues that they would like answered.
- Some community members described asthma issues, particularly in the older population, and the growing need for pumps or inhalers for people who had never needed them before.
- Others described growths on parts of their bodies that doctors haven't been able to explain.
- Some community members have reported loss of consciousness.

The biggest question on community members' minds seemed to be: are these health issues connected to South Vallejo's high pollution burden? There was tremendous desire to investigate what is going on and the connection between water and air issues and public health. As one community member put it,

"The community is not speculating, we're feeling the aftermath and health effects" of documented pollution and its high impact.

Many community members also reported being concerned about the exacerbated effects of poor air and water quality on vulnerable populations, including the elderly population, disabled population, and animals, who are frequently overlooked. Several community members explicitly expressed concern over water quality in the schools, especially given the particularly detrimental health effects of lead on childhood development. One resident reported losing several kittens right before the Swanzy incident was discovered, seeing this as animals telling them what was going on before people realized it. Some residents observed that often the health conditions and sensitivities of animals, including allergies, are also overlooked.

Next Steps

All Positives Possible will continue to advocate for, outreach to, and engage with the South Vallejo community to ensure their right to water resources.

All Positives Possible and South Vallejo residents recognize the importance of having data to back up claims. In the past, survey data they collected was disregarded by a regulating agency because it was collected by the community. When All Positives Possible members (People For Children's Health & Environmental Justice), first canvassed the Midway Village neighborhood, they realized people were going to the hospital with seizures, cancer, and bloody noses, and that horses were dying, so they and made complaints. They were told by a regulating agency that they were merely complaining and didn't have data to back up their claims. All Positives Possible and the community followed up by collecting surveys, which were then disregarded because the agency said they had led respondents to their desired answers by asking if they had been experiencing specific smells, rather than just asking if they were experiencing anything.

To gather additional, validated data on tap water quality, All Positives Possible is participating in the DACTI Program regional tap water quality testing effort. During the needs assessment process, All Positives Possible began gathering water samples from tap water and garden hoses to test for lead, but more testing is needed and desired by community members to understand the issues they are experiencing and their potential causes. More testing is needed to understand potential interactions from raw sewage from the wastewater treatment plant in the community, whether tap water problems originate in distribution lines or premise plumbing, and whether there are quality differences between different water provider sources. The Swanzy Reservoir was particularly noted as a source of concern for contamination. The tap water testing program will help provide accurate information that can be shared with the community and used to inform next steps. Lack of trust in the water agency due to past experience makes third party, independent testing particularly important.

All Positives Possible is a strong advocate for ensuring that people are made aware of what's going on in their community and being included in the beginning of decision-making processes that affect their quality of life. All Positives Possible will continue to create awareness in their community, because currently many people don't have information about water and other issues, and don't know where to get it. All Positives Possible will continue to make connections between communities because what affects one of us affects us all: water and air quality issues do not have census tract borders.

All Positives Possible is also a strong advocate for the development and funding of grants, resources, and programs that focus explicitly on African Americans, who receive the least support in areas including finance, public health, social service needs, legal needs, and for people experiencing homelessness compared to other non-African American populations. All Positives Possible recognizes that other communities also experience oppression and marginalization, but continues to advocate for African American populations who experience the worst effects.

All Positives Possible identified many additional efforts that would benefit the South Vallejo community:

- Address fear of retaliation from landlords, and Housing and Urban Development, for residents in lowincome housing programs raising issues related to health and safety especially as it relates to water quality
- Increase involvement from local and state public health departments. Pollution and environmental
 burden overlap with public health, and the public health perspective has been lacking in many processes
 relating to low-income housing programs, residents' health, and environmental justice as it relates to
 water quality. Public health data and support would be useful for making explicit connections between
 pollution burden and health impacts related to historically disadvantaged, high risk, long term exposure
 American Black populations
- Address with priority and urgency the Unhoused/Homeless Population's access or lack thereof to drinking, tap and quality water
- Grant writing workshops that support communities with live grant-writing
- Impacted community mapping/ground-truthing to identify emissions affecting community health and tap water quality concerns
- Ensure open space remains open and accessible to the public and left alone in its natural state, rather than developed by and for toxic polluters and profit (All Positives Possible welcomes good business expansion, development, and beautification, but not additional polluters that impact already overburdened suffering community health, or redevelopment that causes displacement)
- Conduct reliable water testing and gather ground-truthed information on water quality in Vallejo, to be compiled into a "Don't Trust the Yearly Water Report" report
- YouTube series (currently in progress) with commentary on community water, making comparisons to Flint, Camden, and Puerto Rico
- Train the trainer style program for Community Advocates to engage in BAIRWMP CC meetings, serving as Disadvantaged Community representatives
- Conduct additional community surveys
- Identify alternative water cleaning methods

Recommendations

Black Americans must be declared a protected class and made a priority due to historic and present systemic racism, discrimination, and inequities. DWR and other funders should develop grants and other programs that are focused explicitly on African American populations and their needs and impacts, including the effects of inequitable long-term high dosage exposure to toxins and pollutants. These programs should specifically address the unique ongoing disparities and oppression experienced by African American people.

References

All Positives Possible (2021, October 1). Black Tears, Blue Fears. [Video]. YouTube. https://youtu.be/wp5URQzsdbM

Bay Area Air Quality Management District (BAAQMD). (2021, March 3). Board of Directors Meeting Slides (agenda: 18A): Chevron Oil Spill Summary Feberuary 9, 2021; Phillips 66 Refinery Hydrogen Sulfide Release February 23, 2021. BAAQMD. https://www.baaqmd.gov/~/media/files/board-of-directors/2021/brd presentations 03032021-pdf.pdf?la=en.

Bay Area Air Quality Management District (BAAQMD). (2017, June 14). Notice of Preparation and Notice of Public Scoping; Phillips 66 Marine Terminal Permit Revision Project - Draft Environmental Impact Report. https://www.baaqmd.gov/~/media/files/planning-and-research/cega/final-nop-06142017-pdf.pdf?la=en

Bay City News. (2021, September 21). Contractor who pleaded guilty to bribing former DPW director sentenced to 2 years in prison. Napa Valley Register. https://napavalleyregister.com/news/local/contractor-who-pleaded-guilty-to-bribing-former-dpw-director-sentenced-to-2-years-in-prison/article_9ddc3b31-ae94-574f-8b8c-b6b7daf8ad04.html

California Environmental Protection Agency and Office of Environmental Health Hazard Assessment. (2021). CalEnviroScreen 4.0. [Map] https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

California Department of Justice (2020, November 23). The Fight for Environmental Justice: Vallejo. [Video]. YouTube. https://youtu.be/Osu40T99l8U

City_Data.com. (2019). South Vallejo neighborhood in Vallejo, California (CA), 94590 detailed profile. Urban Mapping. https://www.city-data.com/neighborhood/South-Vallejo-CA.html

Clyde, D., Snow. K (2016, September 22). San Pablo Bay Oil Spill Likely Linked to Crude Oil Tanker. KQED. https://www.kqed.org/news/11097157/officials-investigate-whether-phillips-66-refinery-tied-to-san-pablo-bay-oil-spill

Goldberg, T. (2017, May 22). More of Bay Area May Be Vulnerable to Refinery Mishaps Than Previously Believed. KQED. https://www.kqed.org/news/11465002/more-of-the-bay-area-may-be-vulnerable-to-refinery-mishaps-than-was-thought

Hurd, R. (2017, September 6). Labor Day leak spills 25-50 gallons of oil from Carquinez Strait pipeline. The Mercury News. https://www.mercurynews.com/2017/09/06/labor-day-leak-spills-25-50-gallons-of-oil-from-carquinez-strait-pipeline

KTVU FOX 2. (2018, February 11). Vallejo city officials say water is clean after sediment found in reservoir water. FOX Television Stations. https://www.ktvu.com/news/vallejo-city-officials-say-water-is-clean-after-sediment-found-in-reservoir-water

Martichoux, A. (2019, October 19). Video shows explosion at NuStar Energy storage tank in Crockett. <u>SFGATE</u>. <u>https://www.sfgate.com/local-donotuse/article/Video-explosion-fire-refinery-nustar-crockett-14536858.php</u>.

Raskin-Zrihen, R. (2019, February 12). Vallejo is diverse but segregated, new study finds. Vallejo Times-Herald Online. https://www.timesheraldonline.com/2019/02/12/vallejo-is-diverse-but-segregated-new-study-finds/

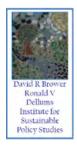
Raskin-Zrihen, R. (2010, December 17, Updated 2018, August 29). Vallejo's asthma rates higher than average. Vallejo Times-Herald. https://www.timesheraldonline.com/2010/12/17/vallejos-asthma-rates-higher-than-average/

Sunflower Alliance. (2020, November 12). Phillips 66 Marine Terminal Expansion Finally Defeated. Sunflower Alliance. https://www.sunflower-alliance.org/phillips-66-marine-terminal-expansion-finally-defeated/

United States Census Bureau. (2021). US Census Bureau QuickFacts: Vallejo city, California. https://www.census.gov/quickfacts/vallejocitycalifornia

Brower Dellums Institute For Sustainable Policy Studies and Action (BDISPSA)





The Brower Dellums Institute for Sustainable Policy Studies and Action (BDISPSA) explores Nature and Human Nature at scales from the wellbeing of a young child, to the social formation of our cities, to how we plan sustainable and thriving global outcomes for our human enterprises.

The Brower Dellums Institute for Sustainable Policy Studies and Action (BDISPSA) explores Nature and Human Nature at scales from the wellbeing of a young child, to the social formation of our cities, to how we plan sustainable and thriving global outcomes for our human enterprises. The Institute focuses on connecting the dots between sectors because human and all ecological systems include an interplay between everything and everybody all of the time.

The Institute helps initiate and manage funded community-based projects and conduct action research which integrates multiple sectors, primarily at local levels. It hosts local, regional and international conversations through informal meetings, seminars, conferences, courses and publications.



Project Description

The Water Management and Greenway Access Community Involvement Plan, launched by BDISPSA in 2017, works with adult and youth residents of Sobrante Park, Columbia Gardens, and Brookfield Village to investigate, understand, and describe water needs, and identify a range of possible solutions through surveys, school classes, community workshops and tours. With other partners, this project hired local residents to develop strategic plans which integrate the whole pattern of needs and assets. Specific project grant applications were developed by a neighborhood working group.

Background on Deep East Oakland

Demographics

The total population of Oakland is 412,040. This David R. Brower, Ronald V. Dellums Institute for Sustainable Policy Studies and Action project lies within the general area of the East Oakland Neighborhood Initiative, which contains six adjoining neighborhoods with a total population of under 50,000, including the three communities that were the focus area of this project: Sobrante Park, Columbia Gardens, and Brookfield Village. Several census tracts are in the highest earthquake shaking category as well as in the flood pathway of a Chabot Dam failure. The area is on the front line of the climate change effects of flooding from sea level rise as well as saltwater intrusion floating legacy toxins into homes.

The census tract that includes Columbia Gardens falls in the 97th overall percentile of CalEnviroScreen 4.0, which is used to identify communities with disproportionate pollution burden from multiple sources in California. The census tract of 4,687 people is 53.5% Hispanic, 34.9% African American, 4.8% Asian American, 4,7% other, and 2% white. It falls into the 92nd percentile for pollution burden (including the 92nd percentile for diesel particulate matter; 82nd percentile for traffic, 97th percentile for lead from housing as well as groundwater threats; 95th in cleanup sites, hazardous waste, and impaired waters, as well as 78th for solid waste), and 94th percentile for population characteristics (including the 100th percentile for asthma and 98th for low birth weight).

The census tract that includes Brookfield Village falls into the 94th percentile of CalEnviroScreen 4.0. The census tract of 2,490 people is 59.2% Hispanic, 27.9% African American, 5.8% other, 4.4% Asian American, and 2% white. It falls in the 79th percentile for pollution burden (including in the 94th percentile for diesel particulate matter, the 98th for traffic, 99th for lead from housing, 93rd for cleanup sites and 87th for impaired waters), and the 96th percentile for population characteristics (including the 100th percentile for asthma, and 96th for housing burden).

The census tract that includes Sobrante Park falls into the 83rd percentile of CalEnviroScreen 4.0. The census tract of 3,672 people is 57% Hispanic, 31% African American, 6.5% Asian American, 2.9% other, and 2.5% white. It falls in the 83rd percentile for pollution burden (including the 99th percentile for traffic burden, 97th for cleanup sites, 93rd for lead from housing, and 87th for impaired waters), and the 86th percentile for population characteristics (including the 96th percentile for asthma, 97th percentile for low birth weight, and 88th for education).

History of Environmental Injustice and Inequity in Deep East Oakland

The Deep East Oakland neighborhoods of Sobrante Park, Brookfield Village, and Columbia Gardens are located on Oakland's southern border, defined by San Leandro Creek near the Oakland Airport, the Coliseum, and San Leandro Bay. Sobrante Park also houses the Sogorea Te' Land Trust of the Confederated Villages of Lisjan / Indian People Organizing for Change. This area is classified by the state's definition to be severely disadvantaged / disadvantaged communities (80% / 60% of the Median Household Income). They are the most impacted neighborhoods in the Bay Area according to Cal EnviroScreen 4.0 and have a lower life expectancy than the broader City of Oakland. These communities have historically been under-resourced and impacted by redlining, freeways, and isolation from other parts of Oakland. There is competition among these areas for funding, resources, and shared public spaces. Illegal dumping and trash have been left on neighborhood streets.

The area was built up during and after World War II with housing to sell to service members and war workers. These neighborhoods then experienced white flight in the 1950s and 1960s, as many white families left, leaving behind a tight-knit and increasingly African American community with a thriving business center in the Sobrante Park area. Older residents describe their childhoods as a safe suburban life when they could be out all day in the neighborhood and exploring the open spaces along the creek as long as they got home by dark. They remember a full range of local African American-owned businesses, including a doctor who would make house calls. There was a vibrant music culture. However, by the late 1960s, the thriving business center was waning due to the drug trade brought in by federal agencies and urban renewal which bulldozed many of the smaller commercial buildings. Home financing from the GI Bill had generated a class of "white" European-looking families to purchase and renovate homes and businesses. Because of real estate restrictions, most houses and remodeling loans were not available to African Americans. Undesirable business types like auto dismantlers were zoned into the area, many directly along the "one way in, one way out" entrance to Sobrante Park. Many stores shut down or moved elsewhere. The grocery store at the entrance of the Sobrante Park neighborhood burned down in a fire.

With the advent of affirmative action and the war on poverty, wealthier families slowly migrated out of town, assimilating more into the mainstream. As a historian of an African American church in Oakland said, "Some churches went from 'how can we help our community' to 'look how financially successful we are'." During the foreclosure crisis, many community members who had lived in Sobrante Park for much of their lives lost their homes, and now more community members are renters. In recent years, the demographics have shifted, and the area has become an increasingly Latinx community.



Sobrante Park Fair community outreach, July 2021.

Photo courtesy of BDISPSA

Community-Identified Strengths and Assets

The rare assets of a flowing open creek, proximity to the bay, views of the hills, seven schools, a number of concerned, supportive and non-system entitled community members, some concerned businesses, agency and school staff, multiple skills, creativity, strong family ties, mature tree cover, and multiple agencies working in the area are potential pre-conditions for these neighborhoods to flourish. Some residents, who have been able to, have chosen to stay in or return to the neighborhood.

The communities of Sobrante Park, Columbia Gardens, and Brookfield Village have many places of worship and community organizations taking the lead to support their community. These maintain a spirit of taking care of one another, cultural events, community organizing and political action. Despite historically being underserved, the Sobrante Park neighborhood has retained an active base that, in 1968, banded together to build Tyrone Carney Park — named after a young Black resident who died in the Vietnam War — in the same spot where the grocery store had burned down earlier that year. The park was subsequently upgraded, but after a drug-related killing, the park was shut down. Funds allocated to re-open and manage the park were re-directed in 2012 by the District's Council member at that time to the pay-for-services regional East Oakland Sports Center.

The East Oakland Boxing Association was founded in 1987. Athletics, after-school programs, tutoring, job readiness, summer paid internships, and a roof rainwater-fed organic garden were developed. Founded in 2006, the Sobrante Park Resident Action Council developed a block-by-block and phone tree outreach system, the Sobrante Park Youth (SPY) program, Health and Resource fairs, family/school programs, and a Time Bank for trading skills. In 2006, the City of Oakland Redevelopment Agency provided funds for landscape architect Walter Hood to draw plans voted on by the community

In 2014 Sobrante Park community members, to prevent further illegal dumping, organized a community project to install a partial barrier to a city street that had become a junkyard (Dirks, 2015). Later, a community mural was added. Funded by the Alameda County Health Department, the school psychologist at Madison Park Academy High School worked with students to create an anti-dumping campaign.

The East Oakland Collective was formed in 2016. It provides economic development, civic engagement, planning, and homeless services prioritizing Black residents.

Working with the Alameda County Sheriff's Office, the Sobrante Park Resident Action Council has received State funds to rebuild Tyrone Carney and Sobrante Mini-parks. BDISPSA is supporting community engagement for the designs.

In the heart of Deep East Oakland, Lisjan is a traditional village site and the first piece of land rematriated to Sogorea Te' Land Trust/Indian People Organizing for Change within the territory of Huichin. This site was deeded for rematriation by Planting Justice, a nursery that trains and hires locally.

Lisjan is home to the first arbor, a Californian Native ceremonial space, in this territory in over 250 years; a symbol of Ohlone peoples' resistance and strength in the face of colonial adversities. Here Sogorea Te' Land Trust/Indian People Organizing for Change operates out of a standard-sized shipping container named Jakelin, in memory and honor of Jakelin Caal Maquin, a Q'eqchi' (Guatemalan) baby that passed away unjustly while in the custody of US border patrol. The work at Lisjan, and at each site, is for the future of Indigenous youth.

Current water-related funding has had a multi-year history. In 2008 the David Brower, Ronald V. Dellums Institute for Sustainable Policy Studies and Action (BDISPSA), in partnership with Merritt College Environmental classes, having visited and studied the San Leandro Creek watershed, began to support a planning effort to envision community access to a restored San Leandro Creek with a trail that would connect the Martin Luther King, Jr. Regional Shoreline park eastward through the urban areas into the Regional Parks in the hills.

Founded in 1969, originally named the Berkeley Creators Association Educational Foundation, BDISPA was re-named after the Association advanced a 1976 Noble Peace Prize nomination for the mainstream environmental icon, David Brower by the social justice icon, Ronald Dellums for the purpose of diversifying the environmental movement. In corroboration of its research on the psychological aspects of peace and violence, the organization also helped initiate the local crafts sales on Telegraph Avenue, now in its 5th decade. The organization funded public mural projects by artists from the Black Arts Movement. In order to fill the small-scale economic development gap, the organization piloted locally designed and built public furnishings through several Berkeley city agencies. Scholarships were provided to its wilderness backpacking camp for youth recommended by the Black Panthers Community School. In 1974, the youth from the backpacking camp installed one of the first restorations in the East Bay Regional Parks since the 1930s and '40s Works Progress Administration. In 1993, it supported the Ecological Restoration degree at Merritt College, the first in the nation. These experiences have provided a base for the current BDISPSA partnership projects in East Oakland.

The community outreach for this DACTI project was based on BDISPSA's experience as a member of the Environmental Justice Coalition for Water and the North Richmond Shoreline Alliance, as well as lessons learned from the Richmond Greenway. In conjunction with the Merritt College Environmental Management and Technology Program, BDISPSA researched and developed aspects of community participation in neighborhood-scale urban planning, informally referred to as "Re-Villaging the City". In 2010 the Oakland Redevelopment Agency funded the multiple partner Green Works Development program based on designs coming directly from the community. This Sobrante Park design-build hands-on education youth program was the pilot project for the 2017 BDISPA grant application to the California Resources Agency for the San Leandro (Lisjan) Creek Greenway. In 2018 the Resources Agency awarded the \$4.1 million implementation grant for the Greenway trail to the Alameda County Flood Control and Water Conservation District on behalf of the community. BDISPA arranged the use of Tribal Involvement Best Practices (Ortiz, Beverly) in the park furnishings design of a ceremonial circle and traditional, food, health and fiber plants in the trail vegetation plan, and to include Lisjan history and current activities in the interpretive signage and virtual tour application being developed.

A number of studies and publications have supported the pre-planning for this project and for the San Leandro (Lisjan) Creek Greenway. Following the 2008 and later site visits, BDISPSA linked with Friends of San Leandro Creek. With the lead of East Bay Regional Parks Director, Doug Siden, the San Leandro Creek Alliance was formed. In 2015, the City of Oakland funded an opportunities and constraints Stakeholder Vision study by BDISPSA, followed by a partnership with Rails to Trails Conservancy for the CalTransfunded San Leandro Creek Master Plan study (City of San Leandro, 2017). BDISPSA published community photography book, A Walk Along San Leandro Creek (www.browerdellumsinstitute.org 2017). Initiated by BDISPSA, the East Oakland area was chosen for a study by Rockefeller funded Resilient by Design Challenge in 2017 and 2018. There were 1994 design studies for upstream public access by the University of California College of Environmental Design as well as a scientific study of the Rainbow Trout population.

In 2016, BDISPSA applied the re-villaging concept to East Oakland as a connecting-the-dots process between the intersecting sectors of health, the built environment, environmental health, private and public enterprises, and policy into a Whole Oakland Plan concept from which each, otherwise siloed, sector would consider their effects on, responsibility to, and multi-benefits of every other sector.

To maintain and use public spaces and create training and employment, the Stewardship, Programming, and Safety concept was piloted with a first Communications Hub circle at Madison Park Academy focused on the use of the adjacent creek.

In 2017, the East Oakland Neighborhood Initiative (EONI) was formed between 12 East Oakland neighborhoods organizations, including BDISPSA, to develop a new vision for East Oakland neighborhoods historically impacted by redlining, injustice, and divestment. After co-developing and submitting an application, partially informed by the Whole Oakland concept, to the California Transformative Climate Communities Planning Grant (TCC) program. EONI was selected as a recipient in 2018. The grant financed a year-long, community-led planning cycle for six neighborhoods in Deep East Oakland which included Sobrante Park, Brookfield Village, and Columbia Gardens. Resulting in the EONI five key goals that shaped the planning process:

- Reduce greenhouses gases;
- Prevent displacement;
- Improve public health;
- Build economic empowerment; and
- Plan by and with the community.



Madison Park Academy and Sogorea Te' Land Trust/Indian People Organizing for Change (IPOC) visit San Leandro Creek, August 2021.

Photo courtesy of BDISPSA

The EONI process centered around multigenerational people power and knowledge, as well as non-system-entitled underestimated community self-reliant assets, to drive for deeper community involvement in planning and maintaining its own future.

The EONI process empowered community-based organizations, resident leaders from each of the six neighborhoods within the project area, and City officials to co-create the 'Better Neighborhoods, Same Neighbors' community-led resilience plan (City of Oakland website) for an implementation funding application. The San Leandro Greenway CNRA funding provided part of the matching funds for the \$28.2 million grant which was awarded from the Strategic Growth Council TCC funding in 2020.

Based on previous work, the community-led resilience plan advanced six projects for implementation. One of these is for the operation and maintenance of part of the San Leandro Creek Urban Greenway by the East Bay Regional Park District which is funded to provide a full-time Park Ranger and a Naturalist once the Greenway is complete.

The San Leandro Creek Urban Greenway project creates continuous safe route access for the public with key community gateways. It provides connectivity to multiple community assets, including the Martin Luther King, Jr. Regional Shoreline, regional parks, nearby schools, and the Planting Justice nursery, which provides organic and health food and food-producing plants available to the community. 2,000 trees will be planted throughout the project area to promote healthier surroundings. Co-Applicants Black Cultural Zone, Planting Justice, and East Bay Permanent Real Estate Collaborative plan to support each other in their community engagement, displacement avoidance, and workforce development efforts to form a Small Business Alliance and stabilize housing through Accessory Dwelling Unit (ADU) housing production, while creating jobs in construction, community greening, and bike maintenance and repair.

BDISPSA will work in collaboration with the funded groups to continue the aligned community engagement hub circles and fulfillment of the San Leandro Creek Urban Greenway community designed and built park furnishings, culturally relevant interpretive signs, an interactive virtual tour app, and native vegetation. BDISPSA has advanced a community real estate ownership concept as part of anti-displacement efforts as well as part of a strategy for providing housing for the currently homeless.

Summary of Outreach and Education Efforts

The needs assessment work built upon years of discussions about community priorities. BDISPSA conducted surveys through a variety of means including social media, websites, and approximately 115 outreach events, and integrated input from other planning processes including the East Oakland Neighborhood Initiative, San Leandro Creek Greenway Project, and Sobrante Park Resident Action Council (SPRAC). BDISPSA also collected data from tours, site visits, and door-to-door surveys. BDISPSA hosted interns to conduct outreach, create a community stewardship network, and connect youth with local artists and nature. Overall, BDISPSA has collected roughly 560 counted responses through its outreach.

BDISPSA hired its own staff as much as possible from residents and people who work in the project area. The Institute chose community partners, when possible, from neighborhood organizations. This strategy provided in-house local knowledge and met the community goal of providing jobs.



Interns and staff at Akoma Market conducting outreach for Communications Hub, Tap Water Quality testing, and Creek access, July 2021.

Photo: Courtesy of Brower-Dellums Institute for Sustainable Policy Studies and Action

Source	Timeframe	Responses**
San Leandro Creek Greenway Project Water Survey Data	Sept 2019	21
2008-2015 Stakeholder Vision Report (New analysis for this report)*	2008-2015	403
Sobrante Park Resident Action Council and In-Advance Creek Survey	Aug 2019	61
Table top comments from tour and charrettes	Aug 2019	68
Higher Ground observations (Four different elementary schools, Athenian academy) and from 8/23/19 meeting notes at Planting Justice	Aug 2019	41
GRAND TOTAL (161 new responses; 403 re-analyzed)		564

^{*} Re-analysis of data from a previous study

^{**} Responses may be single response or full survey response depending on source (see lessons learned)

Needs Assessment Findings

The highest priority issues identified through the needs assessment are:

- Illegal dumping
- Safety
- Jobs
- Flooding

- Polluted water
- Lack of investment in water infrastructure
- Overall lack of investment in Deep East Oakland
- Homelessness

In general, responses prioritized park space and walking, illegal dumping, food, safety, flooding, education, and clean water. The focus of respondents was on 1) health, safety, jobs, education/culture (50.3%), and 2) nature and restoration (49.7%).

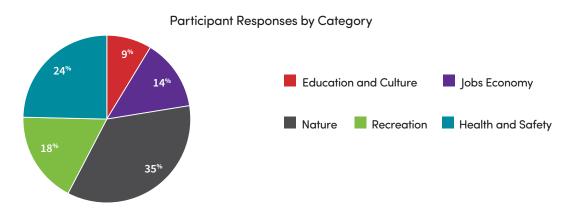
BDISPSA found that needs-based quantitative questions, especially those which contained a question which included "problem" or "concern," yielded a list of health and safety worries as one might expect.

Quotes from community members who took part in the needs assessment process:

"Everything flows into the water ... illegal dumping is an issue. ...Deep East Oakland hasn't had the same reinvestment as other parts of Oakland that have more wealth" —Anonymous, East Oakland Resident

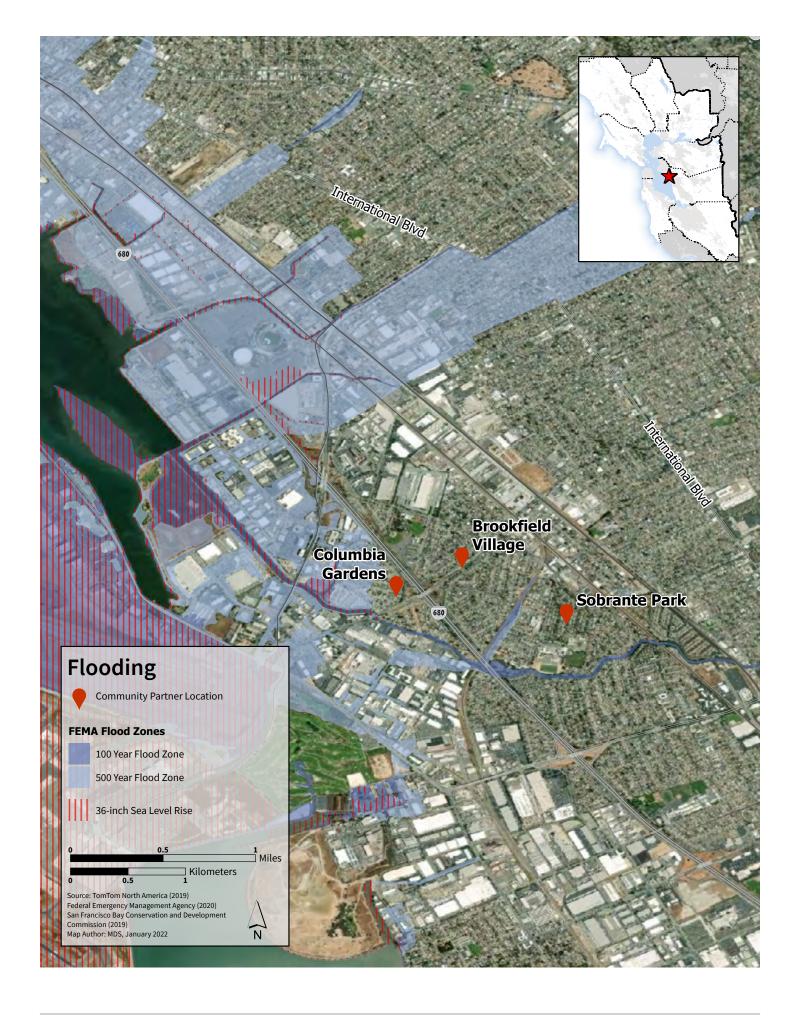
"Lines in my neighborhood flood during rain season." —Desmond Iman, East Oakland Resident

"My concern is safe drinking water that is not mixed and re-cleaned with polluted water." —Burgers + Design Participant



The qualitative conversations over the 14 years BDISPSA members have been working in Deep East Oakland have been more successful in yielding actionable projects. One of the first questions asked by a third-generation community leader was, "Are these projects going to bring in jobs and protect our homes? That is what our community wants." This led to BDISPSA's local hire strategy in its own staff and, as much as possible, to bring the budgets of projects directly to residents. State and local contracting and payment laws are barriers to hiring locally, even if the funds are meant to benefit under-represented communities.

BDISPSA also found that standalone water-related questions, if isolated from all the other elements of life like housing, jobs, aesthetics, education, health, food or culture, were difficult to imagine how to address. When these questions were placed as smaller elements in a larger context, combining resources in more upstream planning revealed itself as more feasible. The themes which came out of conversations or listening sessions were corroborated by the survey metrics. The conversations of those familiar with the neighborhoods indicated how to interpret the raw data. For example, asking people who were relatively recent residents who knew nothing or little about San Leandro Creek were more likely to imagine it as a problem. Those who had played in it as children were more likely to see it as an asset.



The bar graph below counts the number of times these words were used in questions related directly to creek water and street rainwater. They do not reflect the other priorities of the community.

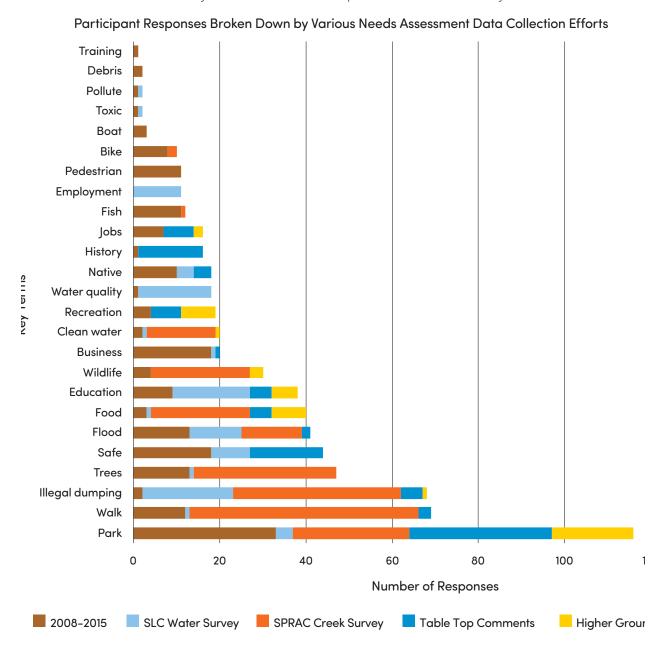






Photo courtesy of Brower-Dellums Institute for Sustainable Policy Studies and Action

Next Steps

From 14 years of working in these focus communities, and recording, compiling, and reviewing results with them, a vision is developing. Those who live and work in these neighborhoods look forward to developing an economically thriving, clean, safe, affordable, healthy and green place which reflects the local cultures. They look forward to easily walking and biking between neighborhood schools, work, transit, businesses, places of worship, events, and parks. They value immediate access to natural waterway areas and recreation. Clean streets, water and air are high priorities. They would like access to affordable home and business ownership and reasonable rents as well as employment, education and training. They would like to benefit from their area becoming a multicultural event, food, business and recreation destination without being displaced by regional improvements.

BDISPSA will continue to work with the community at the neighborhood level to identify and enhance assets to meet needs, envision and develop long term systems which serve immediate needs and, importantly, plan solutions upstream from symptoms which present as immediate problems. BDISPSA identified community stewardship, programming and public health and safety and the San Leandro Creek access community design/build as high priorities and as the ongoing community base for project development.

BDISPSA plans to work with the DACTI Program Tap Water Quality Testing effort to include the communities in Deep East Oakland and link outreach with the other high priority goals mentioned here. East Bay Municipal Utility District (EBMUD) is the water service provider for these communities.

Suite of On-Going Needs Towards Project Proposal Development

Pre-planning: Stonehurst Creek, Ratto Farm floodplain studies, green infrastructure links at and between resilience hubs (to be renamed with community input), water quality monitoring, maintenance and monitoring job creation, training and creating pathways to employment, green infrastructure safe pathways throughout neighborhoods near San Leandro Creek and flood prone areas.

Technical studies: Tap water quality in the area vs. individual home plumbing, research policing/alternative community safety arrangement examples elsewhere, groundwater contamination and flooding, review of drainage infrastructure to identify inadequate drainage lines, sea level rise mapping, demographics, temporary & long-term housing solutions for, unhoused residents, refugee technologies and pop-up communities, i.e. AIDS Ride, Burning Man, Woodstock as examples of successful temporary relocation efforts in diverse conditions.

Community engagement: Review and interview Administration of Justice programs and self-monitoring programs like Community Ready Corps and Urban Alchemy as community partnerships, ambassador programs, and engineered drawings and construction of the Creekside Nature Outdoor Classroom amphitheater based on community input.

Tap water quality testing program: Include broad outreach with tap water and human right to clean air, water, soil, energy, housing, transportation, jobs, and health.

Capacity skills and awareness building needs: Community seminars on water, planning, sustainability, resiliency, 'missing middle' homeownership and neighborhood preservation and caretaking.

Rainwater Retention and Use: Rainwater catchment/greywater systems for greening, watering food gardens, flood control, and importantly, creating economic opportunities; and the opportunity for aesthetics of publicly visible waterfalls, water features and water sculptures as part of the catchment process. (e.g. Architect Eero Saarinen captured the rainwater off the roof of the NYC TWA terminal and directed it overhead of the entrance as a visually and sonically stunning stream splashing into a pool) Urban places are usually not recognized as an important part of watersheds. One student called the drainpipes and gutters "sidestreams". Fog harvesting can be researched. Even in LA, an official desert, half of their annual water use could be captured from in-city rainfall per Tree People research. The bio-filtration system developed by Nancy and Jack Todd showed how all of Los Angeles' wastewater could be processed in greenhouses within the city after which the plants can be harvested for multiple uses as well as for the valuable heavy metals they concentrate. Some of these technologies are decades to thousands of years old. Local water is a significant unused resource.

Additional Project Concepts

BDISPSA's other project concepts for Deep East Oakland in development:

- Neighborhood-based stewardship programs to address illegal dumping and maintaining the San Leandro Creek Greenway
- Peer-to-peer taskforce for people experiencing homelessness
- Partner with the East Oakland Collective, among others
- Groundwater analysis/experiment work with Dr. Kristina Hill at UC Berkeley
- Collaborate with Oakland Department of Transportation and Oakland Dept of Public Works
- Expand and fund East Oakland Flood Watch Initiative (EOC) informal, fun reporting call and response
 on Instagram stories and TV to collect community observations of where flooding issues are arising
- Outdoor recreation
- Urban farming/food sovereignty
- Partner with East Oakland Grocery Cooperative
- Affordable homeownership and community right of refusal
- Looking to build a real estate cooperative to increase local ownership

Project concepts specifically for IRWM Implementation funding:

- Ongoing community and multi-partner, multi-benefit communication, planning, and management both locally within Deep East Oakland and San Leandro Creek, and regionally throughout the Bay
- People experiencing homelessness in the creeks, compounded by displacement pressure
- Line P Stonehurst Restoration green infrastructure
- Purchase Ratto Farm for multi-purpose flood basin
- Fish passage in the San Leandro Creek main channel
- Creekside Nature Education Amphitheater

References

California Environmental Protection Agency and Office of Environmental Health Hazard Assessment.(2017, January). *CalEnviroScreen3.0*. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

Dirks, S. (2015, August 19). Oakland's Sobrante Park Fights to Resurrect a Neighborhood Jewel. KQED. https://www.kqed.org/news/10647780/oaklands-sobrante-park-fights-to-resurrect-a-neighborhood-jewel

East Oakland Neighborhoods Initiative. Better Neighborhoods, Same Neighbors. City of Oakland. https://cao-94612.s3.amazonaws.com/documents/FINAL_EONI_PLAN_2021.2.16.pdf

City of Hayward

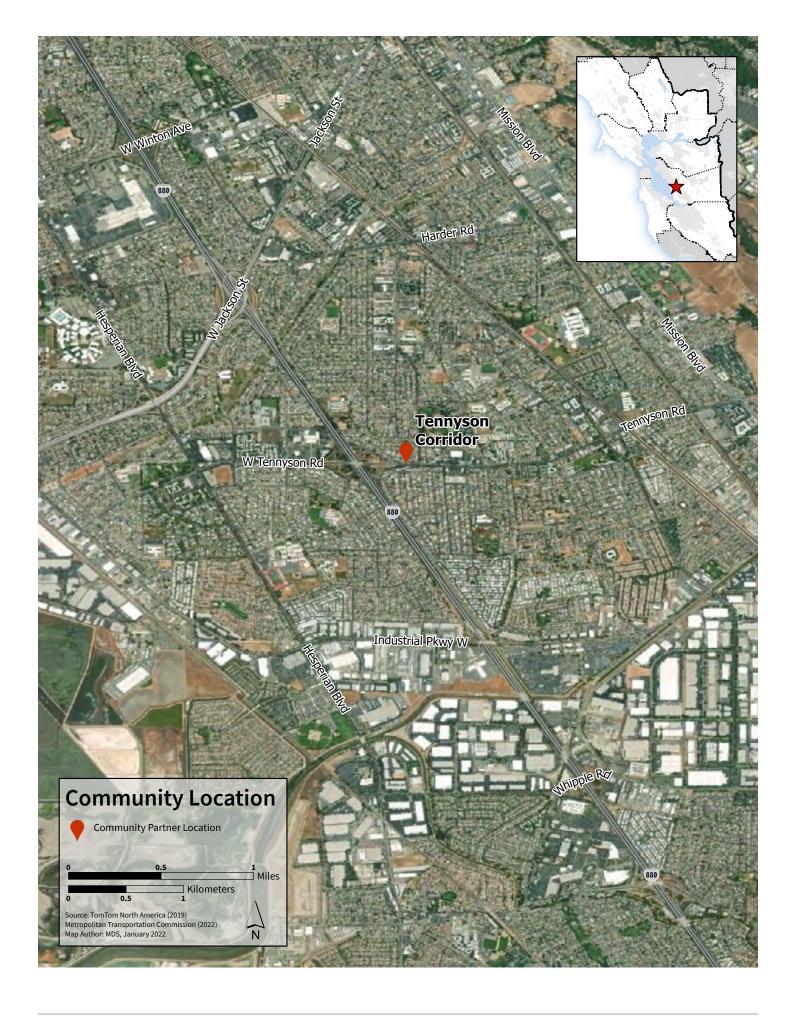


Photo courtesy of City of Hayward



Project Description

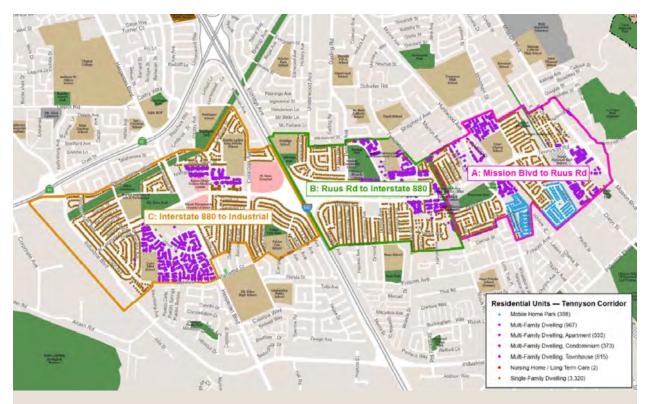
The City of Hayward undertook a community-driven assessment of the water management needs in the Tennyson Corridor, a disadvantaged community on the southern side of the city. The City of Hayward partnered with Rising Sun Center for Opportunity (Rising Sun) and Chabot Community College (Chabot) to guide the assessment. Rising Sun and Chabot facilitated hundreds of conversations about the Tennyson Corridor's water needs by adding a water-focused component to their existing engagement efforts. These included conducting door-to-door surveys and hosting a series of community gatherings from summer 2018 to spring 2019.



Background on the Tennyson Corridor in the City of Hayward

Demographics

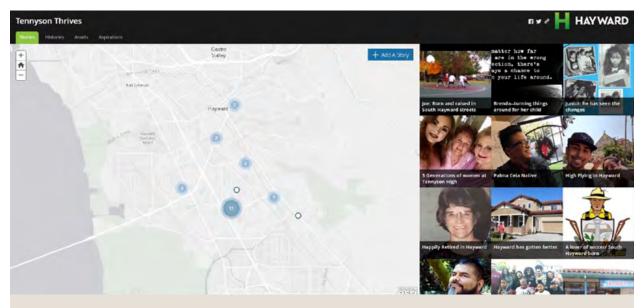
Hayward is the sixth-largest city in the Bay Area with 162,954 residents as of 2020 (Census, 2020). The city is home to three college campuses and a diverse community—economically, ethnically, and linguistically. The 2010 census ranked Hayward the second most diverse city in the state. Within the city, there are a number of economically disadvantaged and severely disadvantaged communities that make up nearly 20% of the city's service area. The Tennyson Corridor in South Hayward is home to some of the East Bay's lowest-income and most ethnically diverse census tracts.



Pictured above is a snapshot of the residential makeup of the Tennyson Corridor, a disadvantaged community in South Hayward.

History of Environmental Injustice and Inequity in the Tennyson Corridor

The Tennyson Corridor runs east-west through several neighborhoods, stretching for three miles from Mission Boulevard to Industrial Boulevard. The area is intersected by Highway 880 and Union Pacific Railroad. As part of the "Tennyson Thrives" Initiative, Chabot students interviewed community members, and common themes that arose from these interviews included lack of access to healthy food, housing, healthcare, and a lack of community. Residents have also expressed dissatisfaction with the lack of investment in the Tennyson Corridor area (City of Hayward, 2019).



The Tennyson Thrives Story Map, developed to provide Tennyson Corridor residents an opportunity to reflect on their stores, histories, and aspirations for the community.

Community-Identified Strengths and Assets

To provide the community with an interactive tool to share their connection to the Tennyson Corridor, the City of Hayward developed a "Tennyson Thrives Story Map," through which residents had the opportunity to post personal stories, highlight local assets, and share histories and their aspirations. Contributors could then pin their post and accompanying picture to a relevant location on the map. Through their contributions to the Story Map, residents identified many physical and social assets in the Tennyson Corridor, including memories made in parks and green spaces, churches, good schools, public libraries, a local community college and state university, dining options, employment opportunities, and the diversity of the community.

Summary of Outreach and Education Efforts

From 2018 to 2019, Hayward leveraged existing successful programs implemented by two local groups to assess the water management needs in the Tennyson Corridor. Those groups were Rising Sun's California Youth Energy Services (CYES) team, and Chabot College's Student Initiative Center.

California Youth Energy Services (CYES): Initial Needs Assessment

Through a partnership with the East Bay Energy Watch (EBEW) and the Pacific Gas & Electric Company (PG&E), Bay Area nonprofit Rising Sun operates the CYES program, which trains and employs young adults to provide energy and water conservation assessments and equipment installation to local residents at no cost to the customer. This service, called a Green House Call, is offered to both homeowners and renters, and checks homes for efficiency, installs equipment, and provides personalized recommendations for further savings.

During the summer of 2018, the CYES team focused their efforts in the Tennyson Corridor to identify the water needs of its residents. The DACTI Program grant funding enabled Rising Sun to expand their Hayward CYES Specialist team from 8 to 10 local youth, providing additional bandwidth to collect survey responses during routine Green House Calls aimed at understanding community water needs. Over the course of the summer, the team conducted 390 Green House Calls and 137 water needs surveys. Rising Sun also reported the installation of enough water-saving devices in the Tennyson Corridor residences to lead to an annual reduction of more than 3,000,000 gallons of water.



A CYES Team member conducts a water needs assessment survey with a Tennyson Corridor resident. Photo courtesy City of Hayward

Chabot College Student Initiative Center: Continued Needs Assessment

Chabot College is located in the Tennyson Corridor and is a key economic and activity hub for the surrounding neighborhoods. The Student Initiative Center focuses on training and coaching students to design impactful programs in their own communities.

The Chabot students spent the fall of 2018 through the spring of 2019 conducting knowledge fairs, community gatherings, and follow-up outreach to build on the insights gained by the CYES team and develop recommendations for long-term programs to address their findings.

Chabot hosted five events to further engage the community. The events drew hundreds of Hayward community members and provided Chabot students opportunities to converse with residents about a range of topics, including water needs within the community. One such event was Palma Ceia Fest, which was attended by an estimated 300 Tennyson Corridor residents and was hosted at Palma Ceia Park, a local park with nostalgic value to many of the residents.

Other events included:

- Needles in the Haystack Art Exhibition: Chabot students displayed over 75 community-inspired art
 pieces at Hayward City Hall. The art, which was the culmination of interviews with 150 community
 members and 50 community-based organizations, expressed the dreams and concerns of South
 Hayward community members.
- Palma Ceia Pumpkin Patch: Chabot students organized a pumpkin patch at Palma Ceia Park, which
 was attended by over 250 community members. Participants played games, trick or treated, received
 free pumpkins, and shared their perspectives on student proposals to address needs identified in the
 community.
- Holiday Community Movie Night: Residents shared their dreams for their neighborhoods and a holiday movie was shown.
- City of Hayward GIS Maps and Water Pollution Knowledge Carnivals: Chabot students taught community members about local watersheds and created presentations, posters, and interactive activities to teach other Chabot students and community members about water pollution.



In summer 2018, Chabot students hosted Palma Ceia Fest at Palma Ceia Park in south Hayward, enabling them to engage with residents about the neighborhood's needs and their desires for their community.

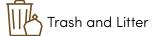
Photo courtesy City of Hayward

Needs Assessment Findings



Drinking Water





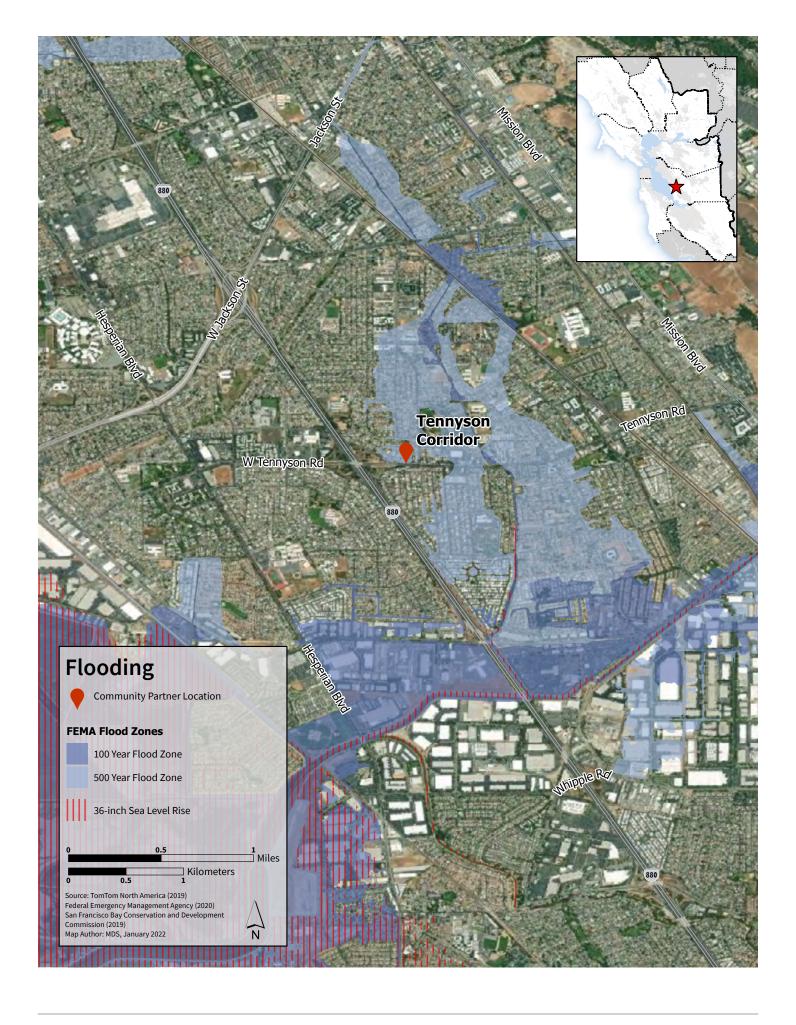


Through the CYES survey process a number of themes arose, including:

- Desire to use less water in order to reduce bills
- Lack of knowledge about nearby water assets
- Concern about illegal dumping and pollution in nearby water assets

In addition to the themes identified during the CYES survey process, the following water-related themes were identified in Chabot's engagement with the Tennyson community:

- Concerns about sea level rise (see map on next page)
- Concerns about tagging in culverts
- Concerns about pollution, litter, and plastic going into the ocean
- Desire for community gardens and increased access to food
- Desire for celebration of Hayward's water assets
- Desire for de-paving and more green spaces/beautification



Next Steps

Environmental Justice Coalition for Water (EJCW)'s partnership with the State of California ended, and work on the DACTI program under the agreement with EJCW was ordered to stop before Chabot students were able to complete their work to consolidate the results of both outreach efforts, develop a set of recommended programs to address their findings, and present those findings and recommendations in a community knowledge fair. However, the outreach that was conducted by the CYES team and Chabot students leading up to the stop-work date produced valuable insight into the Tennyson community's interests and concerns around water, which the city will be able to use in future policy and program development efforts.

References

California Environmental Protection Agency and Office of Environmental Health Hazard Assessment. (2017, January). *CalEnviroScreen 3.0*. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

City of Hayward. (2019). *Tennyson Thrives*. https://hayward.maps.arcgis.com/apps/MapSeries/index. <a href="https://hayward.maps.arcgis.com/apps/maps.arcgis.com/apps.arcgis.com/apps/maps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/apps.arcgis.com/ap

United States Census Bureau. 2010-2014 American Community Survey-Hayward city U.S. Census Bureau's American Community Survey Office.

United States Census Bureau. (2020). QuickFacts: Hayward City, California. https://www.census.gov/quickfacts/fact/table/haywardcitycalifornia/PST040221#PST040221

Contra Costa Resource Conservation District



Photo courtesy of CCRCD

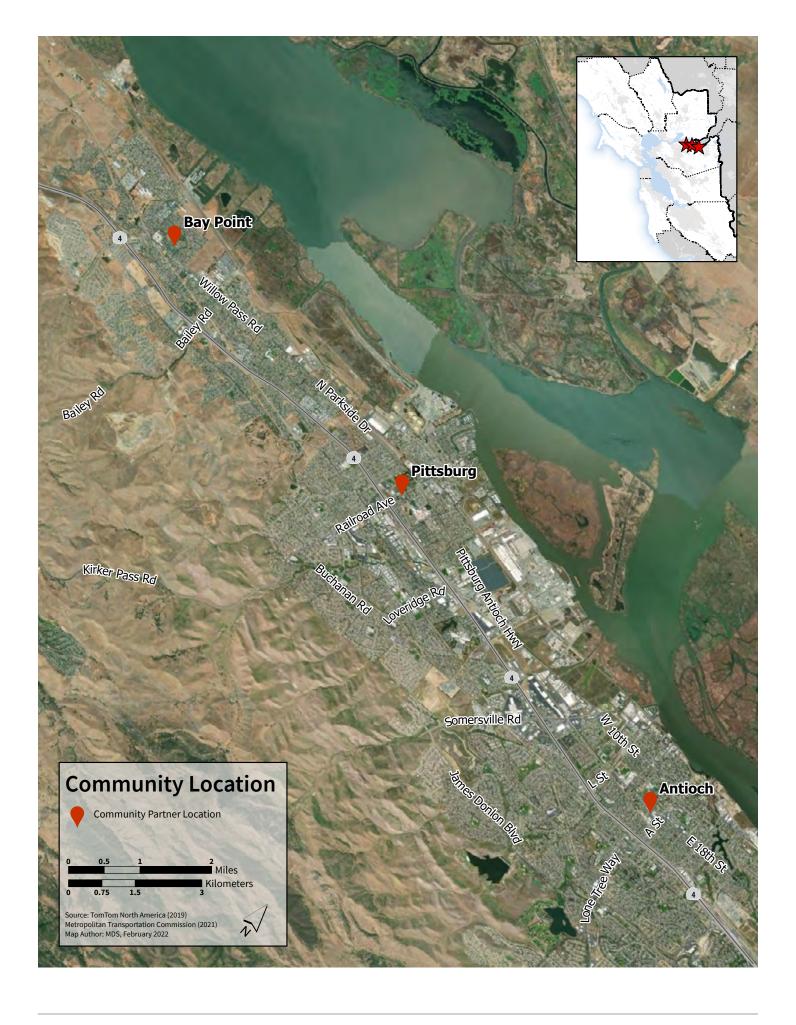


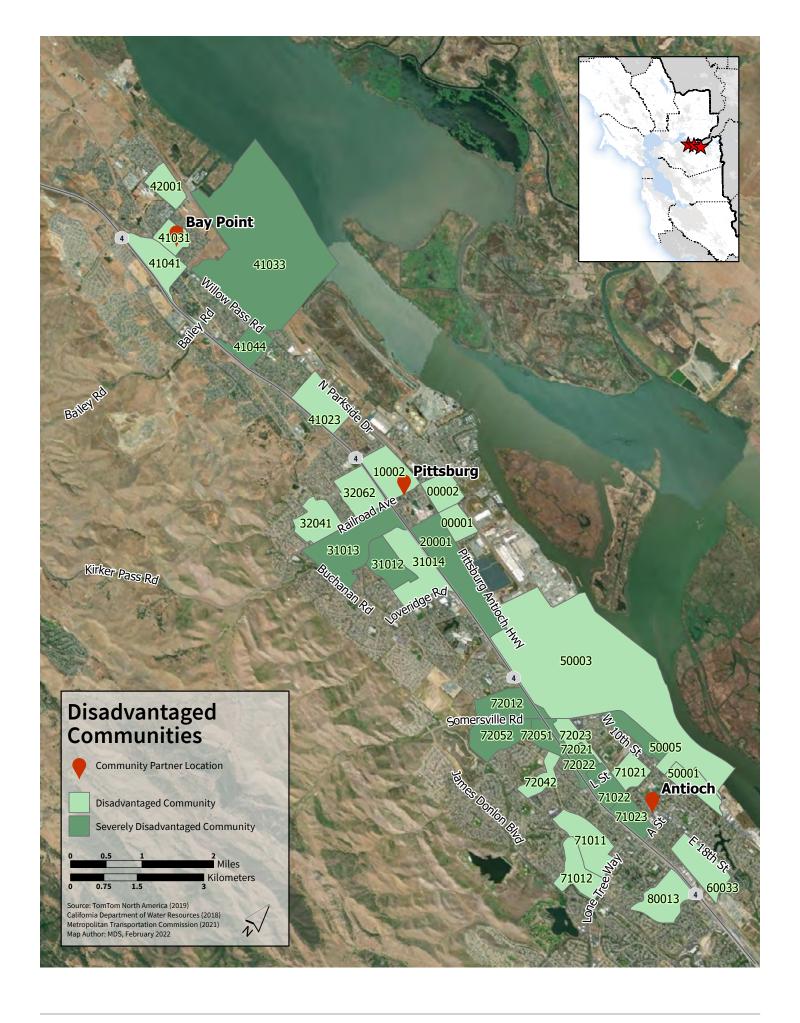
The mission of the Contra Costa Resource Conservation District is to facilitate conservation and stewardship of the natural resources in Contra Costa County.

The Contra Costa Resource Conservation District (CCRCD) was formed in 1941. Their service area is consistent with the political boundaries of Contra Costa County and covers 516,191 acres. The mission of the Contra Costa Resource Conservation District is to facilitate conservation and stewardship of the natural resources in Contra Costa County.

Project Description

CCRCD staff engaged with the communities of Bay Point, Pittsburg, and Antioch to identify local water priorities and potential projects that address water-related issues, such as water quality, flooding, and climate resilience. CCRCD attended community events, provided an online survey platform, and held listening sessions with small groups. CCRCD held a final meeting within each community to report back the findings.





Background on Pittsburg, Antioch, and Bay Point

Demographics

East Contra Costa County (East County) has seen significant population changes in the last 30 years, evolving from primarily semi-segregated industrial or rural towns, to sprawling suburban aggregates. All three communities that were part of this program, Bay Point, Pittsburg, and Antioch, have a mixture of income levels, and there are pocket communities within each that are recognized by the California Department of Water Resources (DWR) as Disadvantaged Communities. Longstanding neighborhoods in the heart of the community are where the disadvantaged communities are clustered on the census tract maps. These cities are each defined by income now rather than by ethnicity.

Bay Point is a census-designated place located in eastern Contra Costa County along Grizzly Bay. It had an estimated median household income in 2016 of \$51,999.

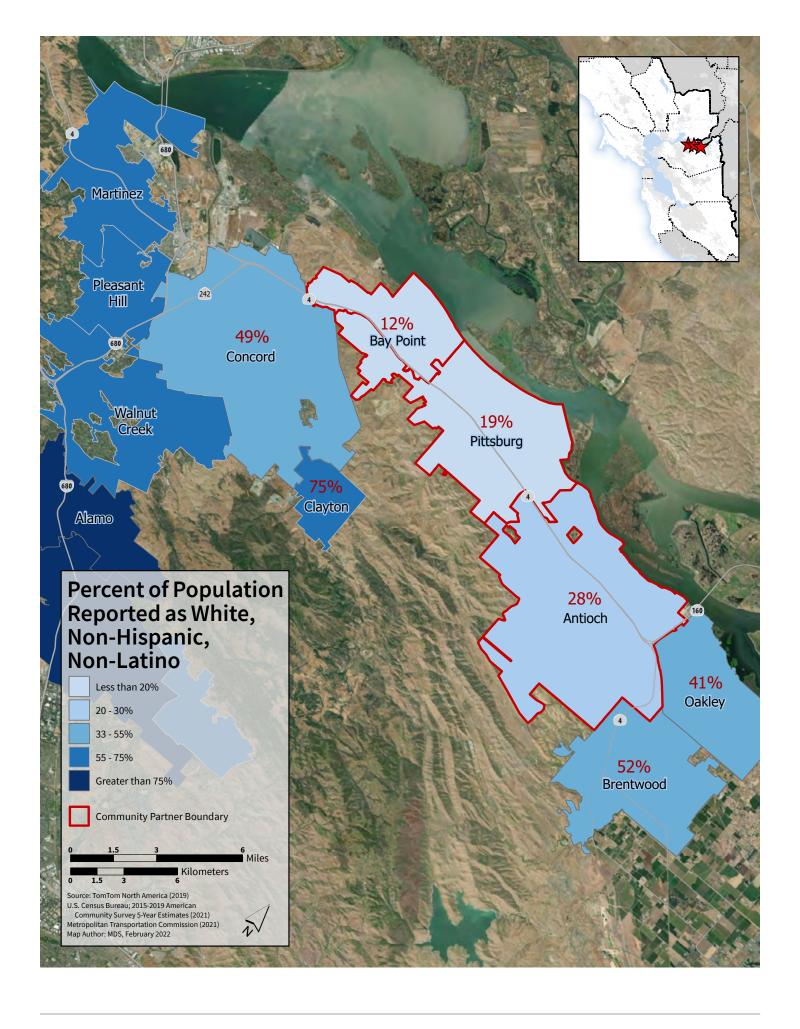
Pittsburg has historically been a city that supports industry. There are neighborhoods dating back to Camp Stoneman during World War II, as well as houses still being built in the southern hills. Estimated median household income in 2016: \$67,392.

Antioch is the second largest city in Contra Costa County and is the furthest east of the communities addressed by this grant. The income levels are highly diverse, with some very low-income communities scattered primarily throughout the downtown area, and higher income communities in the outlying areas. The estimated median household income in 2016 was \$81,203 (\$60,359 in 2000).

In all three communities, the Latinx community represents the highest percentage of the population. East County as a whole was almost 62% non-white in 2010, and of the major communities—i.e. places with more than 10,000 residents—only Brentwood and Discovery Bay are majority white. The largest city in the region, Antioch, is almost two-thirds non-white, while in Bay Point and Pittsburg four out of every five residents are persons of color (Schafran, A., Lopez, O., and Gin, J., 2013). Each community is diverse in part as a result of the housing boom of the 1990s, and the influx of people of color fleeing the gentrification of cities that rim the San Francisco Bay.



Photo courtesy of Eden Housing



History of Environmental Injustice and Inequity in Pittsburg, Antioch, and Bay Point

The roots of the communities of Pittsburg and Bay Point reach back to the mining days. Antioch is considered one of the oldest towns in California. In the 1800s the hills to the south housed five mining communities: Nortonville, Somersville, Stewartville, Black Diamond and Judsonville. Starting in 1859, coal was mined from a network of tunnels and caves; after that was no longer profitable, the mines produced sand for glassmaking.

The first railroads transported these products from the hills to the waterfront, where they were shipped throughout the Bay Area. Over the decades the waterfront remained an industrial hub, housing steel mills, lumber yards, and other factories. The housing that developed to support the people who worked in these factories and mills are within close proximity to the industry. Over the years, even though these industries have become mostly defunct, those areas are where most of the disadvantaged community tracts are clustered.

Pittsburg

Pittsburg has industrial relics and brownfields scattered throughout its downtown area, adjacent to homes, businesses, and parks. Stacks from these factories sit throughout downtown. The most recent community environmental activism occurred when a proposal to refit a former Pacific Gas and Electric (PG&E) plant to store oil products and then ship to refineries by railcar was met with community outcry (Rattu, 2020).



Antioch

Antioch's downtown was built to support industry along the waterfront, including lumber yards. High arsenic levels were found at one site where there was historically a canning operation: the peach pits that were a food byproduct naturally contained arsenic, and concentrating them in large numbers and disposing of them onsite left a toxic legacy.

Bay Point

Bay Point was at the center of a study done in 2009 by the Bay Area Latino Environmental Action Project (LEAP) who received an Environmental Protection Agency (EPA) grant to conduct a study similar to the one described in this report by CCRCD. They worked with the community to identify areas of environmental concern. Over 10 years later, the findings of this study echo the concerns found in the LEAP study: toxins in fish caught in the Bay/Delta, illegal dumping, and concerns over the cost and safety of tap water from a private company. The community is still dealing with the same issues (CCHSD and LEAP, 2009).

Bay Point is the only unincorporated community in the project area. The economy there has steadily declined despite multiple plans to reinvigorate it. The majority of Bay Point is considered a disadvantaged community. During World War II Bay Point was primarily a military town, housing soldiers for the nearby Port Chicago. The famous civil rights case of the Port Chicago 50 that sparked desegregation of the military has its roots in the community there. There is also a legacy of industrial usage along the waterfront, and the community is separated from the shoreline by a series of railroad tracks. The Keller Canyon landfill sits upstream of the community, near the top of the watershed of an unnamed creek that flows through Bay Point towards the shore. Much of the community lives in older developments, with the occasional new housing as infill.

In 2003, Contra Costa was the first county in California to develop an environmental justice policy (Doyle, 2003). The environmental justice committee, which was formed by this policy, focused on illegal dumping as its pilot project. Illegal dumping is still an issue throughout Contra Costa, identified as one of the top issues in CCRCD's assessment, but the environmental justice committee no longer has momentum, and now appears to be defunct.

Community-Identified Strengths and Assets

In the survey of community members, there was a question asking about community strengths. The following word cloud shows the responses:



In all three communities, residents identified support networks as their greatest asset: extended family, school, faith organizations, as well as informal groups that develop around common interests and shared challenges. Some participants appreciate the relative affordability of housing compared to other parts of the Bay Area. A youthful demographic and access to shopping and parks are also seen as assets.

Additional responses to the question, "What does your community do well?" include:

"Giving back. What Ray [Ray Harts of Healthy Hearts Institute] is doing by coming back, trying to help younger people." – Pittsburg

"People are friendly and are often out walking around, walking their dog, fishing, etc." – Bay Point

"We know our neighbors – our neighborhood feels like a little town in a big city." – Antioch

Needs Assessment Process

CCRCD collected data through paper surveys at outreach events, online surveys hosted at ccrcd.org, and three listening sessions held with local groups in each of the three communities. By focusing on groups active in the disadvantaged communities, CCRCD developed an understanding of the problems each community faced. CCRCD organized and analyzed the data and presented their results at wrap-up sessions so residents could confirm the findings.

The survey asked respondents about community amenities and challenges, water-related issues, access to creeks and shorelines, and barriers to addressing challenges. CCRCD asked similar questions at the listening sessions and invited group discussion. While survey data is less detailed than listening session responses, survey responses to multiple choice questions can be ranked to shed light on priority issues.

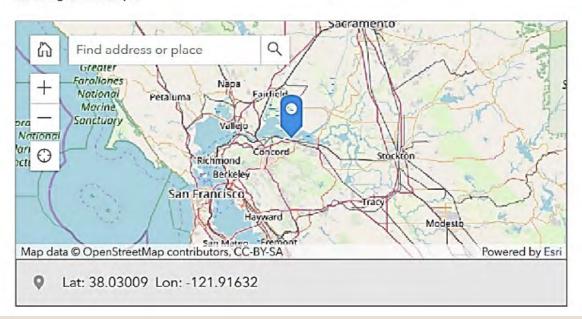
CCRCD collected 57 surveys from residents of the disadvantaged neighborhoods and spoke to 94 people at listening sessions, for a total of 151 participants in the water needs assessment.

Evaluación de necesidades de agua - Condado de East Contra ...

Encuesta para determinar las necesidades de agua autoidentificadas dentro de las comunidades en el este del condado de Contra Costa.

¿Dónde está tu comunidad?*

Para comprender mejor los datos reunidos, indique la ubicación aproximada de su vivienda en el siguiente mapa.

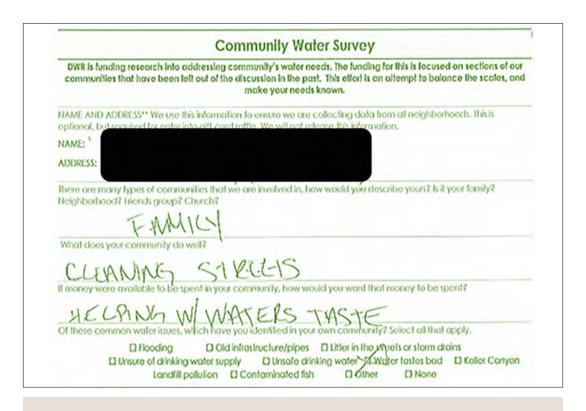


Spanish version of the online survey. Map courtesy of CCRCD



CCRCD attended community events to raise awareness of the ongoing Needs Assessment and provide the opportunity for people to fill out a survey in person.

Photo courtesy of CCRCD



Example of a survey that was completed at an in-person event. Image courtesy of CCRCD



Survey Rankings for Water Concerns

CCRCD's survey included a list of water-related issues and asked respondents:

- Which issues have you identified in your own community? Select all that apply.
- Which issue would you tackle first? Select one.

Figure 1 below shows the percent of survey-takers who identified each issue in Antioch, Bay Point and Pittsburg's disadvantaged communities. Most respondents chose more than one issue.

Figure 1. The top priorities of survey-takers from all communities.

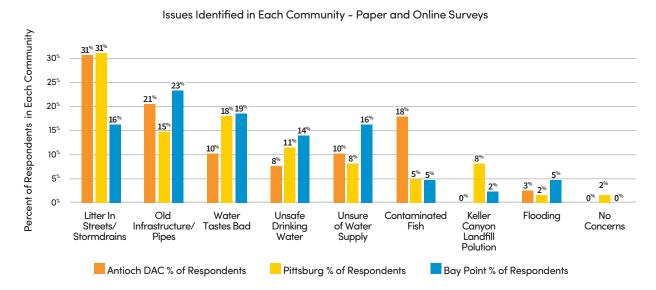
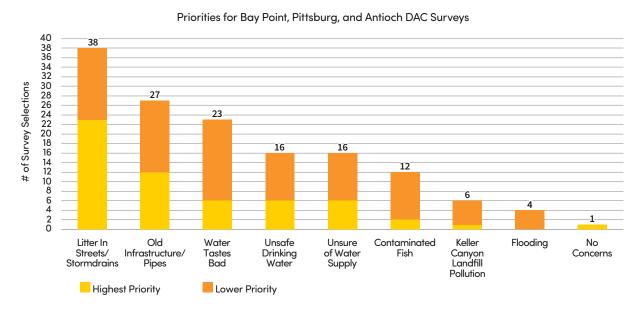


Figure 2. The top priorities of survey-takers by number of survey selections for all three communities collectively.



- **Litter in streets or storm drains** was identified as the most urgent issue by the largest number of respondents.
- The next three highly ranked issues are tap water concerns: old infrastructure/pipes, water tastes bad and unsafe drinking water. Based on survey comments, many people who prioritized old infrastructure/pipes have tap water problems at home.
- Those who prioritized **unsure of water supply** are concerned about droughts, the effect of the Delta's salinity on drinking water supply reliability, and residential water prices.
- Although **contaminated fish, Keller Canyon landfill pollution, and flooding** were selected less frequently in surveys, listening session participants voiced concerns about these issues.
- Listening session participants also described issues related to access to **parks and recreation**.

Details about identified issues



Litter in Streets and Polluted Stormwater

Polluted stormwater and trash in creeks, waterways, and streets were among the most common problems identified in the listening sessions. Participants described the need for pollution prevention, trash removal, treating polluted stormwater, and for storm drain maintenance.

In surveys, litter in streets and storm drains was most frequently chosen as the top priority. 67 percent of survey respondents identified it as an issue in their community and 40% of survey respondents said it was the issue they would address first.

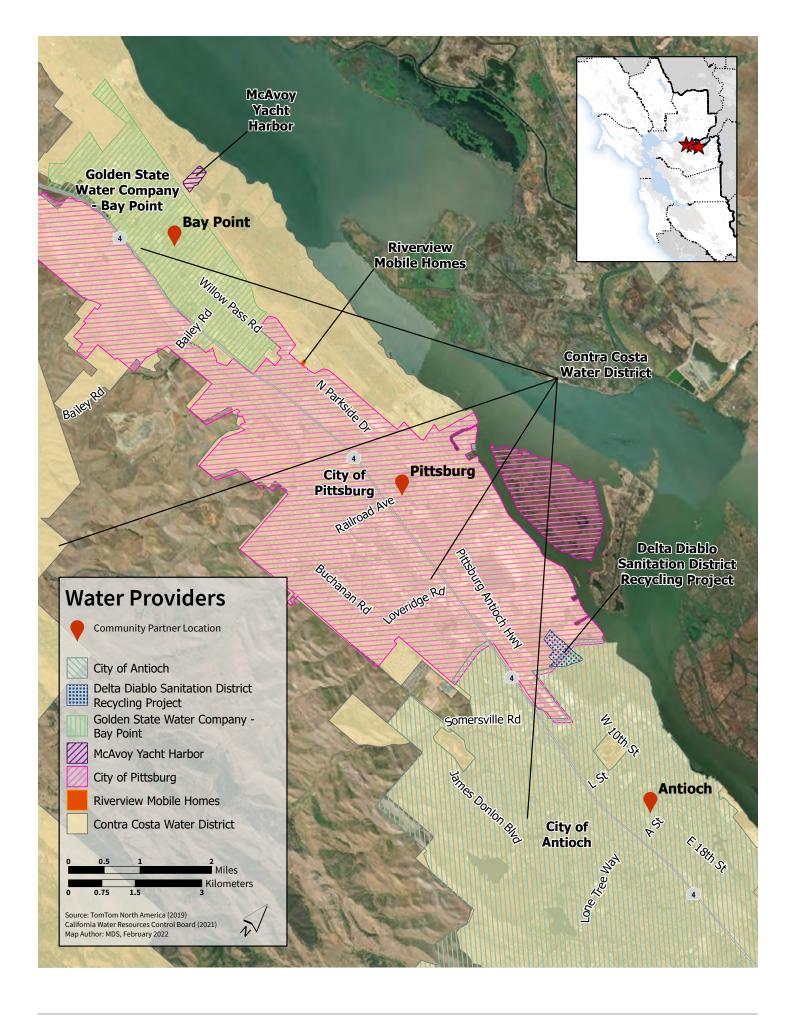
Antioch residents identified illegal dumping and encampments as sources of trash. Pittsburg participants cited neglected homes and encampments as pollution sources. They also expressed concern about oil leaks from older vehicles polluting storm runoff. In Bay Point, illegal dumping sites include Port Chicago Highway and Bailey Road. Encampments also contribute to trash on Port Chicago Highway. Bay Point residents were concerned about trash in parks and along trails as well as polluted storm runoff.

Listening session participants urged better maintenance of both storm drains and landscaped ground cover to reduce pollution and prevent erosion. Suggestions for solutions include reduced trash disposal fees or free monthly disposal at dumpsters throughout the city.

When asked, "If money was available to enhance your community, how would you want that money to be spent," listening session participants said:

"I think it would be good to be spent on making the drainage system better because sometimes all the sewer water runs out onto the street." —Bay Point

"Do something about these deadbeat landlords that let their stores sit empty forever and attract crime, filth, rats etc." —Antioch



Tap Water Concerns

Along with trash and polluted stormwater, poor tap water quality was one of the greatest needs identified in listening sessions and in surveys. Tap water problems were identified as a community issue by 68% of survey respondents with 21% saying that tap water concerns were their most urgent priority.

Bad-tasting water was identified in surveys more often than unsafe drinking water (40% and 28%, respectively). However, survey respondents who ranked poor tap water quality as their most urgent concern were evenly divided between describing it as unsafe tap water and bad-tasting tap water (10.5% for both). Staggeringly, some participants noted that they buy bottled water for their animals to drink—that is the extent to which they felt their water was not safe to drink.

In Bay Point, listening session participants described particles in the tap water and a mineral content that made them feel ill. People compared the taste of tap water to the smell of garbage. One lifelong resident of Bay Point said everyone purchases bottled drinking water although they use tap water for other purposes. Another participant said that tap water dries her skin and she is wary of bathing in water that may be contaminated. Water pricing was also a concern for Bay Point community members who said their tap water was both more expensive and had poorer quality than water in neighboring communities. Unlike Antioch and Pittsburg, Bay Point is unincorporated, and a private company distributes tap water.

Some Pittsburg residents are also uncertain about tap water safety and buy bottled water to reduce risks. Participants noted that water tastes metallic, smells like chlorine, is cloudy, and leaves a film on the skin after showering which causes skin to dry out. One participant noted that aging infrastructure may contribute to the problem since the pipes in their housing complex are over 70 years old.

In Antioch, participants said that tap water has a bad taste during droughts. A participant expressed concern about hard water spots on dishes, odor, and bubbles. Participants again noted the role that old pipes in homes and buildings may play in tap water quality.

The cost of buying bottled water or treating tap water is an additional burden to these communities and several participants mentioned their desire for equitable and affordable domestic water pricing. Some renters are afraid to complain to landlords or apartment managers about tap water problems.

"When I boil my tap water at home it takes on a funny smell and even weirder taste. Shouldn't it taste like nothing (clean)?" —Pittsburg

"A private company tested our tap water and determined it was contaminated; we purchased a tap water treatment system." —Bay Point

"The annual report from the water company says it meets all national standards but it's hard to trust the report because the taste is so bad." —Bay Point



Old Infrastructure and Pipes

Old pipes were a common concern voiced in the listening sessions, usually associated with old pipes in homes that contribute to tap water quality issues, as described above. Some participants commented on problems with wastewater plumbing as well. Concerns about old infrastructure and pipes were noted by 47% of survey respondents. When asked which problem they would address first, 21% of respondents selected this issue.

Participants say they need assistance to diagnose problems with the pipes in their homes. People had questions about whether increases in water bills are due to leaking pipes, how to determine the age of pipes in their homes, and when pipes should be replaced. Some noticed that tap water problems are limited to specific faucets in their home.

In Bay Point, old infrastructure and pipes in homes was the most frequently chosen top priority on the survey. In Antioch it was the second highest priority issue and a top priority at one of three listening sessions. In Pittsburg it was the third highest priority issue and listening session participants commented that many old homes in disadvantaged communities have unreliable plumbing.

"Some residents can smell sewage in homes, it comes from the drain in the shower, it is like a mold smell. Two units share one sewage line. If it backs up you can see toilet tissue in your backyard." —Pittsburg

"The kitchen tap water is OK but bathroom tap water isn't drinkable. It tastes like garbage.

Tap water tastes bad even with a filter." —Bay Point

"A drinking water pipe broke outside our house, after it was repaired the tap water was dirty." —Bay Point



Water Supply and Conservation

At listening sessions, water conservation programs and resources were frequently discussed. 28% of survey respondents said there is uncertainty about water supply in their community, and 10.5% of respondents would prioritize addressing water supply issues.

Most Antioch residents were more concerned about water supply than tap water quality. They expressed frustration with neglected homes and commercial areas and saw the cost of irrigating landscaping as part of the problem. Many Bay Point survey respondents also identified water supply issues as a community concern but did not choose it as their top priority. In listening sessions, Bay Point participants focused on tap water affordability. Water supply concerns did not rank high on Pittsburg surveys, but several listening session participants prioritized water conservation and mentioned the need to conserve water to ensure a dependable supply for fighting fires.

Participants say they need better communication from water purveyors about drought-related water restrictions and pricing, as well as justifications for these policies. They want to contribute to water use efficiency by reporting water wasted by daytime watering during droughts or broken sprinklers.

Listening session participants had several suggestions for encouraging conservation: water education encompassing the social and ecological value of water, free recycled water for residents, ways to deliver non-potable water to residents who don't have a truck, and tax credits or other incentives for people to replace lawns with native plant mixtures.

When asked, "If money was available to enhance your community, how would you want that money to be spent," listening session participants said:

"Drought-tolerant landscaping. The local water district does have some funding, but it is only for people removing a front lawn. Gardening grants should be for everyone, not just the owners of lush lawns." —Antioch

"Programs to convert lawns that have been 'let go' to drought resistant yards. This should be required for rental units." —Antioch



Contaminated Fish

Listening session participants said that access to safe fishing is an important public health issue. More residents of Antioch expressed concern about contaminated fish than residents of Pittsburg or Bay Point. A total of 21 percent of survey respondents said that contaminated fish is an issue in their community, and 3.5 percent of respondents said the issue is their highest priority. Participants support increased outreach and information about cleaner boating and fishing practices.

"I have caught fish from in the Delta near Antioch that were infected with parasites." —Pittsburg



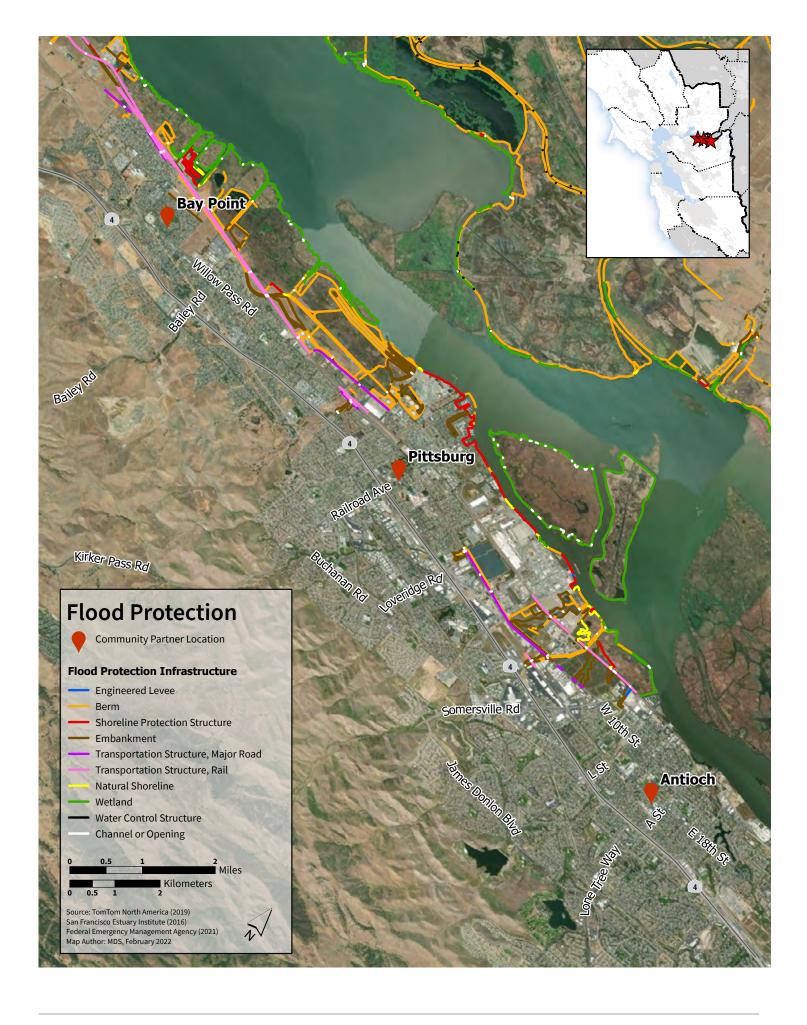
Water and Recreation Opportunities

Listening session participants communicated the need for more water for park landscaping, better access to shorelines, and safer fishing, as well as safe drinking fountains in parks. Antioch listening session participants want safe places to view and access the river. Some mentioned reducing homeless encampments along the waterfront, access to recreation facilities, and outreach fairs or festivals sponsored by water districts. Bay Point residents mentioned the need to improve access to safe parks and trails.

When asked, "If money was available to enhance your community, how would you want that money to be spent," listening session participants said:

"Make the parks look better, like the ones in Brentwood or Oakley or even Walnut Creek because we deserve as much as other cities." —Pittsburg

"I would plant trees to offer filtration from the highway traffic exhaust. Asthma is a high priority health issue for our children." —Bay Point



Other Issues

Other water-related issues listed on the survey were Keller Canyon Landfill pollution (10% identified the issue in their community and 2% prioritized action), and flooding (7% identified the issue in their community and 2% prioritized action).

Bay Point and Pittsburg residents are concerned about wind-blown trash and odors from the Keller Canyon Landfill and allegations that soil contaminated by radioactive waste from the former Hunters Point Naval Shipyard was disposed of in the landfill in 2018. A 2020 audit found no evidence of radioactive materials at the landfill but some community advocates are not convinced.

In listening sessions, participants said that flooding due to blocked storm drains is associated with neglected waterways, storm drains, homes and commercial areas. In Antioch, flooding is a priority issue along West Antioch Creek and the East Contra Costa Integrated Regional Water Management (IRWM) Funding Area submitted a Proposition 1 DWR proposal to address the issue in 2019. Antioch listening session participants also mentioned a sewage smell on 10th Street near the shoreline. In Pittsburg, flooding was described as poor drainage in front of apartment units and problems during king tides or long periods of rain.

Next Steps

Many residents in the disadvantaged communities of Antioch, Pittsburg, and Bay Point question the safety of the tap water in their homes. Premise plumbing is a concern in all three communities. CCRCD will work with the Bay Area DACTI Program Tap Water Quality Testing Effort to implement the program in eastern Contra Costa County. Recognizing that trust is critical to the success of the program, CCRCD will publicize the program with help from community groups. CCRCD staff will coordinate testing while a qualified consultant and/or lab will analyze tap water samples. CCRCD's goal is to help residents refine and add specificity to their tap water concerns so that water purveyors, landlords, or homeowners can resolve the problems.

CCRCD will also hold community workshops and seek implementation funding to address priority issues that are not directly related to tap water. These include trash reduction, upgrades to aging stormwater infrastructure, and access to clean, safe parks and trails. Structural components of these green infrastructure and green streets projects include trash catchment devices for storm drains, street trees to provide shade and improve air quality, and signage in English and Spanish.





Photos courtesy of CCRCD

Potential projects and locations in Pittsburg

- Stormwater and wastewater infrastructure improvements at El Pueblo Housing Development
- Restoration of Kirker Creek and its tributaries at publicly accessible sites
- Reducing illegal dumping on the Pittsburg/Antioch Highway

Potential projects and locations in Antioch

- Reducing litter and the impact of encampments at the Antioch waterfront and downtown Antioch neighborhoods
- Trash capture and stormwater conveyance above East Antioch Creek's outlet to the San Joaquin River near Fulton Shipyard Road

Potential projects and locations in Bay Point

- Sites identified in Contra Costa County's Green Infrastructure Plan for Bay Point, including Bel Air Elementary School and Ambrose Community Center
- Restoration of the seasonal creek behind Riverview Middle School
- Restoration of seasonally flooded lowlands along the train tracks in Bay Point
- Trail improvements at Bayshore Regional Shoreline and Driftwood Drive, Bay Point
- Reducing illegal dumping on Port Chicago Highway and Willow Pass Road, Bay Point/Pittsburg





Photos courtesy of CCRCD

References

Contra Costa Health Services Department & The Latino Environmental Justice Project (LEAP). *The East County Environmental Justice Collaborative CARE Level I Final Report*. https://archive.epa.gov/care/web/pdf/calbaypointlatinoreport.pdf

Contra Costa Health Services Department (CCHSD) & Latino Environmental Justice Project (LEAP). (2009). CARE Level I Final Report. EPA. Available at: <a href="https://archive.epa.gov/care/web/pdf/calbaypointlatinoreport.pdf#:~:text=Bay%20Area%20Latino%20Environmental%20Action%20Project%20%28LEAP%29%20Grantee%3A,Wood%20I.%20East%20County%20Environmental%20Justice%20Collaborative%20%28ECEJC%29

Doyle, A. (2003, September 28). Contra Costa Supes move slowly on a justice policy. *San Francisco Business Times*. https://www.bizjournals.com/eastbay/stories/2003/09/29/story8.html.

Hulaniski, F. (1917). The History of Contra Costa County, California. The Elms Publishing Co., Inc.

Glantz, A. (2011, December) A One-Time Industrial Hub With Few Prospects. *The New York Times*. https://www.nytimes.com/2011/12/16/us/bay-point-a-one-time-industrial-hub-has-few-job-prospects.html

McLeod, D. The First "Community" of Bay Point. *Contra Costa Historical Society*. https://www.cocohistory.org/essays-baypoint.html

Port Chicago. The Open Computing Facility. https://www.ocf.berkeley.edu/~mdlee/vs186a/latoya/ <a href="https://www.ocf.berkel

Rattu, M. (2020, May 15). Reformist//Revolutionary - Not a Dichotomy: A Reflection on Organizing Strategies in the WesPac Movement in Pittsburg, CA. SAGE Magazine. https://sagemagazine.org/reformist-revolutionary-not-a-dichotomy-a-reflection-on-organizing-strategies-in-the-wespac-movement-in-pittsburg-ca/

Schafran, A., Lopez, O., Gin, J., (2013). Politics and possibility on the metropolitan edge: the scale of social movement space in exurbia. *Environment and Planning A 2013, volume 45, 2833–2851*. https://www.academia.edu/33923789/Politics and possibility on the metropolitan edge the scale of social movement space in exurbia.

United States Census Bureau. (2020). *U.S. Census Bureau QuickFacts: Antioch city, California*. https://www.census.gov/quickfacts/fact/table/antiochcitycalifornia/PST045221

United States Census Bureau. (2020). *U.S Census Bureau QuickFacts: Bay Point CDP*. https://www.census.gov/quickfacts/fact/table/baypointcdpcalifornia/PST045221

United States Census Bureau. (2020). *U.S. Census Bureau QuickFacts: Pittsburg city, California*. https://www.census.gov/quickfacts/fact/table/pittsburgcitycalifornia/PST045221

Friends of Sausal Creek



Photo courtesy of Friends of Sausal Creek



The **Friends of Sausal Creek** is dedicated to promoting awareness, appreciation, and stewardship of Oakland's Sausal Creek Watershed, which drains to San Francisco Bay.

The Friends of Sausal Creek (FOSC) is a volunteer-based, nonprofit, community organization dedicated to promoting awareness, appreciation, and stewardship of Oakland's Sausal Creek Watershed, which drains to San Francisco Bay. Our mission is to restore, maintain, and protect the watershed. We engage students and youth, promote community stewardship, and collaborate with partners on behalf of the local ecosystem.



Project Description

This project worked with the local community in the Fruitvale district of Oakland to investigate, understand, and describe water needs from the community's perspective and partner with the community to come up with a range of possible solutions, potential projects, and funding opportunities. The goals were to expand community awareness of the relationship of the health of the creek and its watershed, to enhance public access and enjoyment of the creek for the natural and cultural benefits it can provide, and to catalyze projects that enhance water quality, habitat values in the creek corridor, or address

Background on the Fruitvale District of Oakland

Demographics

The approximately 50,000 Fruitvale residents are primarily Latinx, comprising 60% of the district population. The student population is between 67%-94% Latinx, 27% of the households in the neighborhood are linguistically isolated (no adult is proficient in English), and of those households, 73% are Spanish-speakers. At the eight schools within 1.2 miles of Lower Sausal Creek, more than 90% of students are considered socio-economically disadvantaged. Residents have lower levels of education, lower rates of workforce participation, and lower incomes than found in the City of Oakland overall (Unity Council & AECOM, 2014).

History of Environmental Injustice and Inequity in the Fruitvale District

The Fruitvale district has a history of racial injustice and resistance. With the push of "urban renewal," the Nimitz Freeway (I-880) was built through the heart of Oakland's African American community in the 1950s, disrupting community cohesion, cutting off residents from the economic base downtown, destroying homes, and displacing residents. In the 1960s, further urban renewal, primarily Bay Area Rapid Transit (BART) and Main Post Office building construction, further disrupted the community in West Oakland, forcing many of those residents to move to East Oakland. The Fruitvale was heavily settled by African Americans and Latino/as.

In the late 1960s and early 1970s, Chicanos, Latinos, and the Chicano Movement were active in the Fruitvale district. Organizations such as Latinos United for Justice, the Brown Berets, La Raza Unida, and the militant Chicano Revolutionary Party were founded or had chapters in Fruitvale. The Chicano Revolutionary Party had a free breakfast program that the Black Panthers helped them create in the Jingletown district of Oakland; they also patrolled the streets of Fruitvale and helped defend it against police brutality. The Clínica de la Raza was created due to the actions of the Chicano Movement to meet the need for a free clinic for the Chicano and Latino community of East Oakland. By the late 1980s the district was becoming predominantly Latino, and today is the cultural landmark for the city's Latino population (City of Oakland, 2020).

In this dense, partly industrial, partly commercial, partly residential, diverse, underserved, and mostly disadvantaged urban part of Oakland, Sausal Creek is either underground in a culvert, or largely inaccessible due to adjacent land uses and private creekside property. The creek's "invisibility" attracts illegal dumping and homelessness and underscores its reputation as a crime magnet. FOSC's engagement with students and community members in hands-on restoration in the watershed and experiences in watershed ecology enhanced creek-related awareness and creek access. Discussions on green infrastructure and the development of outdoor recreation were a part of community involvement.



Below I-580, more than half (70%) of the watershed is covered by impervious surface. A FOSC November 2020 Newsletter article presented evidence of the environmental injustice existing in the Sausal Creek Watershed. In particular, low-income neighborhoods (predominantly people of color) have notably less tree canopy and higher levels of impervious surface. "Strong positive correlations have been made between household wealth and critical urban ecology components: biodiversity and higher tree cover rates. By contrast, urban heat islands—resulting from lack of tree and vegetation cover—predominate in low-income neighborhoods" (Stenger, 2020).

In the Fruitvale district, only four small parks provide all the public open space, and two of them are located very close to I-580 (that is, further from the severely disadvantaged communities). In addition, for many years, the Fruitvale Bridge Park, the site of a homeless RV encampment, and Barry Place, a city-owned open space, have been identified as dumping hotspots by the City of Oakland. The Fruitvale is also in the top 20% of California communities for the number of impaired water bodies, environmental cleanups, hazardous waste sites, and groundwater contaminants, particularly in the waterfront zone.



Water quality testing sites begin at the headwaters and continue to the mouth of Sausal Creek as it enters the estuary.

Photo courtesy of Friends of Sausal Creek

Community-Identified Strengths and Assets

Given that listening sessions were held in the Fruitvale-San Antonio Senior Center (Unity Council) and César Chávez Library, it is not surprising that community members were quick to note a rich network of services and employers in Fruitvale. In addition to those two, the Fruitvale district boasts health centers (La Clínica de la Raza and Native American Health Center), schools (15 elementary and middle schools and two high schools), and other nonprofit human service and community development organizations. The Unity Council is a nonprofit anchor in the community, offering educational, financial, and housing development. In 2004, the Unity Council (Social Equity Development Corporation) opened the Fruitvale Transit Village. The "Fruitvale Village" is a nationally recognized mixed-use, transit-oriented development.

In addition to rapid renovation, the Fruitvale district also claims a rich cultural heritage, serving as a cultural center of the Bay Area's Latinx community since the 1960s. In addition to Latinx-oriented goods and services, authentic Mexican and Central American cuisine, it is the site of widely attended cultural events such as Día de Los Muertos, which draws as many as 100,000 people each year.

Summary of Outreach and Engagement Efforts

FOSC conducted two rounds of data collection for the needs assessments: one from November 2018 to May 2019 and the second from June 2019 to February 2020.

In Round 1, FOSC collected two sets of student surveys, conducted one convenience survey at the 2018 Día de los Muertos event in November, facilitated two listening sessions (Fruitvale-San Antonio Senior Center and César Chávez Library), and held seven community leader interviews.

During Phase 2, FOSC looked for confirmation of previous findings and any new input from the community. FOSC conducted three listening sessions (Fruitvale-San Antonio Senior Center and César Chávez Library), collected surveys from health providers (Native American Health Center), implemented one convenience survey, and interviewed three community leaders. Again, the convenience survey was conducted at the 2019 Día de los Muertos event. In total, almost 300 community members participated in the needs assessment.



Volunteers working on a Sausal Creek cleanup on Barry Place.

Photo courtesy of Friends of Sausal Creek

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Data Collection (2018–2020)						
Needs Assessment Method	Location	Participants				
Listening Sessions (5)	César Chávez Library, Fruitvale-San Antonio Senior Center	72 Participants				
Interviews	Fruitvale nonprofits, civic agency leaders, representatives from Unity Council, Brothers on the Rise, Carmen Flores Parks and Recreation Center, Cohen and Bray House, César Chávez Library, Fruitvale-San Antonio Senior Center, Native American Health Center, Holy Names College (Community Outreach), Peralta Hacienda, Sogorea Te' Land Trust /Indian People Organizing for Change (IPOC).	10 interviews with Fruitvale nonprofits and civic agency leaders				
Surveys	Middle schools in the Fruitvale district	140 student respondents				
Convenience Surveys at community event (2); Health provider survey (1)	Día de los Muertos- Fruitvale (Nov 2018 and 2019) Native American Health Center Jan 2020	71 Respondents				
Community Outreach and Education	Location	Participants				
Community workdays and stewardship, climate change and cultural walks (5)	Jingletown, Estuary (King Tides), sites (Barry Place, Josie de la Cruz,)	176 Community Members/Youth				
Student field trips/restoration (ARISE, ASCEND, Achieve, Brothers on the Rise)	Josie de la Cruz Park, Dimond Park, Tidewater/Fruitvale Bridge Park, Jingletown	181 Students/Youth				
Pilot Project	Partners	Participants				
Tap Water Quality Workshop (August 1, 2020) Multiple prep meetings	EBMUD, Alameda County Healthy Homes (7)	2 Participants				
Open Space/Parks and Trash/ Illegal Dumping	Meetings with City of Oakland staff, Parks and Recreation director, Site volunteers	8 Participants				
Open Space/Parks and Trash/ Illegal Dumping	Meetings with City of Oakland staff, Parks and Recreation director, Site volunteers	8 Participants				

Using the mixed methodology described above, FOSC identified, confirmed and summarized key findings. Preliminary data informed follow up questions for subsequent data collection events with target respondents, expanding on and confirming findings. First, this report highlights the key findings summarized from all assessments, then provides findings specific to methods and groups, and finally, presents findings from a survey focused on the topic of tap water quality.

Needs Assessment Findings

Summary of Key Findings

Through these various assessments administered to diverse groups of respondents, students, community members and partner nonprofits of the Fruitvale community, FOSC identified the following water-related problems and priorities:



Trash and Litter

Illegal dumping, trash, and contaminants in the streets, storm drains and and creek were standout concerns often perceived as linked to homelessness, crime, community disengagement, and economic struggles. Creek pollution and contamination, including oil, plastic, and paint, were further detailed under this problem.



Drinking Water

Respondents noted lack of confidence in tap water quality. Many expressed concern that their tap water was not safe and mistrusted the source and safety of drinking water in their homes, often noting misconceptions about the water source and system.



> Green Space

Many respondents felt that there were few safe green spaces for children and families and limited access to the creek and outdoor recreation. This is a community that has historically been excluded from green public spaces.

Community Partner Interviews

Through early interviews with nonprofit staff and leaders from the Fruitvale community, FOSC identified water issues and/or problems in the community as well as possible water project ideas. Further, those interviewed assisted FOSC in accessing other community members and groups.

When asked about water issues and/or problems in the community, two areas dominated the interviews. The first focused on the absence of nature or green, open spaces and parks and the lack of access to safe open spaces (9 of 10 respondents). One respondent noted:

"We only really have two parks in Fruitvale [César Chávez and Josie de la Cruz]. Both of these parks are overused, and people don't often venture out of the neighborhood or to Oakland Hills to go to parks. More parks are needed in the flatlands. Where will the children play in the future if there are no parks?"

The second issue was the Illegal dumping, garbage, and toxins in streets, creeks, and parks (7 of 10 respondents). Several respondents noted the intersection of litter and lack of green spaces:

"There is a lack of access to green space and nature. Parks are seen as inaccessible and sometimes dangerous to many families in the area. Many families are too far removed from their natural environment, which results in behaviors such as littering, leading to a dirtier environment. Mentality toward public land needs to be seen as a right, not a luxury, and kids and their families need to take more advantage of accessing it."

When asked about future project ideas, the top idea, mentioned by all respondents, was daylighting and/ or restoration of the creek and green space (10 of 10). One respondent mused that dealing with trash and improving creek awareness could only happen with greater creek restoration efforts.

"The only way to really make a difference in the litter, dumping, etc., and to increase awareness about the creek would be to do a daylighting project similar to the one in Dimond Park.

Otherwise, I think that fighting for increased awareness and [creek] promotion is a lost cause."

"Everything flows into the water...illegal dumping is an issue...Deep East Oakland hasn't had the same reinvestment as other parts of Oakland that have more wealth."

Other issue areas mentioned by respondents included: drinking water concerns, creation of an Ohlone history and cultural center, and the creation of a community coalition to work on the identified problems.

Listening Sessions

The five bilingual listening sessions provided an opportunity to gather initial information about the most pressing water issues in the community and further explore community issues. FOSC then returned to the listening session sites, presenting and validating key findings. Seventy-two (72) people attended listening sessions; approximately 92% of the participants were Latinx between the ages 20 and 80 years old. The top water issues identified during the listening sessions included the following:

Illegal dumping: mattresses, motor oil, trash, and contaminants and trash and contaminants in the streets and the storm drains. This issue generated the most energy and concern from the participants. Some participants attributed the increased garbage to people experiencing homelessness, crime in the community, and a lack of enforcement of dumping. Participants connected street level trash with their concerns with the pollution and contamination in the creeks and other waterways. As one resident mentioned: "With a lot of cars on the street, oil and gas from these cars enters into storm drains and then the creek." Other pollution sources mentioned included paint and plastic entering the waterways. One community member mentioned the health effect on the community:

"Fish eat the plastic, and then we eat the fish, and the other animals and everyone gets sick..."

Tap Water Quality: Drinking water in the home. Several different concerns about drinking water were discussed. A mistrust of the safety of tap water was first and foremost. Participants did not trust that their tap water was safe from lead and other toxins. One participant stated:

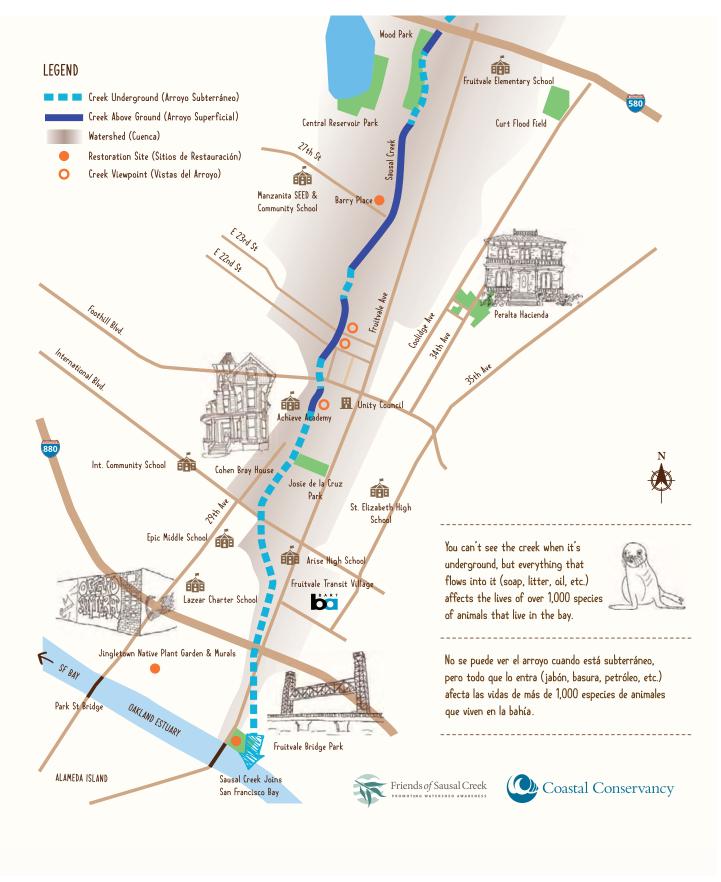
"Almost all water is not safe to drink, we need to buy purified water to cook with and drink."

In addition to the cost of bottled water, respondents were very concerned with the expense and rising cost of tap water. While only a few participants noted the difference between the source of tap water—East Bay Municipal Utility District (EBMUD)—and premise plumbing water quality issues, several were quick to note the need to contact the utility: "[People] need to call companies to make sure there aren't toxins and metals in the piping making people sick." However, no one reported contacting EBMUD about water quality testing.

Limited or no access to green open spaces, creeks, and parks: Participants spoke about both the lack of neighborhood open spaces as well as a lack of access to existing spaces. As one participant noted, "A lot of people don't know about places to go for green space access, and most parks are too far away. They aren't aware of how to get to the creek or local parks." Many commented that there are few or no local safe parks and play spaces for children and that there is not enough access to outdoor recreation for families. Highlighting a lack of green corridors in the Fruitvale, one participant noted the heat in the district, observing, "There aren't any trees or plants along the sidewalks."

Preliminary qualitative data collected through listening sessions and interviews informed multiple choice questions for the surveys. In addition, specific themes raised at early sessions were further explored during the second round of listening sessions and follow-up interviews.

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Student Surveys

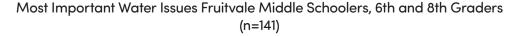
Using the FOSC environmental education program as a point of entry, FOSC administered a short written survey to four classes from two different middle schools, prior to classroom presentations. Of the 141 respondents from Fruitvale middle schools, 101 were in 6th grade at Bret Harte, and 40 were in 8th grade at Lazear. Students were asked to select the top two most important water-related issues from a list of five. Below are the results:

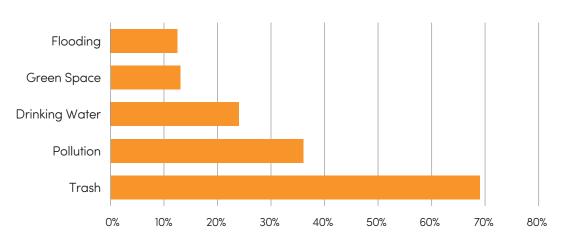
Trash in the storm drains was identified by the most participants (69% of the middle school students).

Next, 36% of middle schools identified pollution in waterways (creek, estuary) as the most important waterrelated issue

Twenty-four (24%) of the students prioritized contaminated drinking water as a priority.

A lack of green space (parks, areas to see the creek) and flooding were both identified by 13% of the student respondents as the most important water issues.





When asked about what they would do "if you had a million dollars to improve your neighborhood," the top responses reflect water-related issues:

Clean up trash in streets and storm drains

"I will pay each neighbor to pick up all the trash," "I would use it to have a recycling team to go and clean up the trash every weekend."

Improve drinking water

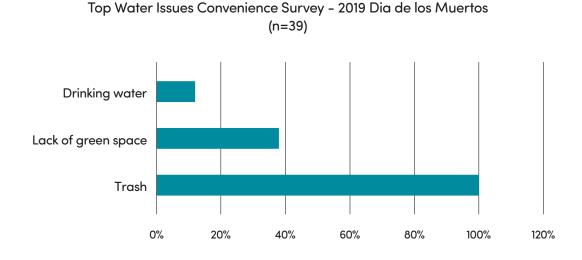
"I would like to upgrade the water filters," "get water tested for lead."

Creek clean-up and restoration, park creation

"I would use my money to get trash out of water and make more parks," "Make a park nearby with a creek."

Convenience Survey

During a tabling event at the 2019 Día de Los Muertos Festival, the public was asked to engage in an interactive convenience survey whereby they put a sticker next to the most pressing water-related concern from a list of three. Like the middle school respondents who prioritized trash in the streets and storm drains as pressing concerns, the population of mostly older, primarily Latino/a adults (39) also identified trash as the biggest issue in their community (100% of participants identified it as an issue). Thirty-eight percent (38%) identified the lack of green spaces (parks, planted areas), and 12% voted for drinking water in the home as the issue (unsure about tap water quality, expensive water bill). While there are differences with the rank, trash and dumping and lack of green space/parks are top concerns across the various groups and methods.



Focused Survey with Local Health Care Providers

As tap water emerged as a concern during listening sessions, FOSC worked with the Native American Health Center to survey 16 health care practitioners from the Center specifically about drinking water issues among their patients. Although health care providers do not routinely ask about drinking water, they reported that some community members voiced their concerns about tap water and its impact on their health. Of the 16 healthcare providers surveyed, 11 (69%) reported that at least one patient visiting the Health Center in the last three months mentioned concerns about drinking water. Five of those practitioners reported that more than eight community members volunteered concerns about drinking water during that time.

When asked how many patients had symptoms tied to a lack of clean drinking water, 63% of the providers responded that no patients had symptoms but 32% reported that anywhere from one to eight patients had symptoms (hair discoloration, skin rash) tied to drinking water during the three-month period. Those providers noted that clients complained about the taste, color, and/or smell of tap water, including the appearance of sediment.

One health practitioner noted that the perception that tap water is unsafe could be a health risk, as community members will then not drink enough water. A dietician who responded to the survey mentioned that she encourages people to drink tap water, although many prefer to buy bottled. She also noted that there is an absence of water fountains in the Fruitvale neighborhood, which can impact those who do not have a home and thus have no access to tap water at all. These comments from health care providers support the conclusion that tap water is perceived to be unsafe among some Fruitvale community members and is a high priority issue.

Conclusion

Through the needs assessment activities Fruitvale respondents highlighted environmental injustices. Community members noted the lack of open spaces and parks for family recreation and enjoyment; the extensive illegal dumping and trash in public areas (streets/ storm drains, dumping "hotspots"); and they expressed both a lack of confidence in their tap water and concerns that the Fruitvale community does not have same access to safe drinking water as those in the "the hills." The community's collective consciousness and concerns are framed by the 2016 Reuters examination that found that that Fruitvale children experience a concentration of lead poisoning (paint- and soil-based) higher than that discovered in Flint, Michigan during the 2014-2015 water crisis.

Fruitvale respondents frequently discussed public safety concerns including robbery and vehicle theft, which are higher than other districts in Oakland. As part of Friends of Sausal Creeks' Walkable Watershed Concept Plan (2017) similar concerns were voiced. Student surveys cited safety issues from crime and traffic as primary reasons students do not walk or bike in their neighborhood.

Next Steps

- Continue collaborating with and engaging community members and partners in determining priority pilot projects: These may include topics identified through the needs assessment, including: tap water quality, trash/illegal dumping and storm drain pollution and increased parks/open space access.
- Improve open space/park access. FOSC will continue to work with City of Oakland partners (Public
 Works Watershed and Stormwater Division, Environmental Stewards, Park Services, etc.) and gather
 feedback and seek resources to advance pilot projects and to follow up on the Capital Improvement
 Project. To that end, FOSC has contracted a feasibility study to explore and detail the development of five
 sites with the potential for expansion or creation of new parks, open spaces, trails and green corridors.
 Through additional interviews and focus groups, the community members identified user priorities and
 contributed to design features for the proposed project sites.
- Work with the DACTI Program Tap Water Quality Testing Effort to include the Fruitvale community in the testing effort. FOSC partnered with the Native American Health Center to distribute tap water quality testing kits and will continue collaborating on tap water messaging to the community. FOSC's tap water quality and contamination "Frequently Asked Questions" (FAQ) document developed with community partners (EBMUD, Healthy Homes, City of Oakland) may play a role in the outreach efforts.
- Convene or connect with existing environmental justice or water groups advocating for the community. FOSC will continue their involvement in clean water, public land and creek access, and environmental justice issues and draw on the advice of their community partners to help them stay connected to priorities of the Fruitvale community. Key stakeholders in the region include City of Oakland Public Works, District 5 Councilmember Noel Gallo, Keep Oakland Beautiful, Native American Health Center, Clínica de la Raza, Carmen Flores Recreation Center, César Chávez library, Fruitvale schools, Brothers on the Rise, and Unity Council.

References

California Department of Education. *School Accountability Report Card 2018-19*. November 2020. https://www.sarconline.org/?year=2018-2019

City of Oakland. *Oakland's History of Resistance to Racism*. November 2020. https://www.oaklandca.gov/topics/oaklands-history-of-resistance-to-racism

Pell, M.B., & Schneyer, J. (2016, December 19). The thousands of U.S. locales where lead poisoning is worse than in Flint. Reuters. https://www.reuters.com/investigates/special-report/usa-lead-testing/?utm_source=twitter&utm_medium=Social

Stenger, B. (2020). Urban Ecology and Racism: Taking Up a Challenge from the Scientists. *Friends of Sausal Creek November 2020 Newsletter*. https://files.constantcontact.com/3b99e7ba101/b840b96d-34d7-47ed-ae17-7f56de59d6cf.pdf

The Unity Council & AECOM. (2014). Fruitvale Economic Development and Commercial Corridor Strategy. https://unitycouncil.org/wp-content/uploads/2016/09/201401023_Fruitvale_Technical_Report-min.pdf

Greenaction for Health and Environmental Justice



Photo courtesy of Greenaction for Health and Environmental Justice



Founded in 1997 by grassroots community leaders, Greenaction for Health and Environmental Justice has been at the forefront of the environmental justice movement for over 23 years.

Greenaction for Health and Environmental Justice (Greenaction) is a multiracial grassroots organization that fights for health and environmental justice with low-income and working class, urban, rural, and indigenous communities. Founded in 1997 by grassroots community leaders, Greenaction for Health and Environmental Justice has been at the forefront of the environmental justice movement for over 23 years. Greenaction has worked in Bayview Hunters Point since the organization was founded.



Project Description

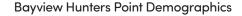
Greenaction worked with the Bayview Hunters Point community. Bayview Hunters Point is a low-income community of color located on San Francisco Bay in southeast San Francisco. Greenaction engaged with residents to define water management needs and related concerns as they manifest from the community's perspective. Greenaction staff have engaged in ongoing discussions, surveys, meetings, educational outreach, and presentations with diverse residents and other stakeholders, including community organizations, regulatory agencies and elected officials.

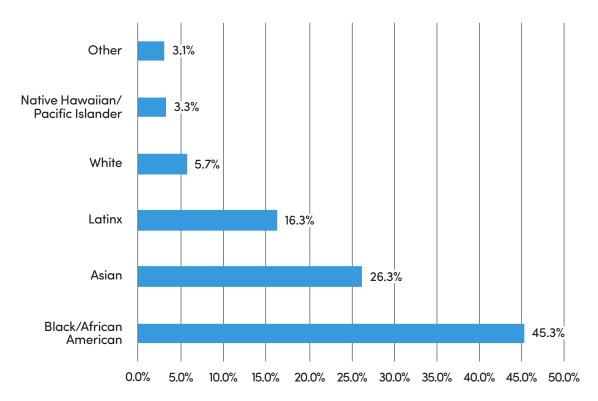
Background on Bayview Hunters Point

Demographics

Bayview Hunters Point has a population of 34,835, of which 45.3% identify as Black/African American, 26.3% Asian, 16.3% Latinx, 5.7% white, 3.3% Native Hawaiian/Pacific Islander, and 3.1% Other. Bayview Hunters Point has an unemployment rate of 5%, compared with 3% for the entire city of San Francisco, and 21.2% of the population has income below the poverty level, compared with 11.3% for the whole of San Francisco (San Francisco Mayor's Office of Housing and Community Development).

Historically a predominantly African American neighborhood, Bayview Hunter Point has become increasingly diverse as other low income and working class people displaced from other neighborhoods have moved in. In addition, the community is facing gentrification and an increase in higher and upper income white residents.







History of Environmental Injustice and Inequity in Bayview Hunters Point

Bayview Hunters Point is a mix of industrial and residential zoning, often in the same areas. It is also home to the Hunters Point Naval Shipyard Superfund site, along with other contaminated sites and 187 leaking underground fuel tanks or LUFTs (Greenaction 2004). The various contaminated sites like Hunters Point Naval Shipyard as well as the LUFTs have caused contamination in the soil and groundwater (Greenaction 2004).

The residents and environment of Bayview Hunters Point are disproportionately impacted by many stationary and mobile pollution sources, including radioactive and toxic contamination at the Hunters Point Naval Shipyard Superfund site and dozens of other contaminated sites along the waterfront and throughout the community (Respaut and Levinson, Reuters 2019). Pollution sources include the Southeast Sewage Treatment plant, under-regulated and unregulated dirty industries, diesel freight transport, the Port of San Francisco, and two freeways. The California EPA's CalEnviroscreen ranks Bayview Hunters Point as one of the communities in the state that is the most at risk from and vulnerable to multiple sources of pollution. Bayview Hunters Point rates in the 90th percentile in CalEnviroscreen, meaning it has a higher pollution burden than 90% of California overall. For environmental factors, Bayview Hunters Point ranks in the 99th percentile for diesel particulate matter, 97th for groundwater threats, and 86th for hazardous waste. For health factors, Bayview Hunters Point ranks in the 97th percentile for low birth weight, the 96th for asthma, and 46th for cardiovascular disease. For population characteristics, Bayview Hunters Point ranks in the 97th percentile for housing burden, 88th for unemployment, and 60th for poverty (Greenaction, 2021). In addition, the area has often been used for illegal dumping.

Bayview Hunters Point is also vulnerable to sea level rise, which combined with storm surges could cause flooding of many of these hazardous and radioactive waste contamination sites and homes, transportation infrastructure, and utilities along the San Francisco Bay waterfront. Toxic materials and waste beneath the surface could be dredged up and exacerbate public health risk of the area (May et. al., 2020). As one example, Islais Creek, which runs through Bayview Hunters Point, was labeled a "toxic hot spot" by regulators in the 1990s, and still contains high levels of contamination (Mojadad, 2021). The artificial creek is expected to be five feet under water by 2050, which could cause industrial contaminants to seep out of the ground and flow out into the Bay (Mojadad, 2021). These hazardous materials will threaten human health and the environment. Additionally, subsistence fishers, lacking affordable healthy alternatives, eat toxic fish from the polluted San Francisco Bay.



Photo: U.S. Navy archive



Large mega-developments proposed for new upscale residents, such as the India Basin Mixed Use Development project, threaten to gentrify the community and would likely result in displacement of longtime residents and small family-owned businesses. In addition to displacement, the India Basin Mixed Use Development project is another example of a mega-development on toxic land — in this case, right next to the shipyard Superfund site. The San Francisco Board of Supervisors approved the India Basin Mixed Use Development project despite the Environmental Impact Report finding that the development would result in significant, unhealthy, ongoing, and unavoidable air pollution that would likely violate regulatory limits (Greenaction, 2019). Treasure Island is another example of contaminated land slated for upscale commercial and residential development.

Community-Identified Strengths and Assets

Community knowledge and civic engagement of residents is a strength and asset as they continue their decades-long efforts and campaigns to improve the quality of life, including environment and health, in this community that is acknowledged to be highly vulnerable and at risk from pollution and other health and socio-economic indicators.

Residents know their community better than anyone, including government "experts."

Another key asset created by Greenaction's and their Bayview Hunters Point community members and community partners is the Bayview Hunters Point Environmental Justice Response Task Force. The EJ Task Force is a multi-stakeholder, community-led problem solving collaboration that brings together residents, community and environmental justice groups, local/regional/state/federal government agencies, and some businesses. The EJ Task Force has monthly meetings, conducted virtually since the pandemic began, and they hope to be able to return to in-person meetings once health conditions allow them to meet safely.

One of the important successes of the EJ Task Force has been to catalyze increased attention to the chronic and serious problem of illegal dumping, as diverse community, government, and business stakeholders work together to try to address this issue.

Related to the EJ Task Force, Greenaction created a website, <u>bvhp-ivan.org</u>, which allows residents and other concerned people to easily and quickly report pollution violations and track the response (or lack thereof) by the appropriate regulatory agency. These complaints are then reviewed at the monthly EJ Task Force meetings with all the stakeholders, including government agencies.



Photo: Dennis Herrera



Photo: Dale Cruse

Needs Assessment Process

Summary of Outreach and Education Efforts

Greenaction reached over 2,000 community members through neighborhood and social media outreach, contacting them with surveys and fact sheets on illegal dumping, sea level rise, and cumulative health impacts/vulnerability to pollution. Greenaction staff engaged in conversations with and relationship-building in Bayview Hunters Point, including attending community and neighborhood meetings and gathering input from these events on community water needs. Greenaction updated, developed, and distributed new outreach materials including fact sheets on illegal dumping, sea level rise and contamination, healthy subsistence fishing, and how to file pollution complaints. Greenaction also maintained a close partnership and capacity building for the Bayview Hunters Point Mothers and Fathers Committee and stayed heavily involved in and made presentations about the project at two monthly meetings of the multi-stakeholder Bayview Hunters Point Environmental Justice Response Task Force. Greenaction also manages the Bayview Hunters Point Identifying Violations Affecting Neighborhood (IVAN) Program.

Greenaction developed and conducted two surveys and analyzed data from over 300 responses. The first survey (Bayview Hunters Point Community Surveys on Water Issues and Concerns) yielded 160 complete responses, and the second survey (Bayview Hunters Point Water Needs Assessment) yielded 150 complete responses. A third survey on subsistence fishing was planned but has not been completed yet due to COVID-19 restrictions and safety concerns.

Needs Assessment Findings

The priority issues identified through the needs assessment are drinking water quality, water/sea-level rise and groundwater rise, illegal dumping, contamination, and subsistence fishing.



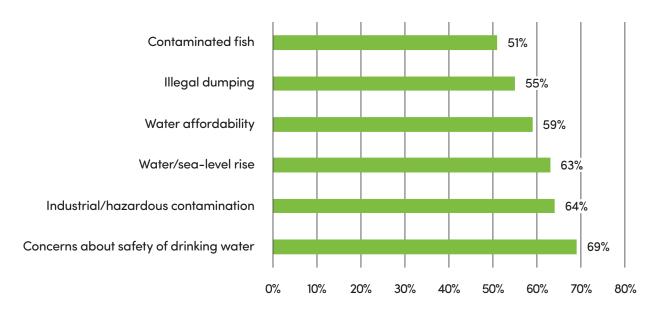






Respondents were asked which issues they have identified in their community. Notable findings include: 69% of survey respondents feel their drinking water is unsafe, 64% are concerned about industrial/ hazardous contamination, 63% are concerned about water/sea-level rise, 59% are concerned about water affordability, 55% are concerned about illegal dumping, and 51% are concerned about contaminated fish.

Priority issues identified by the BVHP community



Next Steps

Greenaction has been holding discussions to prioritize issues and discuss identifying project development ideas based on the survey responses with the community and partners mentioned above.

As part of their work to identify project implementation ideas, Greenaction initiated a new coalition to bring together groups to work together and engage government agencies to address the threat posed by rising sea levels and groundwater to shoreline contamination sites. The mission statement for the group is: "The San Francisco Bay Shoreline Contamination Cleanup Coalition mobilizes for the safe, comprehensive, and immediate cleanup of all toxic and radioactive contamination near the SF Bay shoreline, where sea level rise due to climate change will spread the contamination. Climate and environmental justice is our highest priority."

Some key project development ideas and next steps identified include:

- Working with community and government partners (including San Francisco Recreation & Parks, San
 Francisco Department of the Environment, and San Francisco Health Department) on creating and
 posting multilingual subsistence fishing health advisory signs along the San Francisco Bay waterfront in
 Bayview Hunters Point, Treasure Island, and throughout the San Francisco Bay region where subsistence
 fishing is an issue.
- Engaging with stakeholders on rising water/sea level rise issues facing Bayview Hunters Point.
- Finishing the third subsistence fishing survey and conducting a feasibility study to assist in project development concepts.
- Addressing unsafe water and affordability, including conducting a major water quality testing program
 in partnership with San Francisco Public Utilities Commission and other agencies in San Francisco—
 priority would be residents living in older homes, public housing, public/private housing, and other
 concerned residents.
- Implementing a multi-stakeholder project to address rampant and chronic illegal dumping in Bayview Hunters Point, including working with government and community partners to post signs warning against illegal dumping in problem areas and outreach about the dangers, stepping up monitoring of illegal dumping, and outreach on how to report violations through IVAN and directly to appropriate agencies.
- Working with government partners to assess what a water conservation educational and implementation effort in southeast San Francisco would entail.
- Conducting ongoing water quality monitoring near known contamination sites in Bayview Hunters Point and Treasure Island.
- Continuing to educate the community and work with the Bayview Hunters Point Environmental Justice Task Force and stakeholders on all these water related issues.

Potential partners include San Francisco Public Utilities Commission, San Francisco Department of the Environment, San Francisco Board of Supervisors, San Francisco Recreation and Parks Department, Bayview Hunters Point Environmental Justice Response Task Force, and community groups.

References

Bayview Hunters Point Mothers Environmental Health & Justice Committee, Huntersview Tenants Association, and Greenaction for Health & Environmental Justice. (2004 September). *Pollution, Health, Environmental Racism and Injustice: A Toxic Inventory of Bayview Hunters Point, San Francisco*. https://greenaction.org/wp-content/uploads/2019/06/thestateoftheenvironment090204final.pdf

California Environmental Protection Agency & Office of Environmental Health Hazard Assessment. (2017, January). *CalEnviroScreen 3.0*. https://oehha.ca.gov/media/downloads/calenviroscreen/report/ces3report.pdf

Greenaction for Health & Environmental Justice. (2019, September 5). Challenged by Greenaction and Bayview Hunters Point Residents, Bay Area Air Quality Management District reverses prior support for India Basin Mixed Use Development Project due to "Unacceptable" Air Pollution. [Press release]. https://greenaction.org/wp-content/uploads/2019/09/Press-Release-Sept-5-2019-Air-District-reverses-support-for-India-Basin-Mixed-Use-Development-in-Bayview-Hunters-Point.pdf

Greenaction for Health & Environmental Justice. 2021. State of California Confirms Bayview Hunters Point at Risk from Pollution. https://greenaction.org/wp-content/uploads/2021/06/BVHP-CalEnviroScreen-4.0-Fact-Sheet-.pdf

May, C.L., Mohan, A.T., Hoang, O., Mak, M., Badet, Y. 2020. *The Response of the Shallow Groundwater Layer and Contaminants to Sea Level Rise*. Silvestrum Climate Associates for the City of Alameda, California.

Mojadad, I. (2021, June 18). What Islais Creek tells us about rising sea levels in San Francisco. *San Francisco Examiner*. https://www.sfexaminer.com/news/what-islais-creek-tells-us-about-rising-sea-levels-in-san-francisco/

Respaut, R., & Levinson, R. (2019, January 31). SPECIAL REPORT: Legacy of Contamination. *Reuters*. https://www.reuters.com/investigates/special-report/usa-military-legacy/

San Francisco Mayor's Office of Housing and Community Development. Bayview Hunters Point Neighborhood Profile. Data compiled by MOCD from Census 2000 Summary Files 1 and 3. Available at: https://sfmohcd.org/sites/default/files/FileCenter/Documents/911-BayviewHuntersPoint.pdf

Marin City Climate Resilience and Health Justice



Photo courtesy of Marin City Climate Resilience and Health Justice



Marin City Climate Resilience and Health Justice addresses critical community issues including emergency preparedness, adaptation to climate change and sea level rise, and pollution, and promotes community engagement and social equity.

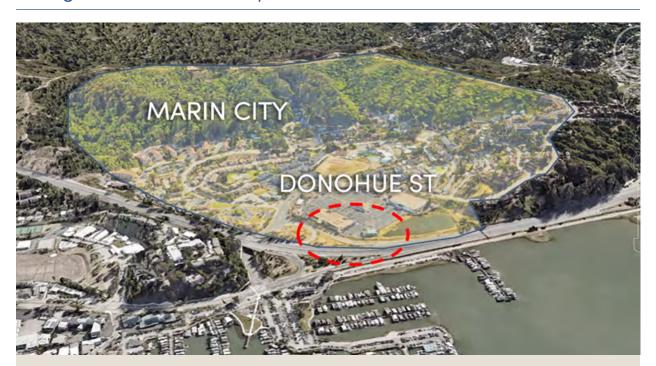
Marin City Climate Resilience and Health Justice (MCCRHJ) is an African American led environmental justice organization based in Marin City, California, made up of community members and allies advocating for climate resilience and health justice for one of the most vulnerable communities in the County of Marin. Their work seeks to establish equitable inclusion in planning and community preparedness, as well as the equitable allocation of resources. MCCRHJ addresses critical community issues including emergency preparedness (including flood and hazard mitigation planning), adaptation to climate change and sea level rise (including wetland restoration), and pollution (water, air, and soil quality), while promoting community while promoting community engagement, including Youth Leadership Development, and social equity.

Project Description

Marin City Climate Resilience and Health Justice worked with local community members to understand how water issues manifest in Marin City from the community's perspective, and how to address them, by conducting needs assessment activities including a water survey, stakeholder engagement, and community forums regarding water issues.



Background on Marin City



Marin City is shaped like a bowl. Highway 101 blocks stormwater from flowing out from the watershed to the Bay and also contributes stormwater runoff to Marin City. The community has only one road in and out (Donohue Street), and that road floods. It's an unincorporated community and depends on the County of Marin for public works. This image shows the topography of Marin City, to highlight where the runoff accumulates. Illustration provided by Marin City Climate Resilience and Health Justice.



Above: Welders at the Marinship yard around 1943. Large numbers of women, Caucasian and African American, entered the yards during World War II. Photograph from "Marinship At War," by Charles Wollenberg. Available at: African American History - San Francisco Maritime National Historical Park (U.S. National Park Service) (nps. gov)

Right: The Marinship factory built Liberty Ships in World War II, operating around the clock. Photo: The Marin History Museum, via



Demographics

According to the American Community Survey five-year estimate data profiles from the U.S. Census Bureau (2018), the estimated population of Marin City is 3,126. Of this population, 56% identify as white, 35% Black, 8% American Indian or Alaskan Native, 8% Asian, and 12% as some other race. 34% of the population speaks a language other than English, and 38% of the population is at or below 150% of the poverty level. From the perspective of community leaders, the population estimates, based on earlier census data, are low.

Marin City falls in the 35th percentile of Cal EnviroScreen 4.0, which identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution, in contrast to the vast majority of the rest of Marin County which falls between the fifth and tenth percentiles (California Environmental Protection Agency [Cal EPA] and Office of Environmental Health Hazard Assessment [OEHHA], 2021). This data is aggregated, and does not include some local impacts to Marin City, including significantly shorter average lifespan.

Median Income, Marin City vs. Marin County, 1980-2013, 2013



U.S. Census 1980, 1990, 2000; American Community Survey 2009-2013.

^{*} Median income not available in 1980; average income shown. Center for Community Innovation, University of California, Berkeley, 2015

History of Environmental Injustice and Inequity in Marin City

Marin City is a disadvantaged and overburdened community in Marin County. The area was developed to house people who worked at the Marinship factory during WWII. After the war, it was one of the only places where African Americans could live due to redlining. Though redlining was outlawed more than half a century ago, its harmful effects are still felt by residents of Marin City, as in many other redlined communities that continue to be the most impacted by pollution (Fears, 2022). Marin County overall currently ranks 2nd in racial inequity in California, according to the Advancement Project California, and topped this list in 2018. Moreover, Marin County was ranked 4th in the state for racial disparity regarding proximity to hazardous waste sites, used in the Advancement Project as an indicator for healthy built environments (Halstead, 2021).

Marin City is one of the highest density low-income areas in Marin County and is home to the county's only family-based public housing (Crispell, 2015). Residents earn a significantly lower family income than anywhere else in the county (U.S. Census Bureau), experience one of the highest chronic disease rates, and the highest disability rate in Marin. Residents have the lowest life expectancy rate in the county and live 17+ fewer years than their affluent neighbors on either side of the community, according to the community's own research as shared by Marin County's public health officer (Burd-Sharps & Lewis, 2012; Halstead, 2015). Marin City children have the lowest school performance (California Department of Education, 2019) and have been found by the state of California to have been subjected to discrimination by the Sausalito Marin City School District as recently as 2019 (The People of the State of California v. Sausalito Marin City School District, 2019).

There is no barrier between Highway 101 and the Marin City community, which is partially encircled by and exposed to both air and water pollution from the highway. According to CalEnviroScreen 4.0, Marin City is in the 99th percentile for exposure from traffic, the 62nd percentile for toxic releases, and 47th percentile for diesel particulate matter. Marin City is also in the 24th percentile for exposure to Particulate Matter 2.5 (PM2.5), and the 84th percentile for impaired waters. The community is also concerned about air vapors backing up in pipes from decommissioned contaminated sites, including two gas stations, two dry cleaners, and three kerosene stations. Marin City Climate Resilience and Health Justice partnered with Audubon California to test sediment in the drainage pond in Marin City in 2021, and found high levels of lead, nickel, and zinc, as well as high levels of chromium.

Pollution and hazardous waste combine with the chronic flooding Marin City has been experiencing for 80 years due to stormwater from torrential rains, groundwater emergence, king tides and sea level rise. Residents refer to the landscape as "the bowl without a spout," reflecting not only the physical dimensions of the community but also the flooding that takes place when excess water cannot drain from the watershed to the Bay because of missing drain pipes as well as the lack of an adequate drainage system. Since October 2014, flooding has closed southbound traffic completely on Highway 101 and blocked the only vehicular entrance and exit into and out of Marin City three times.

To get into or out of Marin City during these flooding events, community members have had to wade through flood waters, despite the possibility that broken or leaking pipes (detailed in the 2017 Marin City Drainage Study) might cause additional water contamination. In a 2017 flooding event, a school bus driver left children on the opposite side of the highway and did not inform their parents, leaving them to walk through contaminated water to get home. On October 24, 2021, families were forced to park their cars outside of Marin City and walk through three to four feet of contaminated flood waters to get home. People working at and visiting the Gateway Shopping Center in Marin City were stuck inside Marin City for hours. During the same event, contaminated water cascaded down from Highway 101 into the front yards and homes of several community members.

The chronic flooding in Marin City disrupts routine activities such as going to school or work. Chronic flooding also prevents important services, such as the fire department, from being able to reach the community. Additionally, many residents with chronic health conditions – in the community with one of the highest chronic disease rates in the county – rely on specialty doctors outside of Marin City who they cannot reach during large flooding events. These flooding events and their impacts on Marin City have generated anxiety about not being able to get out of Marin City to make it to doctor's appointments, or about children not being able to get home from school.

Stormwater flooding causes additional expenses for homes, churches, and businesses. In addition to these direct flooding impacts, homeowners in the area known as the "Bowl" have high maintenance costs associated with their homes flooding, and many residents are affected by mold and mildew issues due to flooding.

Marin City also has extensive sewage backup problems that have affected residents' apartments, and even caused businesses to close or move due to not having reliable bathrooms. During the October 24, 2021 flooding event, residents witnessed water shooting up from manholes. The County Chief Engineer told residents it was sewage water shooting up from the manholes and entering the water they were walking through to get home.

The water issues Marin City experiences are complicated by jurisdictional and property owner challenges and conflicts. For example, many key problems with water drainage take place under or on the property of the Gateway Shopping Center. The owner has resisted paying to clear clogged drainage pipes and to install a needed water pump. Moreover, Marin City is unincorporated, which means it is bound to the administration and decision-making of Marin County rather than having the ability to self-determine and self-regulate at a local level.

There is a deeply felt and growing understanding in the Marin City community that the negative health impacts they experience are tied to discriminatory and exclusive decision-making, policies, and practices that have resulted in a highly disproportionate pollution burden. To date, the county has not taken adequate steps to address these impacts to Marin City, and Marin City Climate Resilience and Health Justice is seeking funding to ensure they can continue to build community capacity to participate in local decision-making to reduce environmental health burdens in Marin City.

For eight years, Marin City representatives and residents have been calling for Flood Control Zone 3 and the County Board of Supervisors to address Marin City's flooding issues, especially the need for improved access via the sole vehicular entrance, which is in a low-lying location that has been flooding for decades (County of Marin, 2021). Marin City Climate Resilience and Health Justice encouraged the county to apply for Federal Emergency Management Agency (FEMA) funding to help pay for drainage improvements in Marin City. Marin County applied for \$4.9 million in FEMA money, and received the first tranche, but is using those funds to pay for flooding mitigation actions that are primarily focused on protecting Highway 101. The County has acknowledged that these improvements will not eliminate the flooding that will increasingly affect Marin City due to climate change.

The Marin City community is still working to inventory and address the many different pollution sources that threaten the community, including flooding and contamination in runoff, cracked and leaking pipes, historic dumping sites, air pollution, and the ways that these exposures are tied to negative health impacts. Marin City Climate and Health Justice is working to advance the most effective strategies for effecting positive change.



Meeting between Marin City Climate Resilience and Health Justice members and U.S. Census representatives.

Photo: Terrie Green

Community-Identified Strengths and Assets

Situated in a bowl-shaped watershed in between Sausalito and Mill Valley, with a beautiful and varied topography that includes steep forested open space hills to the west encircled by Highway 101, and bounded by Richardson Bay on the east side, Marin City has a proud heritage as a traditionally African-American ship-building community in World War II. Many of the residents are related to the war-effort workers who were the original residents of Marin City. The tight-knit Marin City community has come together to build a healthier and more prosperous community through initiatives like the development of the Rocky Graham Park, the campaign for a local grocery store, the launch of the teen center and the proposed Center for Community Life. Marin City Climate and Health Justice builds community engagement to protect the health and resilience of Marin City residents.

Needs Assessment Process

Summary of Outreach and Education Efforts

In 2019-2020, Marin City Climate Resilience and Health Justice carefully conducted over 280 water needs assessment surveys with residents of Marin City. Community members were engaged in a variety of ways, including at existing events and community gathering places to make sure they were met where they are. The majority of respondents to the survey (86%) are renters in Marin City. The survey included questions about community strengths, water-related and environmental challenges, what's going well and not going well with water in Marin City, as well as specific questions about concerns with water quality, infrastructure, emergency preparedness, and knowledge about Marin City's water system and source.

The findings from the survey were presented back to the community and agencies in a number of forums, including to seniors at the Senior Sushine Club, to the Marin City Community Services District three times, at a county wide conference on seniors and aging, at the Environmental Forum of Marin, to 377 attendees of the MLK Jr. Conference, at Marin City's community forum, and to a panel of local government agencies.







Overall, the highest priority issues identified through the needs assessment are: tap water quality, aging infrastructure/pipes, and flooding, all of which affect public health.



Marin City Climate Resilience and Health Justice's Young Environmentalists conducting the water survey with community members in front of CVS Pharmacy.

Photo courtesy of Marin City Climate Resilience and Health Justice

Frequent responses to the open-ended survey question, "what's not going well with water in Marin City" included:

- "everything"
- the taste (sometimes specified as metallic)
- the smell
- that it's cloudy or discolored (brown, yellow, grey, and white were mentioned)
- the water is "hard"
- the water leaves "green slime" residue
- skin effects such as burning or itching
- presence of black dirt
- fluctuations in quality and service
- toilet and shower backups
- flooding
- old infrastructure/pipes
- water pressure
- concern about a Superfund site in Marin City

"The water is very BAD, we cannot drink it, we have to buy water which is not easy."

Responses to the open-ended survey question, "what's going well with water in Marin City?" included:

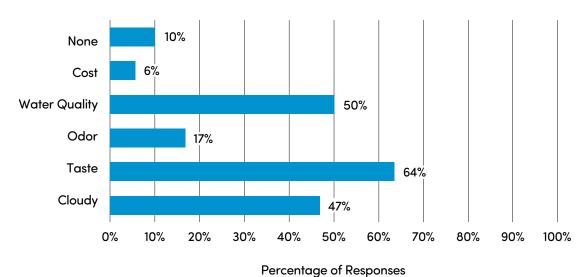
- frequently: "nothing"
- "The area is beautiful and thriving regardless of the systemic neglect from housing!"
- some said "it's available," "seems clean"
- some said they hadn't noticed any problems, or that the water is good



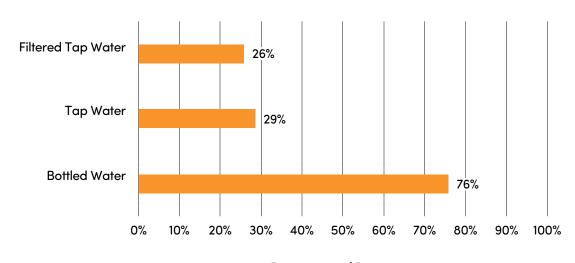
Overall, 68% of participants responded that they are worried about water quality in Marin City. 76% of respondents drink bottled water at home, rather than tap water (29%) and filtered tap water (26%), which is a major additional expense. 64% of respondents who expressed concern about their drinking water quality experienced taste issues, while 47% said their water has a cloudy appearance. 50% of those that expressed concern had general distrust of their water quality, not specifically rooted in appearance or taste. Respondents could choose more than one option for why they are concerned about tap water.

When asked their beliefs about what contributes to poor water quality, 72% of respondents cited "faulty water system" and 65% said pesticides, followed closely by vehicle fluids (41%). Respondents could choose more than one option for what they thought contributes to poor water quality.

If yes, what are your concerns about your drinking water?



Which of the following do you generally drink at home?





A broken pipe main in Marin City from Fall 2020 at the intersection of Phillips Drive and Drake Avenue. The break closed down a church and a school for a week as water overflowed.

Photo: Terrie Green



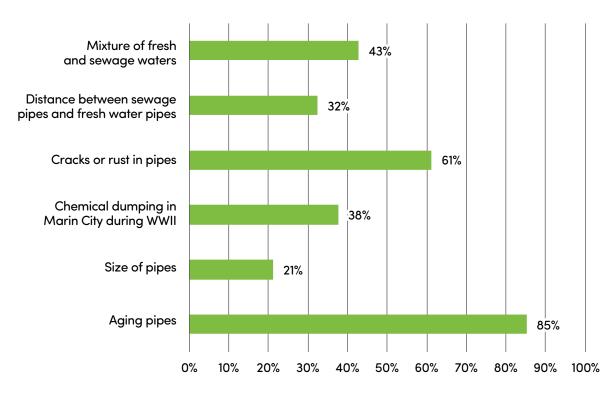
An example of a broken water main.

Photo courtesy of Marin City Climate Resilience and Health Justice

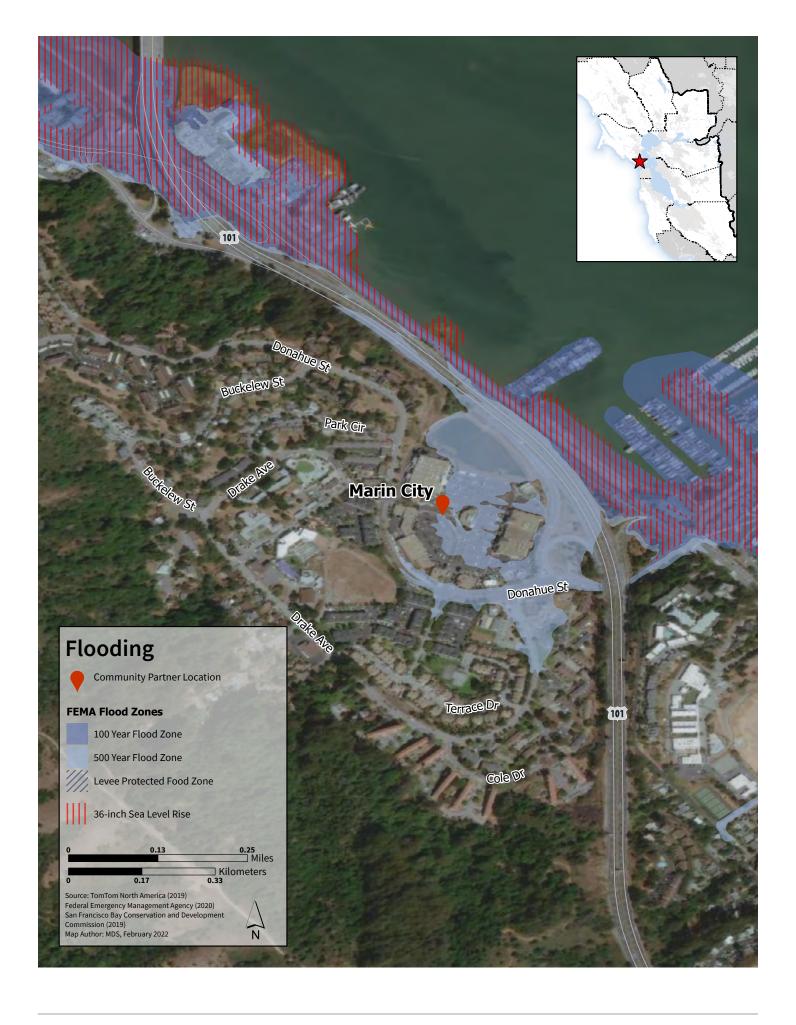
In addition to drinking water quality concerns, respondents are concerned about infrastructure and contamination in Marin City. 85% of respondents are concerned about aging pipes; 61% are concerned about cracks or rust in pipes; 43% the potential mixture of drinking and sewage waters; 40% about chemical dumping in Marin City during WWII, and 32% about the distance between sewage pipes and freshwater pipes. 43% responded that they are very concerned about whether the water treatment system is safe and built to handle growth in the future. Respondents could choose more than one option.

Marin City Climate Resilience and Health Justice members raised concerns about these infrastructure issues in a 2020 meeting of the Flood Control Zone 3. Marin City Climate Resilience and Health Justice also shared the survey findings with the Marin City Community Services District and has encouraged the County of Marin's Department of Public Works to address the infrastructure deficiencies in Marin City.

Do you have any concerns about the infrastructure of Marin City's water system that might be impacting your quality of life and safety?



Percentage of Responses





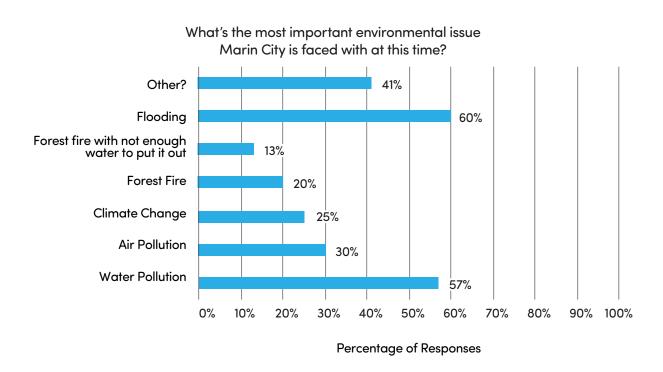
60% of respondents cited flooding as the most important environmental issue that Marin City is faced with at this time, followed by air pollution (30%) and climate change (25%).



2014 flooding on Highway 101 blocking the only entry/exit into Marin City.

Photo: Brent Ward

When floodwater blocks the ramps for Highway 101 on Donohue Street, people cannot get in and out for medical care, work, or school. While many parts of Marin County experience flooding, this is the only community that becomes completely cut off.





Flooding in 2017 blocked the entry/exit to Marin City.

Photo from Flooding closes roads in San Mateo, Napa (sfchronicle.com)

Information and Education

When asked, "How can we better prepare our residents from life and property damage in the disastrous event of fire, flooding, droughts, and infrastructure failure?" 86% of respondents said education and awareness, and 57% responded "offering a community emergency preparedness class" would help with preparedness.

This desire for education and information was also reflected in a series of questions concerning knowledge about Marin City's water system and source: 81% of respondents do not know where their home water originates from, 81% don't know the source/provider, and 75% responded that they don't know where the storm runoff drains to.

When asked what is the best way to teach residents about conservation/water efficiency and the impacts of drought, 67% of respondents chose hands-on trainings, 63% of respondents chose community-based education opportunities, i.e., seminar or lecture series held within and by the community, and 49% of respondents chose educational materials distributed to residences by mail. Respondents could choose more than one option.



Marin City Climate Resilience and Health Justice staff meet with Dr. Kristina Hill and UC Berkeley students.

Photo courtesy of Marin City Climate Resilience and Health Justice

Public Health Impacts

Many of the Marin City Water Assessment questions were focused on understanding the health impacts of environmental issues that Marin City residents are facing.

When asked about issues associated with climate change and flooding respondents were most concerned about, 74.82% of respondents said mold and mildew, 60.95% respiratory diseases and allergies (asthma, rhinitis, atopic dermatitis/eczema, common cold), 54.74% poor mental health, 53.65% loss of human life, 51.82% sewage spillovers, and 51.46% waterborne infectious diseases (Giardia, Cholera, Botulism, E. Coli, Dysentery). Respondents could choose more than one option.

When asked about other concerns about Marin City, many respondents say they are concerned about housing (67%), lack of a grocery store (57%), health (52%), education (52%), employment (48.71%) and road access to Marin City being cut off (47%). Respondents could choose more than one option.



Next Steps

Marin City Climate Resilience and Health Justice continues to advocate and strategically collaborate with the County of Marin and other agencies, advocacy groups, and governmental entities to cross-educate, exchanging community knowledge of flood patterns over time, water concerns, infrastructure conditions, and pollution sites with expertise in sea level rise vulnerability assessment, hazard mitigation methods and processes, planning processes, and more. Marin City Climate Resilience and Health Justice continues work to see permanent remedies implemented to protect the Marin City community, and will continue to expand their collaborative efforts to focus on stormwater, drinking water, pollution/hazards facing Marin City, and public health.

Specific next steps Marin City Climate Resilience and Health Justice plans to pursue include:

- Work collaboratively with Marin City Community Services District to fully develop the Disaster Preparedness Council to ensure readiness for floods, earthquakes, fire and other disasters.
- Participate in the DACTI Program Tap Water Quality Testing Effort and follow up on testing results.
- Conduct groundwater testing.
- Advocate for a more comprehensive flood study to, among other things, look at and assess water management challenges in Marin City. Specific ideas for the comprehensive flood study to explore and assess include:
 - Installing drain pipes to divert excess stormwater straight down Donohue Street and out/under the freeway to the Bay
 - Bringing in pumps as needed for flooding before more permanent solutions are implemented
 - Elevating the sidewalk coming out of Marin City, with a particular emphasis on ensuring that all children have a safe route to schools, between Marin City and Sausalito
 - Assessing flow of water coming down into Marin City from the watershed
 - Increasing the diameter of stormwater and sewage pipes from two to four feet
 - Repairing floodgate(s) and all malfunctioning flap gates immediately
 - Removing accumulated sediment from the Marin City drainage pond to increase water capacity for flood retention
 - Assessing the public health impacts of flooding (including mold and mildew from repeated exposure, particularly in the Bowl)
 - Inventorying and mitigating impacts from 12 acres of metals/pollutants coming from Highway 101 into the drainage pond in runoff; detailed in the 2017 Marin City Flood Drainage Study, which did not offer any measures to mitigate these impacts.
- Recommend a task force to address infrastructure issues related to old pipes in Marin City, including
 sanitation and sewage, drainage systems, and water supply. This task force of governmental and other
 partners should assess and prioritize the replacement of aging and/or missing infrastructure. This should
 also include a study to evaluate the impacts of old lead pipes. The 2017 Marin City Flood Drainage Study
 showed rusted, cracked, and missing pipes. Recently, several major pipes have burst.
- Pursue a program to educate community members about how to detect sewage leaks themselves and who to call when they see a problem.

- Conduct a comprehensive hazard assessment, which will include testing soil to identify any groundwater pollution (cracked or rusted pipes, runoff from Highway 101, etc.) and bringing in a group to assess a possible Superfund site on Phillips Drive as well as other sites. Community members and oral history from original residents indicate that there may be other contaminated sites from WWII-era dumping that need to be investigated. For example, a dump site on top of a hill by the old water tank flows into a major creek bed. A lot of trees and bushes have grown over the area, and Marin City Climate Resilience and Health Justice needs funding to have professionals pull out the brush, document the containers, and conduct soil testing. Other potential pollution sources should be identified and assessed, including two old gas stations, two old dry cleaners, three old kerosene stations, and old dumping areas for Marinship and other groups.
- Require Caltrans to divert and filter pollutants from Highway 101 coming into the Marin City drainage pond and main drainage ditch which flows right into the community.
- Advocate for defensible barriers to decrease noise pollution, as well as other solutions to reduce asthma
 and respiratory diseases from breathing hazardous chemicals due to freeway vehicle exhaust/unhealthy
 air emissions.
- Turn the drainage pond into a multi-benefit site for recreation, flood mitigation, and wetland habitat. Marin City Climate Resilience and Health Justice would like to work with Marin City Community Services District to develop a new park next to the pond with the following provisions:
- Soil and sediment testing of drainage pond, and toxic sediment removal
- · Developing educational programs based around the drainage pond, water system, and habitat
- Assess and address public health impacts related to all of these next steps and project development
 ideas. Community members are specifically concerned about the potential mixture of sewage and fresh
 waters, tap water quality impacts, air quality impacts, pollution in floodwaters (that they sometimes
 have to wade through), and other public health impacts of flooding. Flooding contributes to mold and
 mildew in homes, which adds to asthma and respiratory diseases. Residents are also concerned about
 not being able to get to doctors when there's flooding, health impacts from pipes, and pollution from
 Highway 101.

Program development will focus on the following:

- Tap water and groundwater quality testing
- Environmental hazard identification and assessment
- A public health impact assessment
- A comprehensive resilience plan for Marin City
- Infrastructure needs assessment of broken, leaking, missing pipes
- Habitat restoration/flood protection project for drainage pond
- · Staff salaries, stipends, capacity building, and training
- Advocate for defensible barriers to decrease noise pollution and for other solutions to decrease asthma
 and respiratory diseases from breathing vehicle exhaust and unhealthy air emissions from Highway 101,
 as well as polluted stormwater runoff
- EPA assessment of potential Superfund site(s)
- Needs assessments with community members on air quality impacts and the development of policy recommendations to improve air quality



Location of an unassessed Superfund site in Marin City.

Photo courtesy of Marin City Climate Resilience and Health Justice

References

Burd-Sharps, S., & Lewis, K. (2012). *A Portrait of Marin*. American Human Development Project. http://www.measureofamerica.org/docs/APOM_Final-SinglePages_12.14.11.pdf

California Department of Education. (2019). *District Performance Overview - Sausalito Marin City*. https://www.caschooldashboard.org/reports/21654740000000/2019

California Environmental Protection Agency and Office of Environmental Health Hazard Assessment. (2021). *CalEnviroScreen 4.0.* [Map] https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

County of Marin. (2021, March 11). Marin City Flood Mitigation Project Moves Forward. [Press release] https://www.marincounty.org/main/county-press-releases/press-releases/2021/dpw-marincitypond-031121

Crispell, M. (2015). *Marin City: Historic African American Enclave at Risk*. University of California Berkeley Center for Community Innovation. http://iurd.berkeley.edu/uploads/Marin_City_Final.pdf

GRASS Development Team (2012). *Geographic Resources Analysis Support System (GRASS) Software, Version 6.4.1. Open Source Geospatial Foundation*. http://grass.osgeo.org.

Halstead, R. (2015, March 25). Marin Ranked Healthiest County in State for Sixth Year but Economic Inequality a Pitfall. *Marin Independent Journal*. https://www.marinij.com/2015/03/25/marin-ranked-healthiest-county-in-state-for-sixth-year-but-economic-inequality-a-pitfall/

Marin Flood Control Zone No. 3, Wood Rodgers, & Horizon Water and Environment. (2018, January). *Marin City Flood Drainage Study*. Marin County Flood Control and Water Conservation District. https://www.marinwatersheds.org/sites/default/files/2020-07/Combined_MarinCityDMP_Report%20%282%29.pdf

The People of the State of California v. Sausalito Marin City School District (CA Sup. Ct. 2019). https://www.smcsd.org/documents/About-Us/Desegregation/News/AG%20Final%20Judgement.pdf

United States Census Bureau. 2014-2018 American Community Survey-Marin City CDP. U.S. Census Bureau's American Community Survey Office.

Marin County Community Development Agency



Photo courtesy of Marin County Community Development Agency

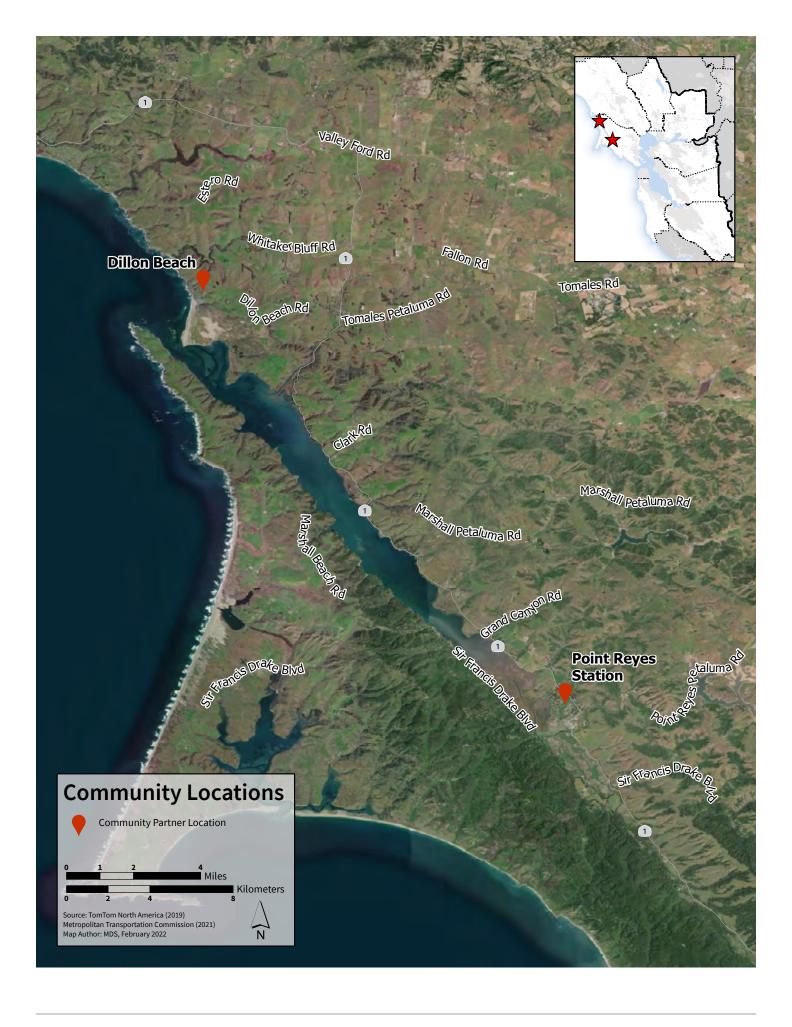


Marin County Community Development Agency is dedicated to promoting, protecting, and advancing healthy, safe, and equitable communities.

The Community Development Agency has a successful history of bringing people together and collaborating with local stakeholders throughout the unincorporated areas of Marin.

Their main programs include:

- Environmental Health Services
- Building and Safety
- Sustainability
- Planning
- Environmental Review
- Housing
- Federal Grants
- Mapping
- Code Enforcement



Project Description

Marin County Community Development Agency initiated separate community engagement projects in Dillon Beach Village and Point Reyes Station to discuss water-related assets, needs, concerns, and potential next steps. Topics included water supply, onsite wastewater treatment, sea level rise, water quality, flooding, and other related issues.

Background on Dillon Beach Village and Point Reyes Station

Demographics

Dillon Beach is a small unincorporated community in northern Marin County with approximately 150 residences characterized by small lots with older homes originally intended for seasonal use. The area is approximately 8.7 acres (0.01 square miles.) The old and aging infrastructure was not designed for current year-round use. Demographics for Dillon Beach Village are difficult to obtain since it is part of the larger Dillon Beach census block that includes Oceana Marin, which is characterized by newer homes on large bluff lots overlooking the ocean.

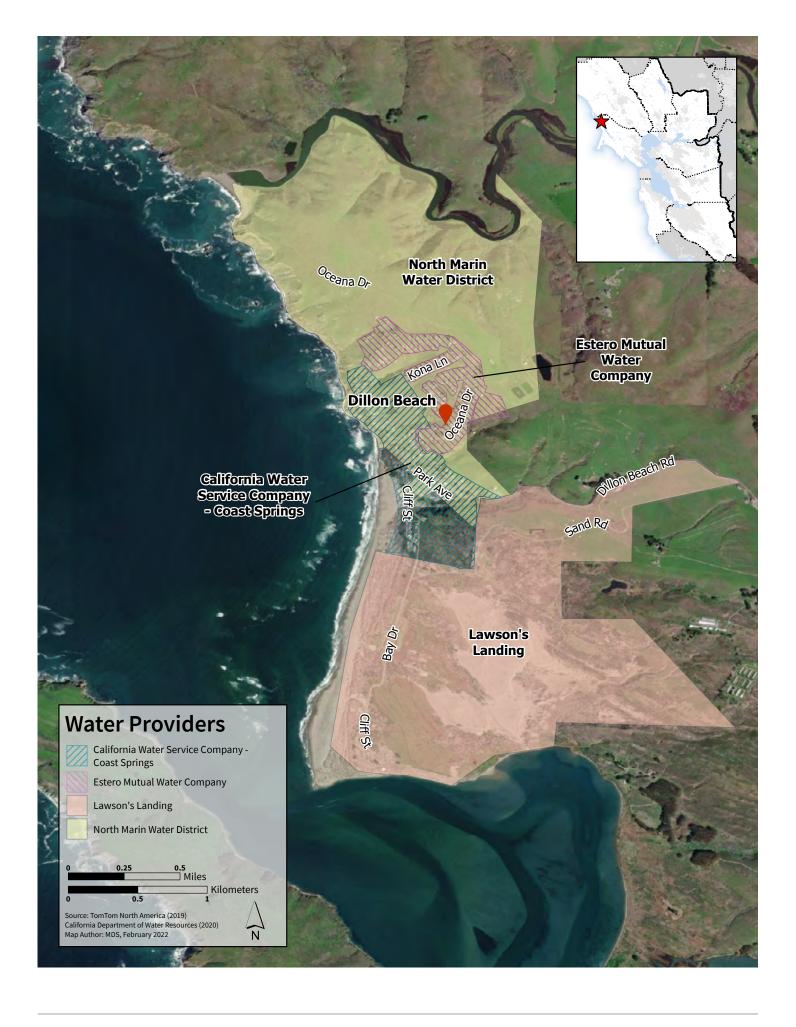
For Point Reyes Station, the planning area in their community plan was designated as the project study area. It entails 1,500 acres (2.3 square miles) and in 2017 had a population of approximately 443 residents with a median household income of \$31,250. There are approximately 360 developed parcels in Point Reyes Station. The median age is 61. Approximately 72% of the residents speak English and 20% speak Spanish (MCCDA, 2022).

History of Environmental Injustice and Inequity in Dillon Beach Village and Point Reyes Station

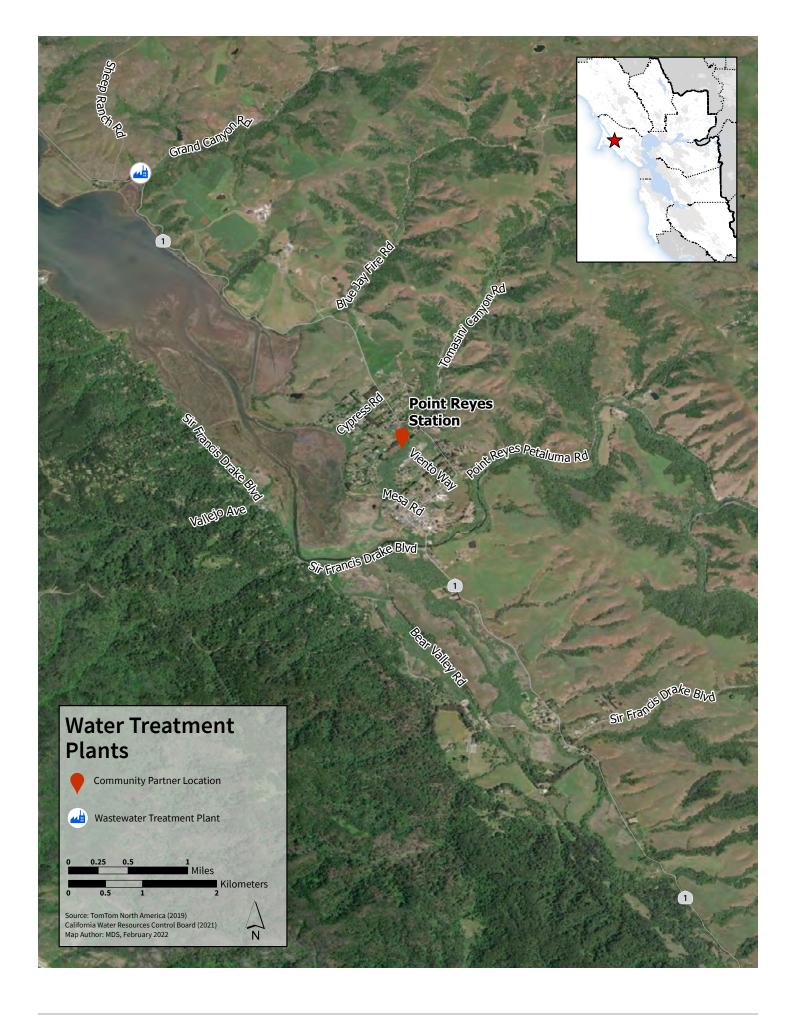
The Department of Water Resources (DWR) DAC mapping tool identified Point Reyes Station as a Severely Disadvantaged Community and the Dillon Beach area as a Disadvantaged Community. Both unincorporated areas are served by a private domestic water system. Households and businesses in each community are served by individual onsite wastewater treatment (septic) systems.

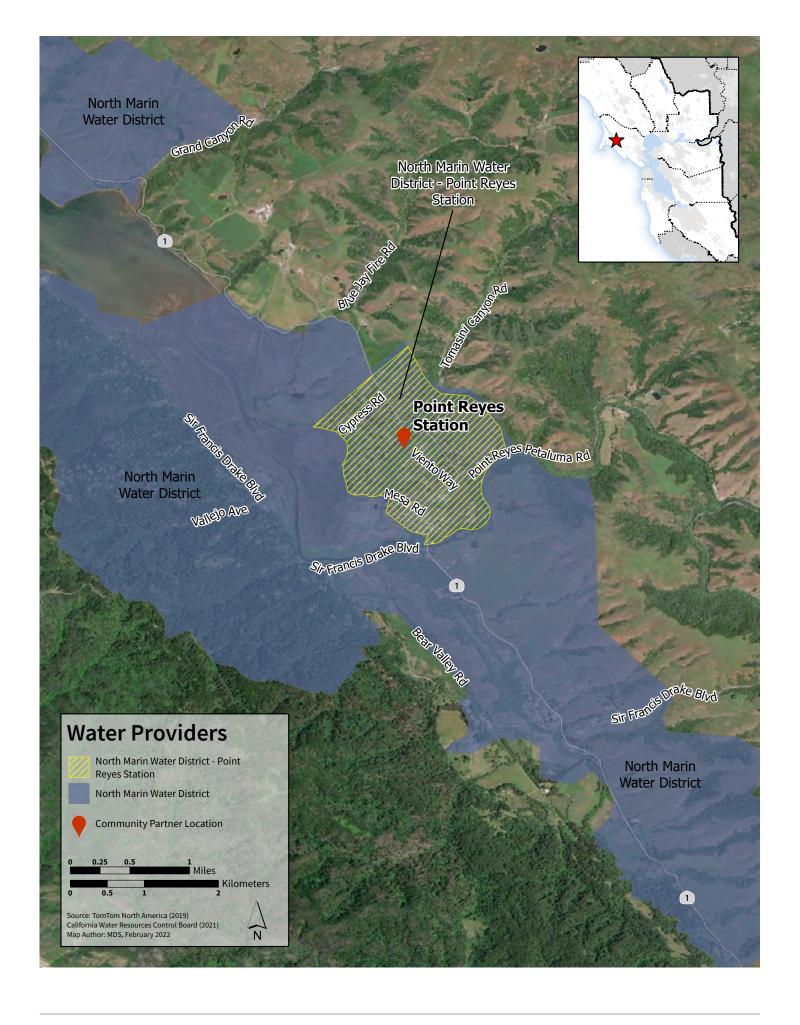
Dillon Beach

Dillon Beach is in the Coast Springs water system within the Redwood Valley District of the California Water Service, or Cal Water (California Water Service, 2016). Cal Water's 2019 Water Quality Report found that the Coast Springs system had moderately hard water (at 88 parts per million or ppm) and was not in compliance with the Manganese Secondary Maximum Contaminant Level (Cal Water, 2019). Some residents reported water that was brown, tasted like chlorine, and left rust stains (Mathew, 2018).



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Point Reyes Station

The county identified three water-related issues particular to the town:

- 1. Shortage of publicly accessible bathrooms
- 2. Current septic restrictions regarding building accessory and junior accessory dwelling units
- 3. Sea level rise, such as rising groundwater leading to increased salinity

Wastewater has been a controversial subject in Point Reyes Station for over 30 years. Despite new information, historical concerns remain that improving wastewater management in Point Reyes Station could open the door to more development and more tourism that would change the community character. While there are other ways to limit development, some strongly prefer to limit growth by limiting the ability of businesses to provide adequate restrooms onsite. Currently, some businesses cannot upgrade their septic systems because of site constraints and in turn redirect their patrons to the public restrooms, which creates a heavier demand on public facilities. Some in the community prefer to provide more public restrooms rather than risk businesses' opportunity to expand.

In one of the community meetings, a member of the Shoreline Unified School District School Board found it totally unacceptable that children in the area had missed eight days of school due largely to flooding. She further added that West Marin School has neither the water supply nor the septic capacity to handle a crowd in case of emergency in Point Reyes Station (Mathew, 2018).

North Marin Water District supplies the water for Point Reyes Station through three wells. The water is vulnerable to iron and manganese contamination, but the North Marin Water District treats and filters the water while adding chlorine as a disinfectant. Point Reyes Station's water is also vulnerable to saltwater intrusion (NMWD, 2019). Residents describe the water as undrinkable because of the high salt content. The water is cloudy, salty, and can cause nausea. The North Marin Water District plans to build a new well further away from salt intrusion to mitigate this issue (Bra, 2020).

Community-Identified Strengths and Assets

Over the past several years, as part of the Marin County Local Coastal Program, the Marin County Community Development Agency (CDA) conducted numerous workshops to hear community members, environmental groups, and the agricultural community identify their environmental concerns. Communities were supportive of the project, collaborated on developing needs, and prioritized the resources to solve complex environmental issues.

Dillon Beach

Dillon Beach Village is a small, strong, and tight-knit community. It is a historical vacation beach village where multiple generations of people live. The community wants to preserve the character of the village and is interested in designating it as a national historic district. While the community wants to limit development in the village, they are interested in improvements.

Point Reyes Station

The community character at the Pt. Reyes Station is rural and historic. There was strong community involvement in the needs assessment, i.e., 59% of the participants were present in the community involvement meetings (n= 105 responses). There was a huge emphasis on resilience to climate change.

Summary of Outreach and Education Efforts

The first step for each community was to gather background data on water and wastewater resources and conditions. This included separate searches into the County Geographic Information Systems (GIS) data for hydrology, wetlands, sensitive habitats, water services providers, and land use policies. Marin County Environmental Health Services (EHS) septic records were examined for the age and extent of permitted repairs. Sea level rise scenarios were compiled from Marin County's Sea-Level Adaptation Response Team; this included identifying vulnerable assets. Each Community Plan was consulted to see what historic problems were identified and remain unresolved. Draft water stories/needs assessments were prepared as a starting point to initiate conversations in each community.

Community outreach was initiated through the office of District Supervisor Dennis Rodoni, Marin County Board of Supervisors (BOS). The project was introduced during the supervisor's office hours for each community. The press was notified of the engagement process through the BOS approval of the grant application and contract. Lists of stakeholders were created that included residents, property owners, utilities, businesses, and interested parties.

In Dillon Beach Village, since there were no existing community groups, email addresses were first collected from Supervisor Rodoni's office and from responses to newspaper articles. Each meeting was also included in the weekly events calendar of the local West Marin newspaper, **The Point Reyes Light**. Meeting fliers were distributed door-to-door by a neighborhood volunteer and posted in the local post office. After the first meeting, informational materials including a draft water story, letters, and surveys were mailed to all property owners in Dillon Beach Village. Surveys were also handed out to residents who weren't property owners or didn't have internet access. With each meeting, the email distribution list grew.

In Point Reyes Station, Marin County Community Development Agency worked with several community groups to distribute meeting notices, agendas and surveys. These groups included the Point Reyes Station Village Association, West Marin School, Main Street Moms, Community Land Trust Association of West Marin, local members of the West Marin Chamber of Commerce, local affordable housing organizations, among others. After the first meeting, a website was set up for the project: https://tinyurl.com/PRSWaterStory. Letters were mailed to all property owners in Point Reyes Station providing the link to the draft water story and online survey. County staff was interviewed on the local radio station KWMR to encourage community participation. Again, with each meeting, the email distribution list grew.

A total of three meetings were held in each community. While the nature of the issues and responses varied in each community, the general format was similar.

At the first meeting, county staff introduced the project and key stakeholders such as water district staff and regulators of onsite wastewater systems. Staff presented an overview of each community's drinking water system, how wastewater is treated, problems identified in each community plan, local results of recreational water quality monitoring, and local mapping of sea level rise scenarios. Next, attendees broke into small groups to discuss the following:

- 1. What does the community do well?
- 2. What are your water-related concerns or issues (e.g., water supply, drinking water quality, condition of septic systems, sewage contamination, flooding, water quality of beach and local creek, sea level rise)?
- 3. Share stories about these concerns.

After 30 minutes of small group discussions, each group presented their comments, which were recorded on large post-it pads. After all groups made presentations, Marin County Community Development Agency asked everyone to begin prioritizing issues. Participants were given three differently colored dots to mark their first, second, and third priorities.

Based on the responses from the first meeting, a survey and draft water story were prepared for each community. A group of three to five volunteers from the first meeting provided additional input and review of the survey.

In Dillon Beach Village, the draft water story and survey were mailed to all property owners, emailed to the growing list of residents, and hand delivered by volunteers to folks who were renters.



Downtown Point Reyes Station is a popular summer destination for tourists.

Photo courtesy of Jennifer Bourn of Inspired Imperfections

In Point Reyes Station, a website was created for residents to review the draft water story and complete the survey online. A letter was sent to 402 property owners explaining the project and providing the weblink. Contact information was provided for anyone who wanted a hard copy of the water story and survey. Hard copies of the survey were also available in the Point Reyes Station library in both English and Spanish, and computers were available for anyone to fill out the survey.

At the second meeting in each community, the draft water story and preliminary survey results were presented. Representatives from utilities and government agencies were at the meetings to answer questions and concerns raised at the first meeting. For instance, in both communities, Marin County Community Development Agency had fire department representatives available to answer concerns about adequate water to fight fires. Representatives from the water districts answered questions about the quality of water and adequacy of the supply. In Point Reyes Station, a County park ranger talked about the community's heightened concerns about the lack of public restrooms for visitors. In both communities, these meetings were particularly constructive for addressing many of the community concerns and highlighting challenges and problems that need to be addressed further.

At the third meeting in each community, the final survey results were presented. Both communities discussed alternative ways to address identified issues and what next steps they want to take, if any. In Dillon Beach Village, since this was the first set of community meetings held for just the Village, they also discussed setting up a more formal neighborhood group to provide an ongoing forum for community conversation.

Needs Assessment Findings

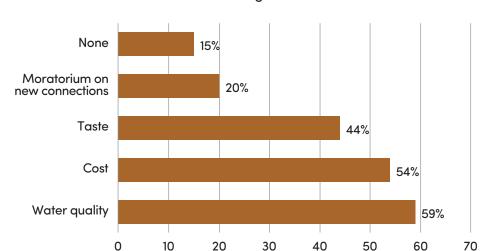
A. Dillon Beach

Quick Stats

- 1. Community members contacted: Marin County Community Development Agency estimates they reached over 200 people. That includes 160 letters and surveys mailed to property owners on December 13, 2018, 80 email addresses from meetings and survey responses (which may have duplicated mailing addresses), and fliers delivered to residents without email addresses.
- 2. Completed surveys: 62; approximately 42% of 149 developed parcels.
- 3. Community meetings:
 - November 13, 2018 44 attendees
 - January 29, 2019 38 attendees
 - April 30, 2019 approximately 30 attendees

Issues Identified

Issues identified during brainstorming at the first workshop were consolidated into the following categories and topics for the survey. Final survey results are presented below as percentage of respondents:



Dillon Beach: Drinking Water Concerns



1. Drinking Water concerns:

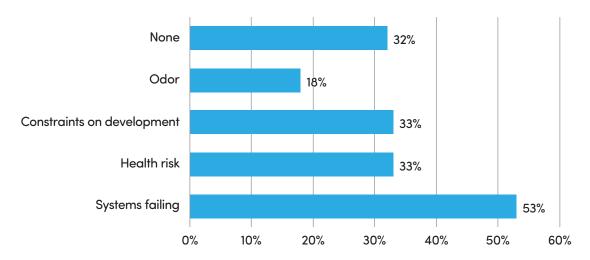
- Water quality (59%)
- Cost (54%)
- Taste (44%)
- Moratorium on new connections (20%)
- None (15%)



2. Concern about surface runoff contaminated with wastewater:

- Yes (7%)
- Unsure (46%)
- No (48%)

Dillon Beach: Conern About Onsite Wastewater Systems





3. Concern about onsite wastewater systems throughout Dillon Beach Village:

- Systems failing (53%)
- Health risk (33%)
- Constraints on development (33%)
- Odor (18%)
- None (32%)



4. Sea level rise concerns:

- Cliff erosion (58%)
- Vulnerability of utilities along Cliff Street (29%)
- Drinking water wells subject to flooding (27%)
- Storm surge flooding (17%)
- None (34%)

These issues were further discussed throughout the second and third meetings. Water utility representatives answered questions about cost, water quality, moratorium, repairs, etc. Since there had previously never been a forum for residents to speak directly with their water company representative from CalWater, there was some initial sense of mistrust. Once questions were answered, some concerns were eased. This is reflected in responses prioritizing concerns.

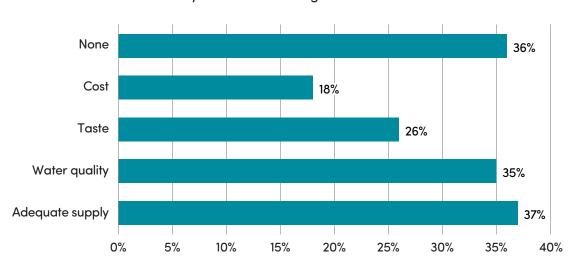
B. Point Reyes Station

Quick Stats

- 1. Community members contacted: Marin County Community Development Agency estimates that they reached nearly 500 people: That includes 402 letters mailed to property owners on April 18, 2019, 80 email addresses from meetings and survey responses (which may have duplicated mailing addresses), as well as fliers delivered to businesses, residents, and library.
- 2. Completed surveys: 105; approximately 26% of 404 developed parcels.
- 3. Community meetings:
 - March 25, 2019 30 attendees
 - June 5, 2019 18 attendees
 - October 3, 2019 27 attendees

Issues Identified

Issues identified during brainstorming at the first workshop were consolidated into the following categories and topics for the survey. Final survey results are presented below as percentage of respondents:



Pt Reyes Station: Drinking Water Concerns



1. Drinking water concerns:

- Adequate supply (37%)
- Water quality (35%)
- Taste (26%)
- Cost (18%)
- None (36%)

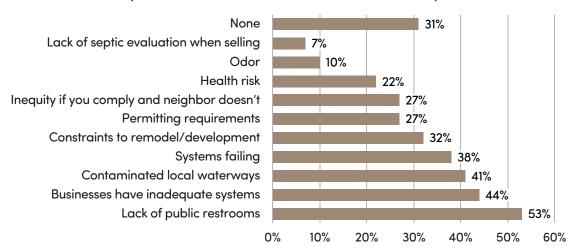
2. Concern about water quality in local waterways:

- Need to protect fish and wildlife (40%)
- Pathogens and nutrients in Tomales Bay (32%)
- Pathogens and nutrients in Lagunitas Creek (14%)
- Pathogens and nutrients in Lagunitas Creek and Tomales Bay (14%)
- None (30%)

3. Concern about onsite wastewater systems throughout the community:

- Lack of public restrooms (53%)
- Businesses have inadequate systems (44%)
- Contaminated local waterways (41%)
- Systems failing (38%)
- Constraints to remodel/development (32%)
- Permitting requirements (27%)
- Inequity if you comply and neighbor doesn't (27%)
- Health risk (22%)
- Odor (10%)
- Lack of septic evaluation when selling (7%)
- None (31%)

Pt Reyes Station: Concern About Onsite Wastewater Systems





4. Concern about flooding:

- Roadway flooding outside Point Reyes Station interfering with access in/out of town (64%)
- Roadway flooding within Point Reyes Station (56%)
- Flooding homes along creeks (40%)
- None (16%)



5. Sea level rise concerns:

- Roadway flooding (64%)
- Wells subject to saltwater intrusion (48%)
- More failures septic systems (42%)
- Flooding homes (36%)
- None (11%)

These issues were further discussed at the second and third meetings. The General Manager of North Marin Water District answered questions about cost, water quality, adequacy of supply, the amount of water available to fight fires, emergency operations, and saltwater intrusion. The local fire captain answered questions and underscored their collaboration with the water district. Representatives of Marin County Parks discussed efforts to upgrade existing public restrooms in Point Reyes Station. The County Department of Public Works was contacted about culvert maintenance during the wet season. Roadway flooding issues are primarily on State Route 1 and will be pursued directly through ongoing discussions with Caltrans.

A. Dillon Beach

Some of the community's concerns about water lend themselves to direct action with the county, water district, and other agencies. Others require further in-depth study. The survey asked, "If you had a fixed budget to address Village needs related to water, how would you want to spend it?"

Participants were asked to rate the importance of their support for the following communityidentified next steps:

Study the feasibility of creating a not-for-profit water district (45% rated this as very important to essential)

- 1. Essential (12%)
 - Very important (33%)
 - Somewhat important (30%)
 - Not important (26%)
- 2. Conduct a feasibility study of alternatives for a community wastewater system (53% rated this as very important to essential)
 - Essential (23%)
 - Very important (30%)
 - Somewhat important (21%)
 - Not important (25%)
- 3. Conduct more water quality testing (Marin County currently monitors Dillon Beach weekly from April 1 through Oct 31)
 - a. Winter beach monitoring (37% rated this as very important to essential)
 - Essential (11%)
 - Very important (26%)
 - Somewhat important (50%)
 - Not important (13%)
 - a. Winter surface runoff (35% rated this as very important to essential)
 - Essential (11%)
 - Very important (24%)
 - Somewhat important (40%)
 - Not important (26%)
 - a. Sophisticated water analysis to identify sources of contamination (microbial source tracking) (37% rated this as very important to essential)
 - Essential (14%)
 - Very important (23%)
 - Somewhat important (40%)
 - Not important (23%)

4. Conduct a study of the Village's drainage system (28% rated this as very important to essential)

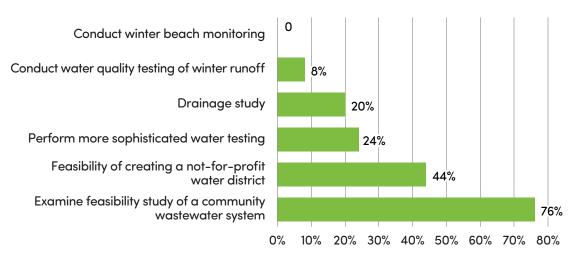
- Essential (7%)
- Very important (21%)
- Somewhat important (43%)
- Not important (29%)

Top Priority for Next Steps

Survey respondents were asked to then identify their top one or two priority projects:

- 1. Examine feasibility study of a community wastewater system (76%)
- 2. Feasibility of creating a not-for-profit water district (44%)
- 3. Perform more sophisticated water testing (24%)
- 4. Drainage study (20%)
- 5. Conduct water quality testing of winter runoff (8%)
- 6. Conduct winter beach monitoring (0%)





These survey results were discussed at the third meeting. It was recognized that while the community explored buying the current water system in 1996 when it was for sale, the system is currently not for sale. Therefore, that project alternative was not viable at this time. By the third meeting, the community commented that water rates came down in recent years and discussed that it would be better served building on improved communication with CalWater.



Dillon Beach: Outcome of Last Meeting

- 1. A discussion was led about what a feasibility study could entail. One element of a feasibility study would further clarify the extent of septic system failures and resulting water contamination. Additional water sampling would help identify the problem. This would include winter sampling of surface runoff in the neighborhood to see if there is surfacing effluent from onsite septic systems. This could entail microbial source tracking analysis to identify sources of contamination of surface water, the local creek, and beach. After a lively discussion, attendees initiated a vote and with a unanimous show of hands supported conducting a feasibility study of alternatives for a community wastewater system. A signup sheet was circulated and an initial committee of 12 residents was formed to help develop a grant request for this project.
- 2. Capacity building: At the last meeting, the community discussed forming a new group to continue conversations about all topics of concerns, such as parking, traffic, fire services, drainage, drinking water, and new development at the nearby Dillon Beach Resort. A signup sheet was circulated for people who wanted to be part of this new group. The office of Supervisor Rodoni helped facilitate the formation of this group. The Dillon Beach Neighborhood Group was formed last summer and has met several times. While the group decided among themselves to include the adjacent community of Oceana Marin, Village residents now feel they have an important forum to express their concerns. This new group is one of the ongoing successes of this community engagement process.
- 3. Additional local action: As a result of these meetings, a winter beach monitoring program at Dillon Beach is being initiated by the Marin Chapter of the Surfrider Foundation. This organization has a local training program in the county where they work with local high schools to collect water samples and teach the students to run laboratory bacteriological analysis. The Surfriders are initiating a winter water sampling program for Dillon Beach that will be conducted by students at nearby Tomales High School.

Dillon Beach: Follow-up on Needs Assessment Findings

Since the last meeting in Dillon Beach Village, Marin County Environmental Health has moved forward with a Wastewater Feasibility Study.

The study effort began with comprehensive research of historical soils and septic system records on file with Marin County Environmental Health covering about 70 percent of the study area. This provided a valuable baseline to assess conformance with modern standards as well as the viability for continued long-term use and management of onsite wastewater treatment systems. A cumulative water balance and wastewater-nitrate loading analysis was conducted to evaluate the current and potential impacts of the high density of septic effluent discharges on local groundwater resources and surface waters of Dillon Creek, important to the local water supply as well as biological resources and recreation. A homeowner questionnaire survey was conducted to solicit and evaluate community concerns about existing septic systems, both from a user standpoint and in regard to perceived impacts on local runoff, public health, water supplies and beach water quality. The survey also obtained input on preferences, support and need for alternative long-term wastewater management solutions that are being evaluated for the community, which include: (a) status quo; (b) upgrading and improved management of septic systems; (b) community sewerage and connection to the neighboring wastewater system serving Oceana Marin; and (d) a hybrid approach, providing sewer connection for those portions of the study area with the greatest need and supporting continued, improved management of onsite wastewater systems where viable and appropriate.

For more information about the study effort, including the final report, and other updates, visit: https://www.marincounty.org/depts/cd/divisions/environmental-health-services/dillon-beach-study

B. Point Reyes Station

Some of the community's concerns about water lend themselves to direct action with the county, water district, and other agencies. Others require further in-depth study. The survey asked, "If you had a fixed budget to address Village needs related to water, how would you want to spend it?"

Potential Projects

Participants were asked to rate the importance of their support for the following community suggested next steps:

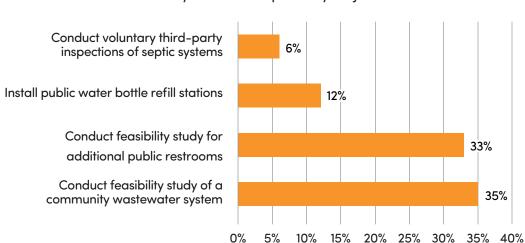
- 1. Conduct feasibility study for additional public restrooms (71% rated this as important to essential)
 - Essential 36%
 - Very important 20%
 - Important 15%
 - Somewhat important 17%
 - Not important 12%
- 2. Conduct feasibility study of alternative for a community wastewater system (47% rated this as important to essential)
 - Essential 19%
 - Very important 17%
 - Important 11%
 - Somewhat important 9%
 - Not important 44%

- 3. Install public water bottle refill stations (41% rated this as important to essential)
 - Essential 10%
 - Very important 11%
 - Important 20%
 - Somewhat important 23%
 - Not important 36%
- 4. Conduct voluntary third-party inspections of septic systems (31% rated this as important to essential)
 - Essential 4%
 - Very important 6%
 - Important 21%
 - Somewhat important 28%
 - Not important 40%

Top Priority for Next Steps

Survey respondents were asked to then asked to identify their top one or two priority projects:

- 1. Conduct feasibility study of a community wastewater system (35%)
- 2. Conduct feasibility study for additional public restrooms (33%)
- 3. Install public water bottle refill stations (12%)
- 4. Conduct voluntary third-party inspections of septic systems (6%)



Pt Reyes Station: Top Priority Projects

These survey results were discussed at the third meeting. While there was support for conducting feasibility studies for a community wastewater system and additional public restrooms, there was no consensus to move forward with a single project. Attendees felt there was not enough information on the scope of problems related to seasonally failing septic systems.



Point Reyes Station: Outcome of Last Meeting

- 4. Expanding public restrooms and community-wide septic system upgrades: Supervisor Dennis Rodoni and State Senator Mike McGuire have been working for about four years with West Marin communities on key topics from tourism to infrastructure. The current community engagement in Point Reyes Station provided valuable feedback to this effort. Two working groups have been formed in Point Reyes Station to follow-up on the DACTI Program community engagement process to discuss 1) expanding public restrooms for visitors and 2) approaches for community-wide upgrades to septic systems.
- 5. Additional data collection: Further study is needed to better determine the extent of seasonal groundwater contamination from old and failing septic systems. Next steps could entail winter monitoring of groundwater levels throughout the historic downtown and along local creeks to clarify whether there is seasonal groundwater contamination.
- 6. Additional local action: In response to the community comments and survey responses, Marin County Parks is planning to install public water bottle refill stations at the public restroom in town. Other sites for additional refill stations are being considered by community groups.

References

Bra. (2020). Relief on the horizon for dramatically salty Point Reyes water. *Point Reyes Light*. https://www.ptreyeslight.com/article/relief-horizon-dramatically-salty-point-reyes-water

California Water Service (Cal Water). (2019). 2019 Water Quality Report: Redwood Valley District - Coast Springs System. https://www.calwater.com/docs/ccr/2019/rv-cs-2019.pdf

California Water Service (Cal Water). (2016). 2015 Urban Water Management Plan: Redwood Valley District. https://www.calwater.com/docs/uwmp2015/rv/2015 Urban Water Management Plan Final (RDV).pdf

Mathew, Teresa. (2018). County helps Dillon Beach describe its water story. *Point Reyes Light*. https://www.ptreyeslight.com/article/county-helps-dillon-beach-describe-its-water-story

North Marin Water District (2019). West Marin Water https://nmwd.com/your-water/west-marin-water/

MCCDA, 2020. Information provided by MCCDA staff from Marin County data.

Mujeres Empresarias Tomando Acción (META)



Photo courtesy of Mujeres Empresarias Tomando Acción

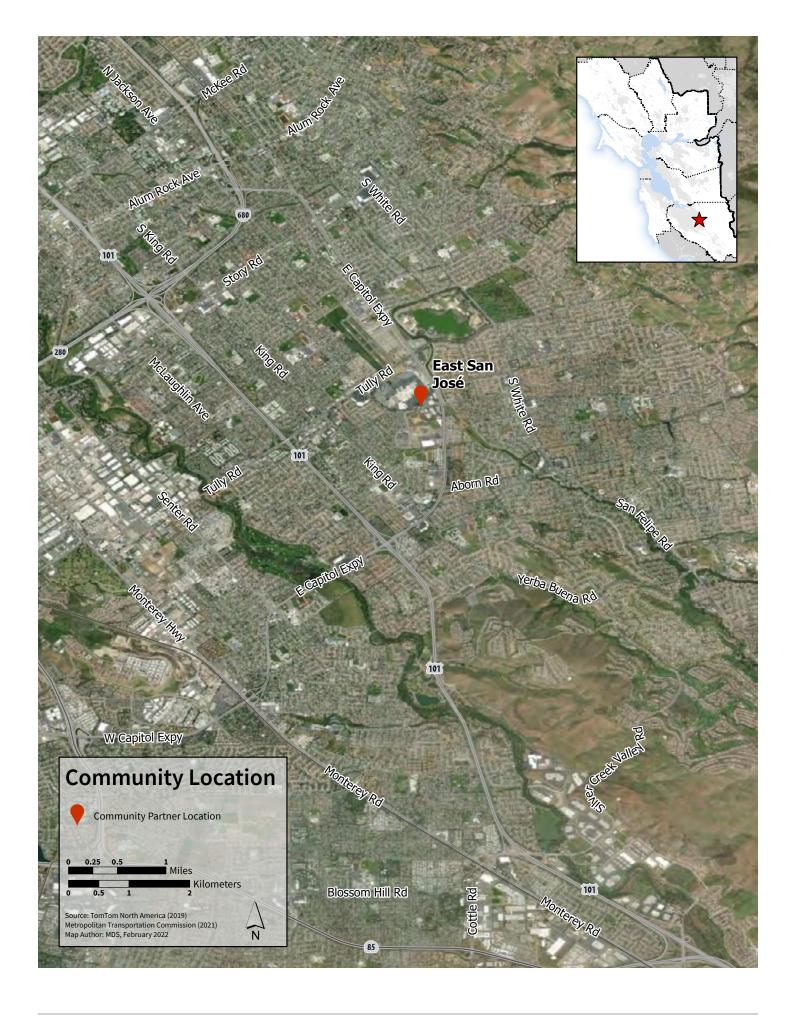


Mujeres Empresarias Tomando Acción (META) provides outreach services to inform and mobilize the community, being a connective bridge to make changes and prosper.

Mujeres Empresarias Tomando Acción (META) is a woman-owned business comprised of community workers who provide quality services, developing the leadership of each client through workshops and children's activities.

META provides outreach services to inform and mobilize the community, being a connecting bridge to make changes and prosper. They conduct their business with respect, honesty and with a focus on improving the quality of life for communities and their families.

META has a vision that advances economic power through leadership development and is a symbol of strength and prosperity. META also motivates women in their community to pioneer their own businesses and to be able to raise awareness among more people to support women entrepreneurs like them to make their dreams come true and activate the local economy and the entire community.



Project Description

In 2021, META conducted a water-related community needs assessment in the east San Jose area as defined by the DWR DAC Mapper Tool. META conducted outreach for the needs assessment through a social media campaign, surveys, and two focus groups. META aimed to include traditionally marginalized communities that are typically underrepresented such as the Latinx and Vietnamese communities. META worked with partner organizations to develop their outreach strategy to ensure strong representation of community groups most prominent in East San Jose.

Background on East San Jose

Demographics

East San Jose is located in the city of San Jose, California, and consists of the Alum Rock and Evergreen districts.

The District of Alum Rock has a population of 12,042, of which 67% identifies as Hispanic or Latino, 19% identifies as Asian, 16.7% as White, 3.4% American Indian, 1.4% Black, 0.3% Native Hawaiian or Pacific Islander. 15.7% identify as two or more races. 43.3% identify as some other race. 35.4% of the population of Alum rock identified as foreign-born in the census. 43.4% of whom identified as not a U.S. citizen. 11.3% of the population is below the poverty line.

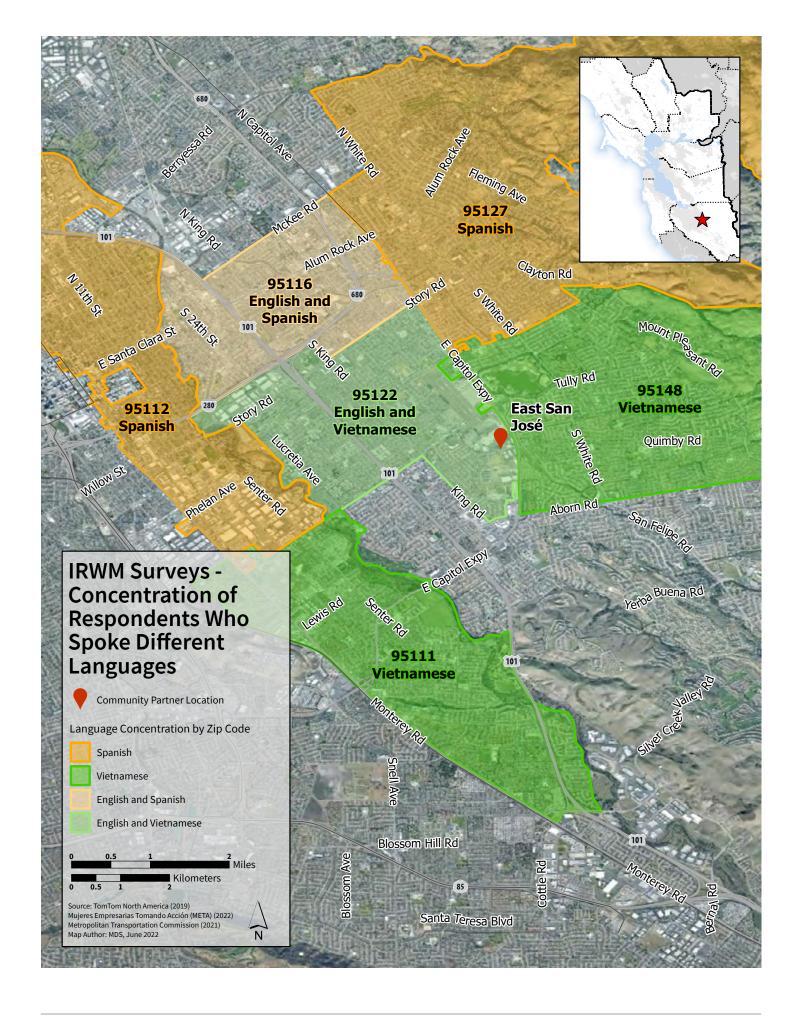
Unlike Alum Rock, the District of Evergreen does not have discrete census data available. META describes the community of East San Jose as largely Latinx and Vietnamese, the majority of whom are working-class families and students.

History of Environmental Injustice and Inequity in East San Jose

Similar to many other marginalized communities, the residents of East San Jose are disproportionately impacted by environmental justice issues. Many community members have experienced poor water quality and frequent flooding during the rainy season. Most recently, the community of East San Jose worked to shut down Reid-Hillview Airport, a small aviation airport whose activity has been linked to high levels of lead in the blood of children living nearby (KPIX5 CBS SF Bay Area, 2021; Ramirez, 2021).

Community-Identified Strengths and Assets

Local nonprofits such as the Si Se Puede Collective and Asian Americans for Community Involvement have helped to inform community members about environmental justice issues and have helped mobilize residents to take action in addressing them. The communities residing in East San Jose have powerful local leaders working side-by-side with the community to address social inequities. The cultural experiences and established cultural hubs of East San Jose such as the Mexican Heritage Plaza serve as an asset in facilitating communication and outreach with external partners working in East San Jose. This was recently demonstrated with the powerful mobilization of East San Jose leaders in mitigating the impact of COVID-19 on the local community through food drives, COVID testing, and vaccinations.



Community Needs Assessment Process

Summary of Outreach and Engagement Efforts

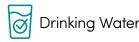
Survey

Needs assessment surveys were conducted from April to May 2021. The survey was provided in English, Spanish, and Vietnamese. A total of 257 surveys were conducted (84 in English, 139 in Spanish and 34 in Vietnamese). The survey was shared through weekly social media outreach, door-to-door outreach, and outreach at local community events. META also conducted one-on-one phone calls to establish community connections prior to sharing the survey. The survey collected demographic data and asked questions related to water education needs, prioritization of water issues, and water usage.

Focus Groups

During May 2021, META conducted two focus groups. Both groups were conducted in Spanish with a total of 21 participants. The questions were structured to provide open dialogue on water quality, prioritization of water issues, and solutions to water issues.

Needs Assessment Findings









The main issues identified through the needs assessment were problems with drinking water quality and infrastructure. Participants also mentioned trash, flooding, and industrial contamination as issues.

META aimed to talk with people who represent the major communities within East San Jose to elevate the perspective of the East San Jose community, which is largely Vietnamese and Latinx. The survey results are broken down into the three main languages in which the data was collected; Vietnamese, English, and Spanish. The results showed differences between the responses in these languages for specific questions. Most of the English survey respondents expressed that their ethnic or racial group is Latinx, indicating that the survey respondents as a whole are primarily Latinx.

Survey

Vietnamese

The Vietnamese survey respondents were primarily concentrated in the 95122, 95111, and 95148 zip codes of East San Jose. The majority of respondents (73.5%) indicated that they have lived in East San Jose for five to ten years. However, most respondents share that they do not work in East San Jose. Additionally, most of the respondents (61.3%) reported that they do not receive a water bill, which might indicate that they are renters. Around 50% of respondents reported that they use water for cooking. A larger percentage (67.7%) indicated that they buy water used primarily for drinking. Most (62.5%) consider the tap water to be "good." However, the main concern reported by respondents was unsafe drinking water followed by industrial contamination and cost of water. The top three requests for additional information about water were safety of water, cost of water, and disaster preparedness in relation to water. Respondents indicated that they would prefer to learn more about water issues through video.

English

The English-speaking respondents were primarily concentrated in the 95122 and 95116 zip codes of East San Jose. Many respondents identified as Hispanic/Latino and indicated that their primary languages spoken at home were English and Spanish. The majority of respondents (75.6%) shared that they have lived in East San Jose for five to ten years. However, 60.2% do not work in East San Jose. In comparison to the Vietnamese survey respondents, 54.8% shared that they do receive a water bill. This might indicate that a slightly larger percentage of respondents are homeowners. Most respondents shared that they use water for bathing. Additionally, 60.2% expressed that they buy their water, mostly for drinking. Over 50% of respondents consider the quality of water to be "fair." The top three issues for respondents in this group were cost of water, safety of drinking water, and infrastructure/pipes. The top three issues respondents want to receive more information about are chemicals in the water, safety of the water, and cost of water. Respondents indicated that they would like to learn more about water issues through video and flyers.

Spanish

The majority of respondents in the Spanish survey group identified as Hispanic/Latino. All of the respondents indicated that their primary language is Spanish. Most respondents were located in the 95116 and 95112 areas of East San Jose. A large majority (80.1%) of respondents have lived in the East San Jose area for 11 years or more. However, about half of the respondents did not work in East San Jose. A majority of respondents (62%) do not receive a water bill, which might indicate that a majority of the respondents in this group are renters. Respondents also shared that they use the water primarily for cleaning and bathing. More than half (52.6%) of respondents buy water. Many use the purchased water to drink or cook. The majority (62.8%) of respondents expressed that the quality of water is "acceptable." The top three water issues identified by respondents were: safety of water, old infrastructure/pipes, and trash. Respondents expressed wanting to know more about water quality and contamination. Respondents indicated that they would like to learn more about water issues through video and flyers.

Focus Groups

The focus group participants were asked the following questions:

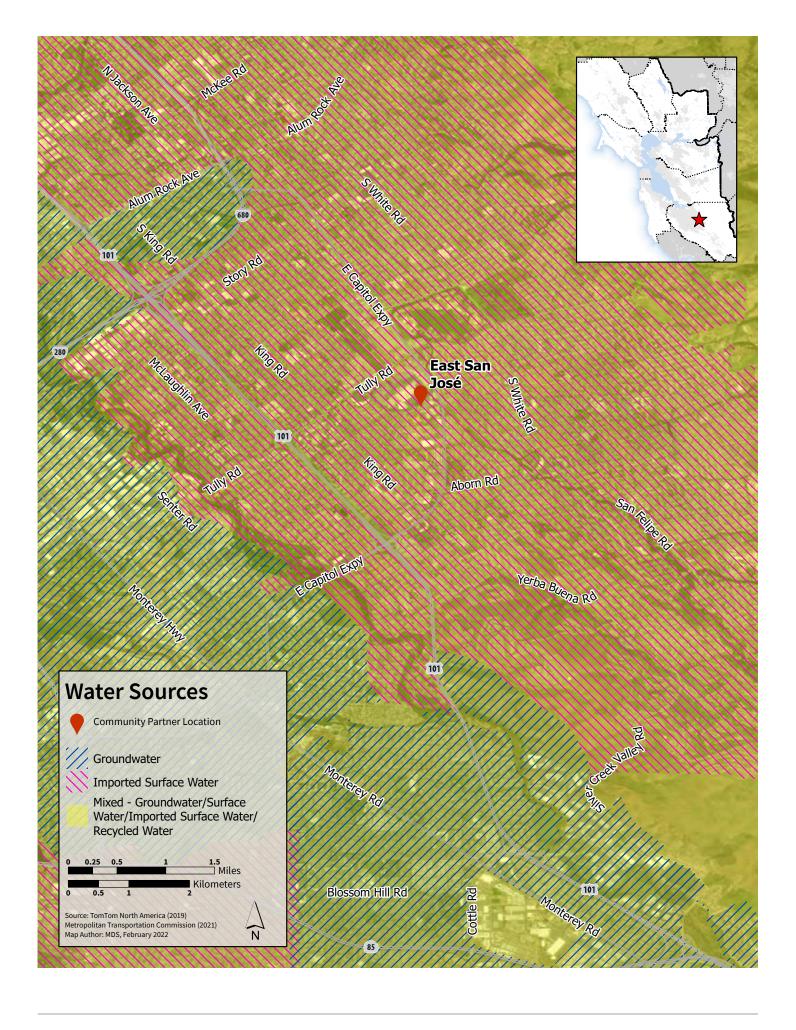
What do you think of the quality of water in East San Jose?

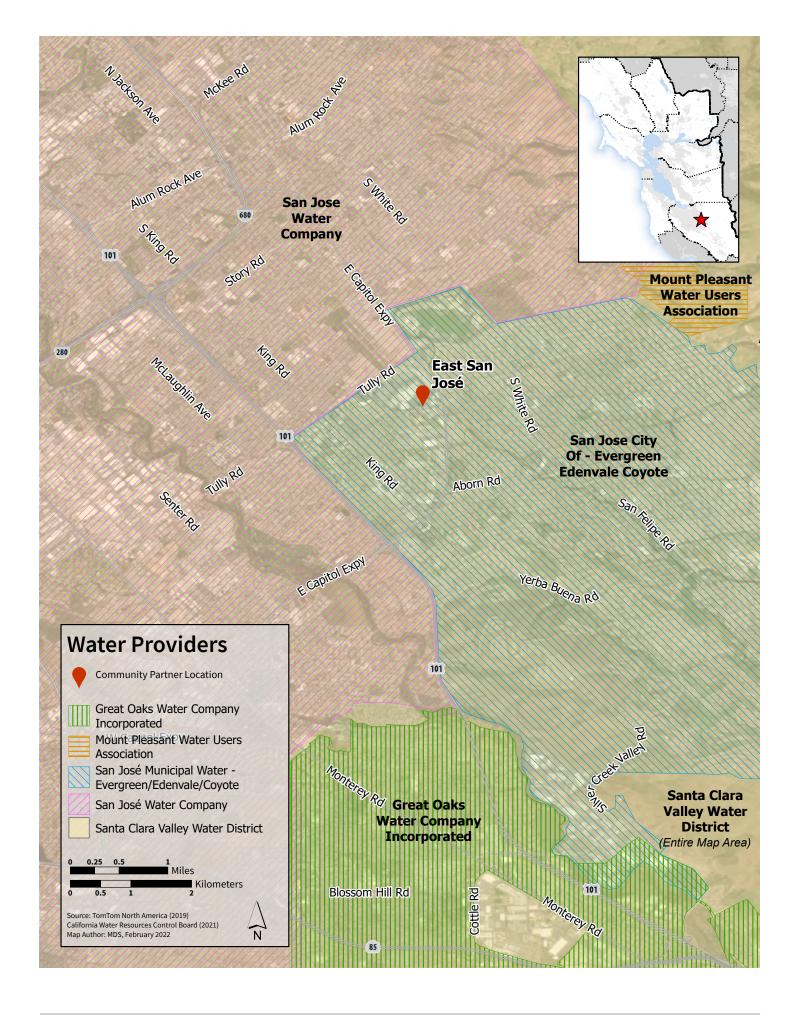
- Of common water problems, which should we prioritize?
- What do you think are the solutions to these problems?
- If we analyze tap water quality, what kind of information would you like to know?

Participants shared that they do not think the quality of their tap water is good. Many reported buying tap water specifically because they are not sure about or do not trust the safety of cooking with or drinking tap water. Some described the water that comes from their tap as brown/yellow in color with a smell and taste of bleach. One participant shared that they have experienced a stark difference between clear water in Mountain View and the water they drink at home in East San Jose. At least one participant had read that the tap water in East San Jose should not be used for cooking or drinking.

Participants prioritized the safety of drinking water as the primary water issue they are facing. Other priority issues include old infrastructure, cost of water, industrial contamination, and the intersection of trash and flooding. Participants specifically mentioned that trash accumulates and can clog storm drains and exacerbate flooding issues.

Participants want to be better informed about the quality of their water. Many participants recommended testing tap water to understand whether lead or other constituents that might be harmful to their health are present. Some participants recommended routine maintenance of the water pipes, and some suggested implementing programs to help reduce water waste. Additionally, participants requested information about the quality of their water pipes and would like to know what types of water filters can be used at home. One participants suggested a program that would provide low-come individuals with free water filters.





Recommendations and Next Steps

Overall, participants expressed being the most concerned about the safety of tap water, with many sharing that they buy bottled water for cooking and drinking. Participants also expressed high levels of interest in understanding what type of constituents are found in their water. Many participants do not receive a water bill, and therefore do not have access to outreach and information about water quality found on the water bill. The quality of pipes/infrastructure, industrial contamination, trash that intersects with flooding, and cost of water were also among the top concerns expressed by survey and focus group participants.

META would like to partner with local water utilities to support the evolution of their engagement with communities to meaningfully bring communities in and address water quality concerns. META recommends the following next steps to follow up on the needs assessment findings and provide additional information to the East San Jose community:

Outreach

Culturally sensitive outreach to inform community members of water issues in East San Jose should include:

- Outreach in Vietnamese, Spanish, and English as well as other languages that may be found in this area
- Informative videos and flyers

Outreach strategies should also consider 1) that a majority of people who live in East San Jose do not work there and therefore might not be able to participate in community meetings on particular days or times during their work day; 2) that the Vietnamese community members who responded to surveys through this process were elderly and had limited literacy skills, and outreach to this particular population might need to be adapted to ensure that the community can access information without additional barriers; and 3) that many participants have lived in East San Jose for over five years, which could help make outreach easier as these communities have established meeting areas and events.

Additionally, META recommends exploring the following outreach and information-sharing strategies to ensure that the East San Jose community can be informed and supported:

- 7. Developing programs to help pay water bills
- 8. Providing information on how people can save water and how that benefits the community
- 9. Creating programs where people can receive help in changing the water valve when it is not working, and changing broken pipes or other household items that can waste water
- 10. Conducting tap water quality testing to understand what is in the in tap water and ensure that drinking water is safe
- 11. Providing additional information about the water treatment process, including how it is filtered and how it reaches community members' homes
- 12. Keeping the sewers clean, especially in rainy weather, and cleaning the streets frequently so that there is not garbage buildup

References

KPIX5 CBS SF Bay Area. (2021, August 18). San Jose Reid-Hillview Airport To Close Because Of Lead Levels Following Vote By County Supervisors. *CBS Broadcasting Inc. and Bay City News Service*. https://sanfrancisco.cbslocal.com/2021/08/18/reid-hillview-airport-san-jose-lead-levels-closing/

Ramirez, L. (2021, August 3). Report: Children Living Near SJ's Reid-Hillview Airport Exposed To Dangerous Levels of Lead. *CBS Broadcasting Inc. and Bay City News Service*. https://sanfrancisco.cbslocal.com/2021/08/03/report-children-living-near-sjs-reid-hillview-airport-exposed-to-dangerous-levels-of-lead/

Multicultural Center of Marin

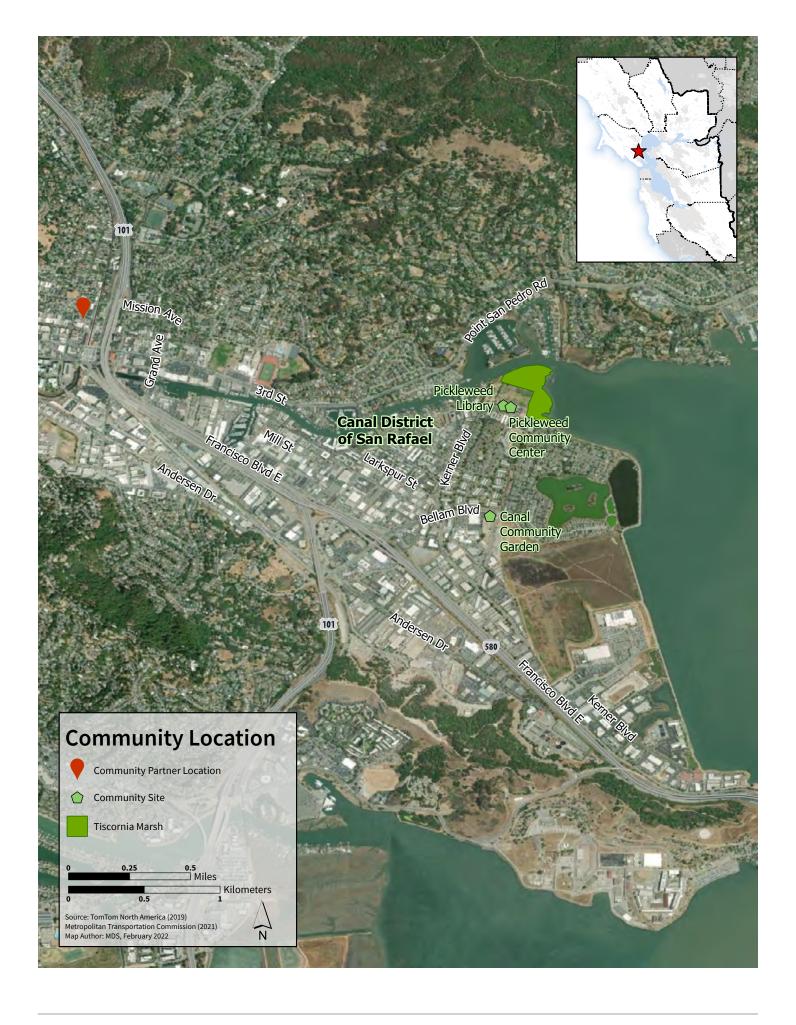


Photo courtesy of Multicultural Center of Marin



The Multicultural Center of Marin works with diverse immigrant and underserved communities MULTICULTURAL of Marin County in advancing their social, CENTER of MARIN cultural, and economic well-being through self-empowerment programs that encourage participation in the broader civic life of U.S. society.

Founded in 2002, the Multicultural Center of Marin serves more than 5,000 low-income individuals each year; over 90% served are Latinx. The Multicultural Center of Marin has three program areas: Youth and Family Empowerment; Community Resilience; and Arts, Culture and Media. The Multicultural Center of Marin has partnered with county and city agencies to conduct multiple community forums to provide a linguistically and culturally appropriate setting for community members to participate in county and city planning processes. They also started the Canal Community Resilience Council (CCRC) in 2019 to provide an ongoing forum for such conversations and allow the community to determine the priority topics to address. Topics such as Proposition 1, The Disadvantaged and Tribal Community Involvement Program (DACTI Program), Measure AA sea level rise adaptation projects, housing and tenants rights, and waste reduction have been addressed in this venue. In addition, The Multicultural Center of Marin has various methods of reaching the community with key information, such as two weekly radio shows, an extensive text list, social media, and a team of Block Captains who reach out within the Canal neighborhood.



Project Description

The Multicultural Center of Marin engaged community members and worked to understand water issues as they manifest in the Canal neighborhood of San Rafael by conducting needs assessment activities including a water survey, stakeholder engagement, and community forums regarding water issues. One goal of the needs assessment was to identify priority implementation projects. Projects appropriate for Proposition 1 implementation funds will be developed into proposals.

Background on San Rafael's Canal Neighborhood

Demographics

The combined population for the census tracts that cover the Canal area (1122.01 and 1122.02) in 2017 was 12,307 (American Community Survey, 2017).

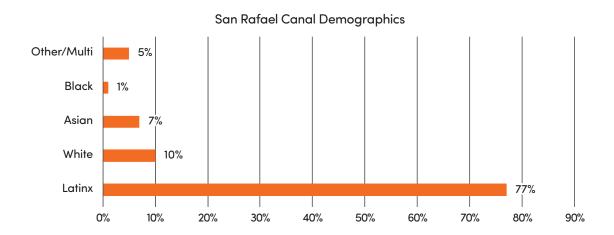
77.5% of residents in the Canal area identified as Latinx, 9.9% as white, 6.8% Asian, and 1% Black/ African American.

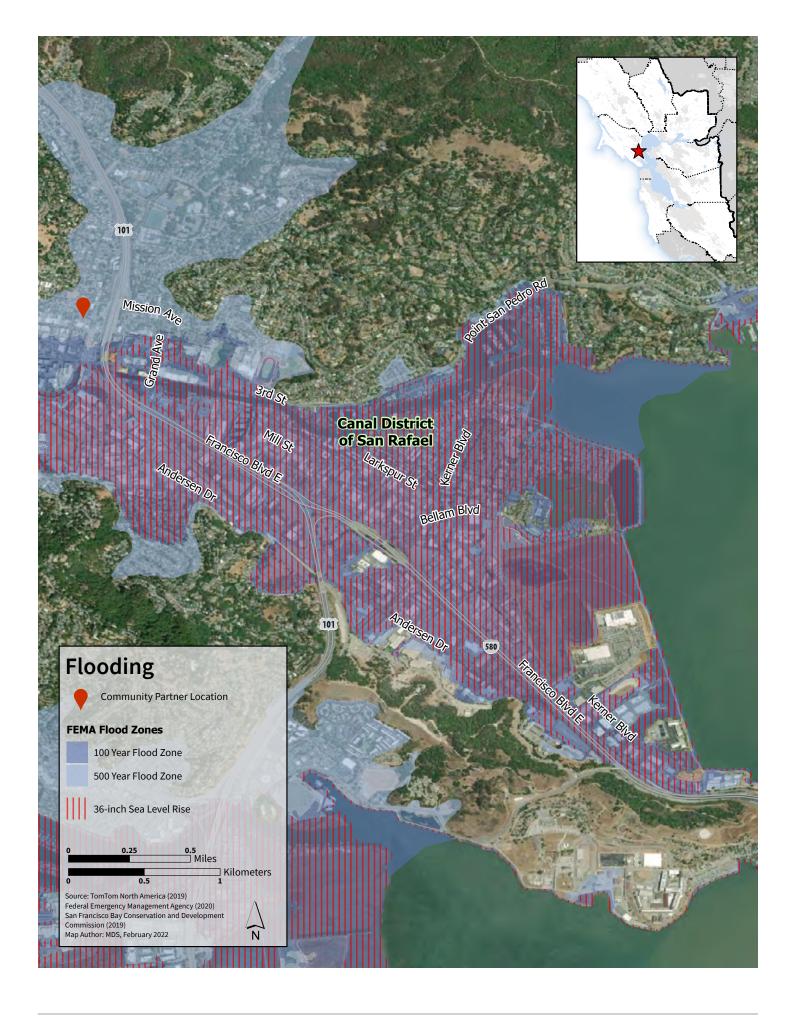
48% of residents in the Canal area of San Rafael were reported to be not U.S. citizens. Many residents in the Canal area are believed to be undocumented, and community advocates believe the population is undercounted.

37.2% of households in the Canal area are considered Limited English Proficient, meaning there are individuals who do not speak English as a first language and who have limited ability to read, speak, write, or understand English. 79.9% of households in the Canal area speak a language other than English. 66.4% are considered Spanish speaking only.

The poverty rate in the Canal area in 2017 was 31%, which was a 60.2% increase since 2010. The life expectancy in the Canal area is nine years shorter than the county overall average (Marin County Community Development Agency, 2020).

Residents of the Canal area live nine years fewer on average than who live in the Town of Ross, which is 15 minutes away by car (Bud-Sharpe & Lewis, 2012).





History of Environmental Injustice and Inequity in the Canal Neighborhood

The Canal neighborhood of San Rafael is one of the highest density areas of low-income residents in Marin County. Named for the canal that was dredged along San Rafael Creek, the area was originally developed in the 1950s and 60s as apartments for young couples and new college graduates. After the Vietnam War, many refugees from southeast Asian countries arrived in California and took service jobs in Marin, and many refugees from the civil wars in El Salvador and Guatemala also settled in the Canal area neighborhood. Over three decades, the Canal area's population changed to being almost 90% immigrants or children of immigrants (Marin County Community Development Agency, 2020). It is among the most segregated districts in the Bay Area, according to the U.C. Berkeley Othering and Belonging Institute (Neilson, 2021).

Historically, the Canal neighborhood of San Rafael has experienced significant discrimination, and residents have not been adequately involved in county or city planning. Existing social justice concerns include racial and immigration profiling, lack of food security, substandard housing, threat of displacement, and employment instability. Environmental justice concerns include inundation projected in the Canal area from sea level rise. Waterways flow through the community and there are limited routes in and out of the community.

The Canal neighborhood has a "very high degree of overcrowding" and over the past 10 years, "overcrowding has increased dramatically as rental prices have skyrocketed (Marin County Community Development Agency, 2020)." According to the 2017 American Community Survey, 46.9% of residents in the Canal live in overcrowded conditions. The Canal area is also the location of much of San Rafael's industry and one of Marin's four residential and commercial waste management facilities (Marin County Community Development Agency, 2020). This industry and other businesses could be a source of water contamination. More information is needed about the status of key infrastructure and community water concerns in the Canal neighborhood.

Community-Identified Strengths and Assets

Residents of the Canal community have strong networks due to a variety of factors, including family networks, pockets of residents originating from the same countries and even the same towns, having shared experiences as immigrants, many having a shared language, and living in close proximity with children attending mostly the same schools. This leads to a sense of shared concerns and interdependence. In addition, there are a few organizations that work alongside the community to foster community engagement and leadership.

Given that Canal residents are mostly low income, they statistically have a lower carbon footprint than their wealthier neighbors in Marin. For example, they are more likely to use alternative transportation, such as biking, walking, and public transportation. They are likely to adapt to carbon reduction measures more easily than their wealthier neighbors. The Multicultural Center of Marin is working to involve local residents in a wetlands restoration project at Tiscornia Marsh and has worked with disadvantaged youth to produce radio shows and a video about sea level rise and the Canal Neighborhood. Through the DACTI Program, The Multicultural Center of Marin championed a needs assessment process to understand community water concerns in the Canal area.

Needs Assessment Process

Summary of Outreach and Education Efforts

From February through August 2019, the Multicultural Center of Marin conducted over 180 short verbal surveys with Canal residents at 10 locations and events in the Canal area that drew from various areas in the in community, including:

- San Pedro Elementary School (6/7/19)
- Marin Warriors Boxing Club (3/14/19; 6/10/19)
- Conservation Corps North Bay (2/22/19)
- The Multicultural Center of Marin Food Distribution (3/23/19)
- Pickleweed Park Day of Child/Earth Day (4/20/19)
- Laurel Dell Elementary School Charla Café (5/28/19)
- Pickleweed Child Care & Flagship Bus (5/13/19)
- Canal Alliance Food Distribution (6/18/19)
- National Night Out (8/6/19)

The surveys included open-ended questions asking about residents' experiences with water. Some of the questions asked include:

- 1. How is the quality of the water you drink?
- 2. How is your access to water?
- 3. Do you have other issues around water, if so what?
- 4. What is your experience around flooding after storms?
- 5. The program coordinator developed a How-To Guide for Water Assessments to support bilingual staff in implementing the surveys. Most of the staff come from the community and conducted the surveys in trusted settings, such as food distribution sites, schools, and at community events.

Needs Assessment Findings

Numbers in parentheses indicate number of locations—out of 10—where an issue was raised:

- Low quality of drinking water: including smell, taste, and cloudy appearance (9)
- Buying drinking water, boiling water, or filtering water due to distrust of tap water quality (9)
- Flooding that interferes with activities (9)
- Trash in streets when it rains or floods (5)
- No access to hot water at times (5)
- Gutters clogged when raining (4)
- No problem reported (4)
- Low water pressure (3)
- Old pipes (2)
- Do not bring up issues due to fear of landlords (2)

Details of Top Priority Issues



#1: Water Quality: Distrust of the quality of water coming from the tap

- Water is unclear, having an unusual color and a chlorine or metallic smell
- A general feeling that faucet water is not safe, and could cause possible health effects
- Many homes rely on purchased bottled water (causing more environmental problems)



#2: Stormwater accumulation: When there is heavy rain there is flooding in the streets.

This creates limited access to:

- Markets
- · Community centers
- Schools
- Residents' homes

The only full-size grocery store (i.e., not 7-11 or little deli markets) in the Canal area is at the corner of Kerner Boulevard and Bellam Avenue, a major intersection in the neighborhood. Historically that area floods, making it hard for people to access the store, especially on foot, as many do.



Flooding in the Canal area.

Photo from https://www.acclimatewest.org/flooding-forecasts/



#3: Age of pipes: Water pipes are old, affecting the quality and quantity of water coming from the taps

- Low water pressure occurs for many, especially at certain times when many in a building are using water.
- At times residents experience a lack of hot water.



#4: Trash after rains: Trash was observed floating in the streets of the neighborhood during and after big rains, causing drains to clog and neighborhoods to be unsightly.

The results of the surveys were then discussed with the Canal Community Resilience Council (CCRC) to draw out more specific information and to prioritize the concerns. The CCRC was started by The Multicultural Center of Marin in 2019 to ensure community voices and perspectives are part of planning processes that affect residents of the Canal neighborhood. Residents and agency representatives attend to discuss a range of environmental issues, housing, and many other topics that concern the community. Residents are being trained in leadership and advocacy. At this point, county and city agencies request to bring topics to the meeting for community input.



Marin Municipal Water District representative Matt Sagues discussing the results of the water assessment with the Canal Community Resilience Council.

Photo courtesy of Multicultural Center of Marin

Next Steps

The Multicultural Center of Marin continues to advocate and strategically collaborate with the County of Marin, City of San Rafael, the Marin Municipal Water District (MMWD), and other agencies and governmental entities to ensure community knowledge and perspectives are an integral part of water management assessments, planning and decision-making. The Multicultural Center of Marin will continue collaborations from the planning, stage to pursue permanent remedies to protect vulnerable communities.

The Multicultural Center of Marin is working in collaboration with several partners, including MMWD, City of San Rafael, and County of Marin to develop project proposals for funding to address the top water-related needs identified through the needs assessment process, including:

- Improving infrastructure to reduce flooding and ensure water quality
- Water testing through the DACTI Program Tap Water Quality Testing Effort
- Educating the community about tap water quality compared to bottled water
- Working with waste management on garbage accumulation
- · Addressing housing, safety, and other related issues with community

Potential Proposition 1 Implementation (or other funding sources) Projects:

- Pipe replacement
- Pump station installation
- · Community water station
- · Faucet-mounted water filters
- Community education

Technical Assistance Needed

- Identify and engage entities to apply for implementation funds
- Develop ideas into potential Proposition 1 proposals
- Implementation and analysis of the DACTI Program Tap Water Quality Testing Effort

Tap water quality continues to be a central concern for the community. They report that water smells, looks, and tastes abnormal. The concerns are so widespread that people report staff at the local clinic telling them not to drink it. This is likely due to the fact that many staff there are members of the community and there has been limited effort to determine the actual status of the water. MMWD tests the water within their system and provides reports on the results, but these reports are not easily accessible to the community and do not take into account any changes the water might experience while running through the private pipe system. The DACTI Program Tap Water Quality Testing Effort will help provide accurate information that can be shared with the community. In addition, replacing some of the MMWD pipes will contribute to ensuring water quality since the outdated pipes are vulnerable to oil infiltration and breakage. Finally, given that water is likely to continue presenting as abnormal, even if not actually unhealthy, it will be important to educate residents as well as provide community water stations to reduce the use of bottled water, which adds to environmental issues as well as depleting limited household funds needed for food and rent.

References

American Community Survey. 2017 5-Year Estimates Data Profiles. <u>DP05: ACS DEMOGRAPHIC AND HOUSING... - Census Bureau Table</u>

Burd-Sharps, S., & Lewis, K. (2012). *A Portrait of Marin*. American Human Development Project of the Social Science Research Council. http://www.measureofamerica.org/docs/APOM_Final-SinglePages_12.14.11.pdf

Marin County Community Development Agency. January 2020. County of Marin Analysis of Impediments to Fair Housing. <u>Analysis of Impediments - County of Marin (marincounty.org)</u>

Neilson, S. This neighborhood in Marin is the most segregated in the Bay Area. San Francisco Chronicle. October 10, 2021. This neighborhood in Marin is the most segregated in the Bay Area (sfchronicle.com)

Nuestra Casa



Photo courtesy of Nuestra Casa



Nuestra Casa uplifts families in East Palo Alto and the mid-peninsula through community education, leadership development, and advocacy.

Nuestra Casa stands by their community's side to help them navigate institutions, build people power, and use their voice to shape a new, more equitable community. Their programs build leaders who transform their local community and are actively engaged in the local economy, school district, and civic life. Nuestra Casa envisions a vibrant mid-peninsula community united around shared values where every resident thrives and that will together build a community that leaves no one behind.

Nuestra Casa has a long track record of working with groups with a history of disproportionately less representation in local, county, and state policies and/or projects. These groups include but are not limited to: Spanish-speakers with limited English proficiency, recent immigrants, youth and elderly populations, unincorporated communities, and small independent organizations.



Project Description

Nuestra Casa conducted outreach related to Proposition 1, Integrated Regional Water Management Program, environmental justice, and water holistically in the East Palo Alto community. Their objective was to empower and support community members to define their own water-related issues, assets, and priorities through a community needs assessment process.

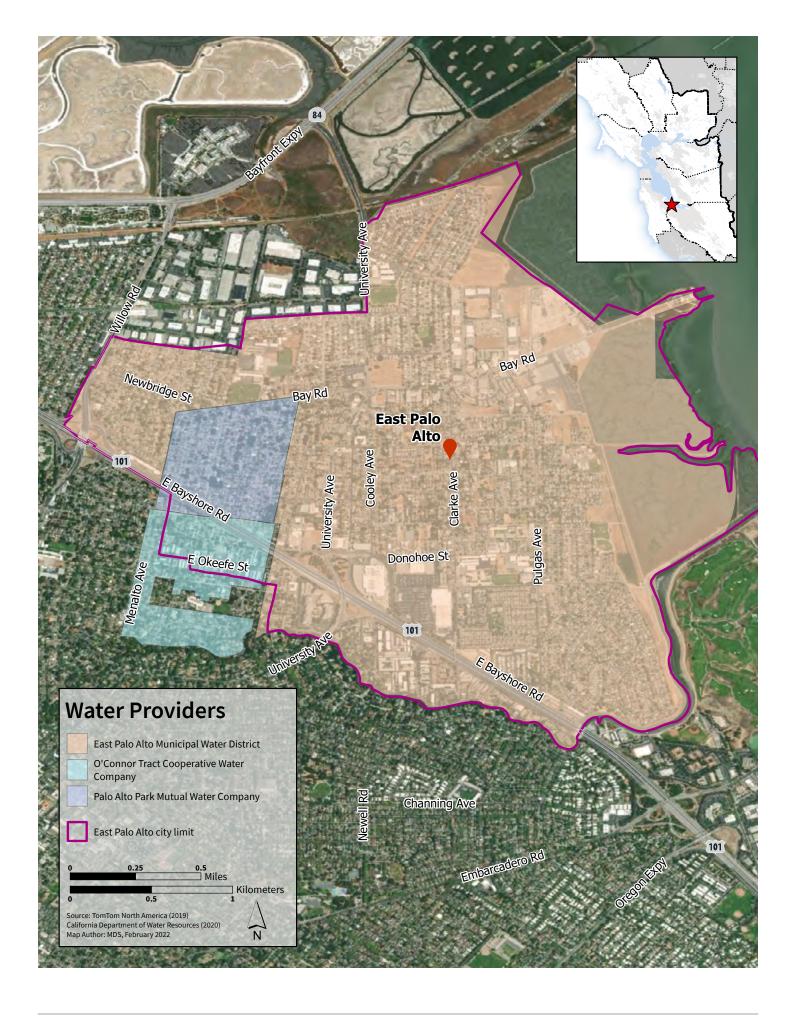
Background on East Palo Alto

Demographics

According to the 2019 American Community Survey Flve-Year Data Profiles, East Palo Alto's population is 29,593, with a median age of 30.7 years. 66.1% of the population identify as Hispanic or Latino, and 33.9% as not Hispanic or Latino. 38% identify as white, 14.2% as Black or African American, 2.8% as American Indian and Native Alaskan, 6.3% Asian, and 5.2% Native Hawaiian and other Pacific Islander. 38.7% identify as some other race (U.S. Census, 2019).

As of 2019, East Palo Alto had San Mateo County's highest unemployment rate, and double the poverty rate of the greater county. Only 20% of residents have a college degree, and only about two thirds have graduated from high school. The job-per-person ratio works out to be 0.2 (compared to 3.04 jobs-per-person in the nearby City of Palo Alto), and these jobs tend to be lesser paying than in other areas (Layton & Johnson, 2019).

Much of East Palo Alto falls in the 85-90th percentile of the California Environmental Protection Agency's (CalEPA) CalEnviroScreen mapping tool, which identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. CalEnviroScreen highlights the many challenges communities face in addition to and outside of income, the way communities are often designated as disadvantaged (CalEPA & OEHHA, 2017).



History of Environmental Injustice and Inequity in East Palo Alto

East Palo Alto was not incorporated until 1983, and many decisions made prior to incorporation have influenced its current resources and population. The 2019 "From Crisis to Solutions: A Case Study of East Palo Alto's Water Supply" (Layton & Johnson, 2019) report explores how many of these decisions were inextricably connected to race and discriminatory policies. In the six decades of its efforts to become incorporated, East Palo Alto lost many resources to state development projects and neighboring cities. Early land use decisions in San Mateo and neighboring counties directed toxic industrial uses to East Palo Alto, including the San Mateo County landfill, a regional hazardous waste recycling plant, auto dismantling facilities, and pesticide and herbicide producers. One site, the Romic hazardous waste facility, which operated for 43 years until it was closed in 2007 in response to community pressure, caused soil and groundwater contamination 80 feet below ground level (Layton & Johnson, 2019).

In the 1930s, the road that became U.S. Highway 101 was built through East Palo Alto, bisecting the existing community. Subsequent highway widening displaced many businesses that served residents, few of which reopened within the City of East Palo Alto. In addition, other parts of the city's industrial areas were annexed by neighboring cities, decreasing the population and property values. East Palo Alto has struggled against this history to build and maintain a tax base and a healthy balance between jobs and housing. While East Palo Alto has one of the highest population densities in Silicon Valley, many residents travel to work outside of East Palo Alto due to insufficient jobs in the city for the population and higher paying jobs elsewhere. This contributes to issues including traffic congestion and poor air quality. The rapidly transpiring climate emergency also has real implications for affordable housing in a region already experiencing a higher than average displacement rate, due to a rapidly growing technology sector attracting high-income-seekers from around the world (Layton & Johnson, 2019).

Water allocations made before the incorporation of East Palo Alto limited the City's capacity to support economic development. As the population grew to one of the densest in Silicon Valley, its water supply allocation from the San Francisco Regional Water System (SFRWS) changed little. For the fiscal year 2013-2014, East Palo Alto had the lowest gross per capita consumption of the SFRWS' wholesale customers but used far more of its water supply allocation than most other wholesale customers. Additionally, East Palo Alto does not have a secondary or emergency water source. Until recently when it secured 1.5 million additional gallons per day from Palo Alto and Mountain View, East Palo Alto was described as being in a water crisis; in other words, not having enough water supply to meet the growing population's needs (Layton & Johnson, 2019). For a more in-depth description of the history of East Palo Alto, see "From Crisis to Solutions: A Case Study of East Palo Alto's Water Supply" (Layton & Johnson, 2019).

Community-Identified Strengths and Assets

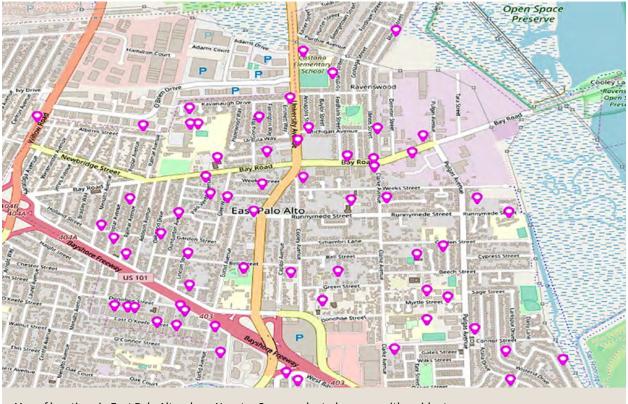
From the perspective of Nuestra Casa, one of the most noticeable strengths of their community in East Palo Alto is how the community comes together, not just in times of need. East Palo Alto is a community grounded in diversity and togetherness. Oftentimes, community members have a lot on their plate from dealing with issues related to housing affordability, food insecurity and mental health. Even with all these issues they face daily, community members continue to show up to meetings, forums, and workshops to have their voices be heard. Community members show up to these meetings to not only advocate for themselves but also for their families, for a better East Palo Alto. Community members go out of their way to educate themselves on the issues surrounding East Palo Alto and what actions they can take to help better their community. Nuestra Casa's community understands the importance of showing up to these spaces to make real change happen within East Palo Alto.

Summary of Outreach and Education Efforts

Nuestra Casa conducted over 715 surveys in English and Spanish with residents in East Palo Alto at locations including Chavez Middle School, Belle Street Park, the Woodland Apartments, Midtown, the Village, Ravenswood Family Health Center, and at churches to better understand the community's water-related issues and priorities for solutions to address them. The survey Nuestra Casa deployed included questions about residents' top priority water issues, overall top issues to understand how water issues compare, and an open-ended question asking how residents would spend one million dollars to improve water issues in their community.

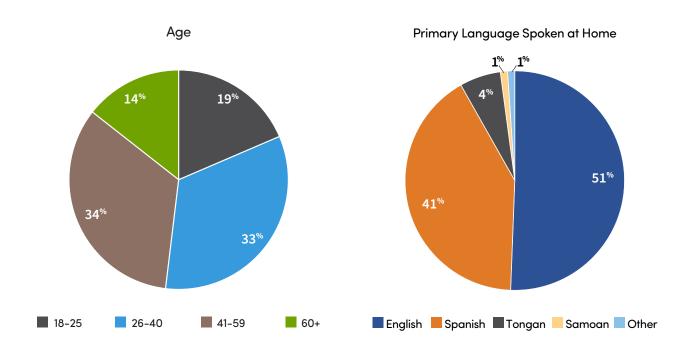
Nuestra Casa also held two listening sessions, one in English and one in Spanish, to facilitate conversations to gather more details about issues residents are experiencing and begin conversations about developing solutions.

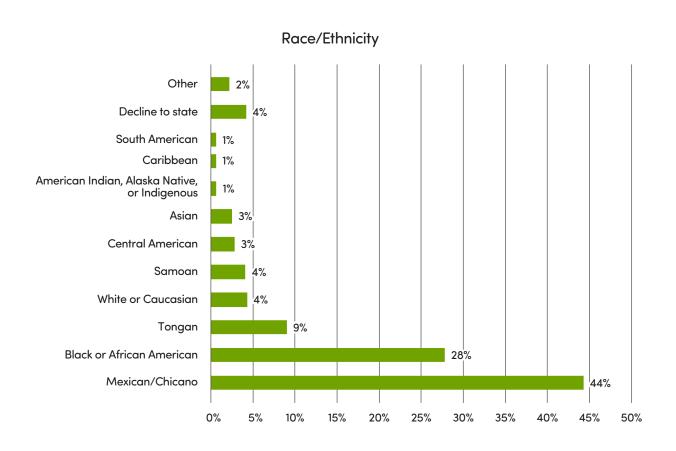
Throughout the needs assessment process, Nuestra Casa leveraged efforts with San Francisco Bay Conservation and Development Commission (BCDC) and Bay Area Regional Heath Inequities Initiative (BARHII) to engage the East Palo Alto community specifically around sea level rise and community health issues.



Map of locations in East Palo Alto where Nuestra Casa conducted surveys with residents.

Demographics of Respondents





The top prioritized issues identified through the water needs survey are presented below, along with greater details and support from qualitative survey questions and the listening sessions.



Drinking Water Quality

Nuestra Casa's needs assessment process identified an overwhelming perception that the water quality in East Palo Alto, at least in some locations, is not good. It also capatured related concerns about the role of water infrastructure in the quality issues that respondents are experiencing.

Unsafe drinking water was the most identified water issue by survey respondents in East Palo Alto: 55.7% of respondents (397) did not feel drinking their tap water is safe, and 45.7% (326) of respondents indicated that their water tastes bad. Furthermore, when asked what they think about the quality of tap water in East Palo Alto, 41.8% of residents responded "bad," and 42.1% responded "fair," only 11.9% responded "good." Perhaps most strikingly of all, almost three quarters (74.5%) of respondents buy water for cooking and drinking. Negative tap water quality experiences have prompted many people to buy bottled water, which is an extra expense, can cause major strain on already tight budgets, and causes additional issues for the environment. Some respondents mentioned concern about the negative environmental impact of plastic water bottles in response to the qualitative survey question, "If you had a million dollars to improve some water-related issue, how would you use it?", as well as in the listening sessions.

Of the water issues identified in the needs assessment, water quality in particular ranks extremely highly in the minds of surveyed East Palo Alto residents with respect to overall community issues. When asked, "What conditions in East Palo Alto would most impact you, your family, and your community's ability to get through difficult times or disasters?"—the second overall most chosen response was water quality (67.3% / 480), second only narrowly to housing affordability and stability in their home (68.4% / 488).

What do you think about the quality of tap water in East Palo Alto?	%	n (English/Spanish)
Bad	41.8%	298 (242/56)
Fair	42.1%	300 (168/132)
Good	11.9%	85 (48/37)
Other	2.8%	20 (10/10)

What conditions in East Palo Alto would most impact you, your family, and your community's ability to get through difficult times or disasters?	% (Rank)	n (English/ Spanish)
Housing affordability and stability in your home	68.4% (1)	488 (353/135)
Water quality	67.3% (2)	480 (340/139)
Not enough money, jobs	36.9% (5)	263 (215/48)
Education	39.7% (4)	283 (204/79)
Access to health care and health insurance	39.8% (3)	284 (182/102)
Air quality	36.7% (6)	262 (153/109)
Immigration status, fear of ICE, etc.	34.5% (7)	246 (149/97)
Safety	32.8% (9)	234 (150/84)
Housing quality (including mold, lead, pests, dangerous conditions, etc.)	33% (8)	235 (143/92)
Access to healthy, affordable food	24.8% (11)	177 (130/47)
Power to influence decisions	20.9% (12)	149 (119/30)
Ongoing health conditions (like asthma, diabetes, blood pressure, etc.)	28.2% (10)	201 (111/90)
Transportation	14.4% (13)	103 (78/25)
Information not communicated in my language	12.9% (14)	92 (151/41)
Other	2.1% (15)	15 (13/2)

Many responses to the qualitative survey question, "If you had a million dollars to improve some water-related issue, how would you use it?" related to improving tap water quality and replacing old pipes. Specifically, many respondents said they would use the funding to improve water quality and conduct water testing to improve overall taste, safety, appearance, and quality, as well as implement a better filtration system, including answers of filters for houses/schools. Additionally, more affordable water and lower/ more equitable water bills were mentioned.

In the listening sessions, respondents identified specific tap water quality issues, including:

- Water appearance: brown, yellow, rusty, black, cloudy, contaminated
- Water smell or taste: tastes bad, smells bad, tastes or smells like chlorine, bleach
- Health issues resulting from exposure to water: rashes, burns on skin, hair falling out, burning eyes, etc.

In addition, respondents noted different water quality in different locations, observed that more expensive water is better quality, and that people buy water in addition to paying their water bill. Attendees also mentioned worry about the environmental effects of buying bottled water.

"The water in the school tastes like pain" —One of Nuestra Casa's promotoras' son speaking about the water at the primary school in East Palo Alto

"At certain times of the year water is brown or cloudy" —Anonymous resident of East Palo Alto



Infrastructure and Pipes

41.8% (298) of respondents mentioned concern about old infrastructure and pipes, specifically in the water distribution system. Many survey respondents said they would use the funding to improve water infrastructure and replace old pipes as well as improve and optimize the water distribution system. In the listening sessions, many participants mentioned worry about infrastructure and dirty pipes. There was a common perception that pipes contribute to experienced water contamination.



Flooding

The next most identified issue was flooding, noted by 38.6% of respondents (275). Many survey respondents said they would use the funding for flood control measures. In the listening sessions, many mentioned flooding. The school on Fordham Street and some corners on Gonzaga Street were specifically said to flood severely in the winter.



Drinking Water Supply

Drinking water supply, litter and trash, and industrial contamination were all also identified by over a quarter of respondents to the survey.

Of these common water issues, which have you identified in your community?	% (rank)	n (English/Spanish)	
Unsafe drinking water	55.7% (1)	397 (288/109)	
Flooding	38.6% (4)	275 (230/45)	
Drinking water supply (amount)	34.5% (5)	246 (218/28)	
Water tastes bad	45.7% (2)	326 (220/106)	
Old infrastructure/pipes	41.8% (3)	298 (206/92)	
Industrial contamination	23.8% (7)	170 (136/34)	
Litter/trash	27.8% (6)	198 (133/65)	

34.5% (246) respondents identified drinking water supply as an issue in East Palo Alto. In the listening sessions, many mentioned worries about the future supply of water. Participants specifically mentioned interest in recycled water/water reuse/rain capture, worry about dependency on other cities, and limited water supply being used for corporations rather than for community members.



K Trash and Litter

23.8% (170) respondents identified litter and trash as an issue in East Palo Alto. In the listening sessions, many mentioned worries about litter and trash pickup and control, the need for better waste management, including more trash cans, and cleaning trash from storm drains.



四点 Industrial Contamination

27.8% (198) respondents indicated that industrial contamination is an issue in East Palo Alto.

Information and Education

Other related issues brought up by respondents in the qualitative survey question and listening sessions were:

- A lack of transparency around how decisions are made and money is spent, and a desire for transparency around water quality and other issues affecting East Palo Alto
- The need for information and education programs for community members on water quality, water conservation, and environmental justice issues, as well as how to dispose of toxics and trash



Photo courtesy of Nuestra Casa

Next Steps

Participate in the DACTI Program Tap Water Quality Testing Effort and Follow up:

- Through the needs assessment process, community members provided many ideas about what to do to address the water quality issues they identified. Among the most frequently raised solutions, respondents asked for collaborative, transparent water quality testing, and more information and transparency about water quality, as well as fixing infrastructure/pipes to contribute to safe water delivery. Respondents also wanted good water for everyone and felt that people shouldn't have to pay more for good water. As a next step to follow up on this concern, Nuestra Casa has already begun working with the DACTI Program tap water quality testing effort to begin scoping the effort in East Palo Alto. Results from the tap testing effort will inform the development of solutions. Depending on the results of the testing, Nuestra Casa will also explore policy ordinances and other next steps.
- The water distribution system in East Palo Alto is particularly complicated relative to other communities in the Bay Area—while most communities usually have only one provider, in East Palo Alto there are three. The City of East Palo Alto has outsourced distribution of its wholesale Hetch-Hetchy water from the San Francisco Public Utilities Commission (through the San Francisco Regional Water System) to a private company called Veolia. In addition, there are two municipal water companies: Palo Alto Park Mutual Water Company and the O'Connor Tract Municipal Water Company. Community concerns have previously been raised specific to the Palo Alto Park Mutual Water Company (The Almanac, 2019).



Photo courtesy of Nuestra Casa

Continue to work with and include an expanding proportion of the East Palo Alto community, as well as engage agencies and local government in conversations and the development of solutions to the needs identified in the assessment process

- More holistically understand the source of environmental threats to East Palo Alto residents, and understand the interaction between infrastructure—wastewater lines and waste lines—and water quality.
- Host solutions development conversations about tap water quality, flooding, and litter and trash, as well as provide more support for the community
- Continue to expand reach through the Environmental Justice Parent Academy training methodology, which ran its first session in the Fall of 2020
 - Nuestra Casa has trained three community members with proven facilitation skills to engage and work directly with parents as Promotoras (Community Climate Ambassadors).
 - Each of the three community members bring skill sets, and cultural understanding of the African American, Pacific Islander, and Latino communities. The Promotoras will help recruit parent participants, provide direct support to parents, and help connect them to community resources, which are translated into both Spanish and Tongan. Each Parent Academy serves 75 parents comprised of three groups of 25 members, with each group learning the fundamentals of environmental justice and climate change-related issues in their respective communities. Parents participate in the EJ Parent Academy for six weeks. To encourage a high level of engagement, participants receive a \$300 stipend for completing the EJ Parent Academy. During the parent workshops, the children of the families are engaged in a Youth Climate Academy, offered by Nuestra Casa's partner organization, Mycelium Youth Network. Youth engage in activities that promote environmental stewardship and at-home strategies that help reduce climate impacts, such as recycling, composting, water, and energy conservation, and more. Nuestra Casa envisions that the Academy will unlock solutions for more people, communities, and needs.

Build capacity through hiring expertise in water quality and infrastructure

• A top priority for Nuestra Casa is to build their capacity. This has been achieved by hiring another full-time staff member to focus on infrastructure, water quality and water testing, and the intersectionality between environmental justice and water quality. Additionally, our new staff member is working with Nuestra Casa to provide further educational materials, information, and support to the East Palo Alto community.

References

California Environmental Protection Agency and Office of Environmental Health Hazard Assessment (2017, January). *CalEnviroScreen 3.0*. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

Layton, F.M., & Johnson, A.A. (2019). From Crisis to Solutions: A Case Study of East Palo Alto's Water Supply. Silicon Valley Community Foundation. https://www.siliconvalleycf.org/sites/default/files/publications/east-palo-alto-water-report-reader.pdf

United States Census Bureau (2019). *ACS Demographic and Housing Estimates 2019: ACS 5-Year Estimates Data Profiles*. TableID: DP05. https://data.census.gov/cedsci/table?g=0400000US06_1600000US0620956&tid=ACSDP5Y2019.DP05

The Almanac (2019, July 31). Troubled Water: Water company in East Palo Alto and Menlo Park faces allegations of election fraud and company mismanagement. Almanac News. <u>Troubled Water | News | Almanac Online | (almanacnews.com)</u>

Sonoma Ecology Center and Daily Acts





Photos courtesy of Sonoma Ecology Center



Sonoma Ecology Center (est. 1990) works to address challenges related to water supply and quality, open space, rural character, biodiversity, energy, climate change, and a better quality of life for all residents.

Sonoma Ecology Center works to address challenges related to water supply and quality, open space, rural character, biodiversity, energy, climate change, and a better quality of life for all residents. Their mission is to work with their community to identify and lead actions that achieve and sustain ecological health in Sonoma Valley.



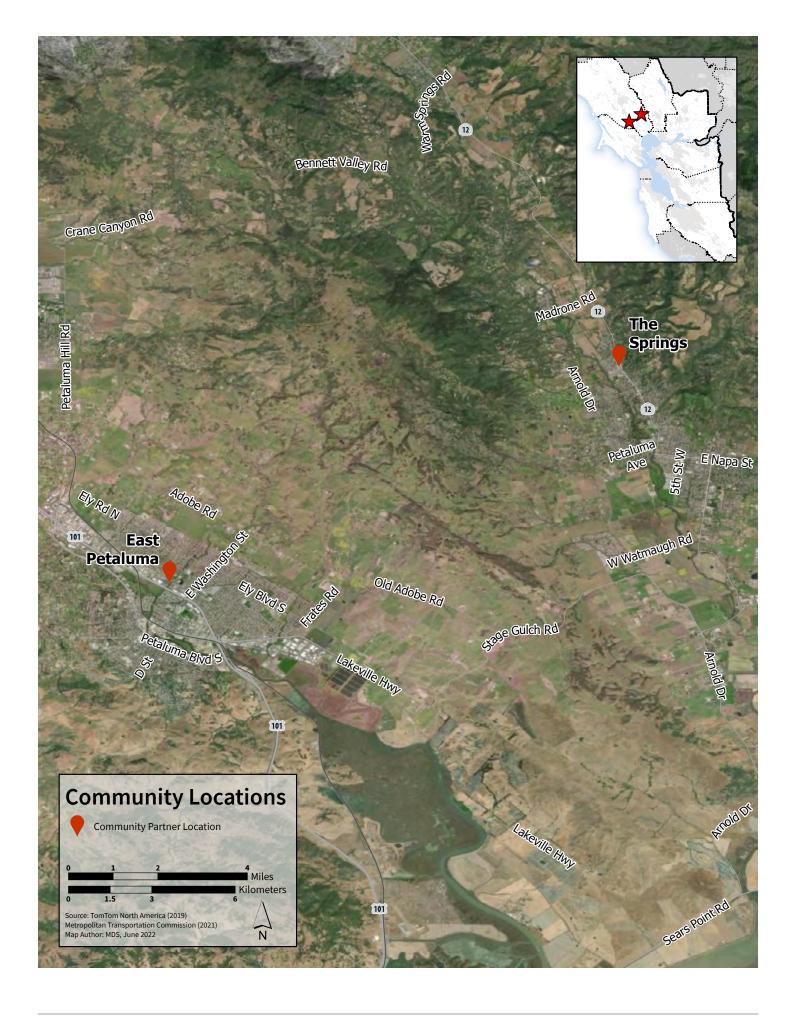
every action makes a ripple

est 2002) is a holist

Daily Acts (est. 2002) is a holistic education nonprofit that takes a heart-centered approach to inspiring transformative actions that create connected, equitable, and climate resilient communities.

Daily Acts believes in the power of daily actions to reconnect people to self, community, and place, which helps to heal our society and planet. Their mission is to inspire transformative action that creates connected, equitable, climate resilient communities.

Both organizations have many years of collaborative, community-oriented, multiple-benefit action, and both have deep local roots as well as a track record of engagement in Bay-wide community issues.



Project Description

Sonoma Ecology Center (SEC) and Daily Acts Organization (DAO) partnered on this project with their community in southern Sonoma County to conduct outreach and needs assessments to collect information about the issues and needs related to water facing their disadvantaged communities (DACs) in Petaluma and The Springs community of Sonoma Valley. Their goal was to reach a representative group of their DAC area to learn about the various issues and assets community members experience related to water, and to begin to develop a strategy for how to address the issues identified.

Background on Petaluma and The Springs

Demographics

The city of Petaluma is located in Sonoma County and has a population of 60,767 (U.S. Census, 2019). Petaluma is predominantly white, with a significant Hispanic or Latino population (22%) and small Asian (5%) and Black or African American populations (1%) (U.S. Census, 2019). The Petaluma General Plan 2025 states that "the North McDowell Boulevard subarea also contains a significant portion of the city's senior housing. South of Corona Road, four mobile homes parks and one apartment complex are located along North McDowell Boulevard, providing affordable living for Petaluma's seniors and families" (City of Petaluma, 2008, 2021).

The unincorporated areas of Fetters Hot Springs/Agua Caliente West Tract of southern Sonoma Valley within Sonoma County are known as "The Springs." With a population of just over 5,000, The Springs area has the lowest Human Development Index (HDI) score in Sonoma County outside of southwest Santa Rosa, and lies amid census tracts with much higher HDI scores (Burd-Sharps & Lewis, 2014). 45% of adults lack high school diplomas, and median personal earnings in The Springs are third from last among Sonoma's 99 tracts. 25.3% of individuals fall below the poverty level in The Springs, compared to 15.3% in California, and 11.5% in Sonoma County.





Photos courtesy of Sonoma Ecology Center and Daily Acts

History of Environmental Injustice and Inequity in Petaluma and the Springs

There are multiple locations and situations in southern Sonoma County where residents are at a disadvantage in relation to water:

- Residents may lack access to decision-making processes about water.
- Residents may lack access to information and support to make positive behavior change.
- Local organizations may have trouble obtaining participation by traditional means.

- Larger scale projects to increase water security may be needed, such as stormwater capture for groundwater recharge, but they are contingent on support from the community, including disadvantaged landowners and residents of key parcels.
- There may be a language or cultural barrier to participation.
- Public sites such as public schools, which disproportionately serve disadvantaged residents, are primarily impervious, often lacking vegetation and other low impact development features.
- The Springs is identified as an Urban Service Area for the County of Sonoma, but it does not have any town or city government. The county is set up to serve rural areas, so the Urban Service Areas that lack local government also are lacking in much of the infrastructure for urban areas like storm drains, sidewalks, and local services.
- Heavy traffic, large parcels featuring a mix of residential, commercial, and industrial development, discontinuous sidewalks, and no bike lane make North McDowell difficult to navigate on foot or bicycle.

Community-Identified Strengths and Assets

The Springs area of Sonoma Valley has been designated a Rural Investment Area (RIA) by the regional planning agency, the Association of Bay Area Governments (ABAG). RIAs are centers and corridors of economic and community activity surrounded by agricultural, resource, or protected conservation lands. RIAs present an opportunity to preserve a rural character and scale while integrating a range of housing types, local retail, and cultural and civic activities. Other key components of RIAs include an inviting public realm and strong pedestrian and bicycle connectivity between the area and surrounding neighborhoods. RIA designation makes The Springs eligible for federal funding, and zoned to accommodate limited growth and economic activity, with the goal to limit growth and reduce development pressure on surrounding open space and agricultural areas.

The east side of Petaluma is characterized by residential neighborhoods and contains a significant portion of the city's 55+ (age 55 and older) communities. The east side of Petaluma was designed to be primarily residential and includes many parks and trails along the creeks. However, there are many opportunities to improve pedestrian access to trails, according to the 2025 Petaluma General Plan.



One of the community events where Sonoma Ecology Center and Daily Acts engaged community members.

Image provided by Sonoma Ecology Center and Daily Acts.

Summary of Outreach and Education Efforts

SEC and DAO collected assessments from April 2019 to January 2020. Needs assessment surveys and conversations were conducted in Spanish and English at many community events including farmers markets, health fairs, housing events, community celebrations, and school events. Overall, SEC and DAO collected 203 needs assessment surveys through two primary methods: 1) sending a postcard to targeted residents in Petaluma and The Springs area of Sonoma Valley with a link to the online survey, as well as 2) collecting surveys through conversation with residents at various community outreach events. Roughly 40% of total responses were from Petaluma, and 60% from Sonoma Valley (The Springs).



Needs assessment surveys and conversations were held with Sonoma Valley residents at community events from April 2019 to January 2020.

Photos courtesy of Sonoma Ecology Center and Daily Acts

Needs Assessment Findings

The top priority water issues identified in Petaluma and South Sonoma were:

- Drinking water
- Stormwater
- Trash/dumping
- Community improvements

Some results are broken down by Sonoma Valley (The Springs) and Petaluma.



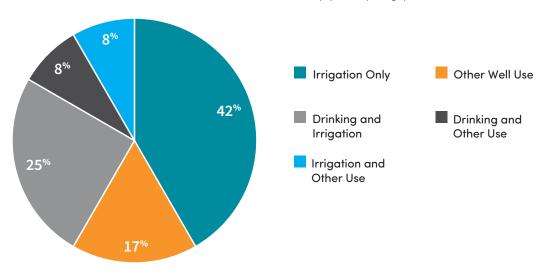
Drinking Water

In Sonoma Valley (The Springs), 48% of residents said they only drink bottled or filtered water. Examples of qualitative responses to the survey about drinking water issues include:

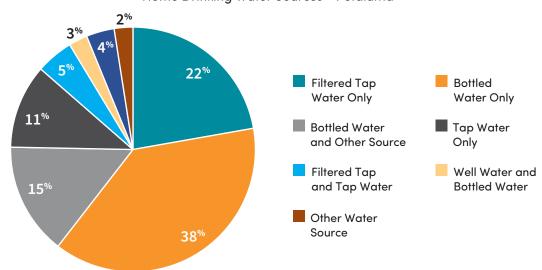
"I think that tap water is not safe to drink."

"If I had to drink it [tap water], I would boil it first to get rid of the chlorine."





Home Drinking Water Sources - Petaluma



In Petaluma, 60% of residents said they only drink bottled or filtered water. Examples of qualitative responses to the survey about drinking water issues include:

"I don't like the smell of [the tap] water."

"...I have little confidence in the tap water because it comes out of the tap white."

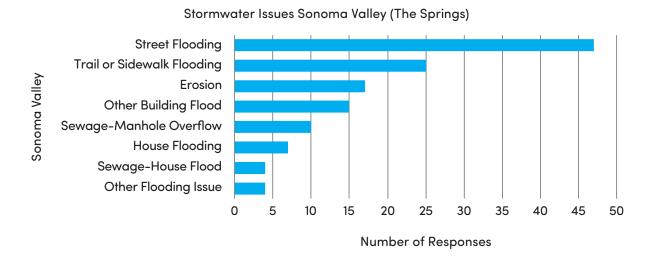
Many respondents specifically identified smell, which they interpreted to be chlorine, as a drinking water quality issue.

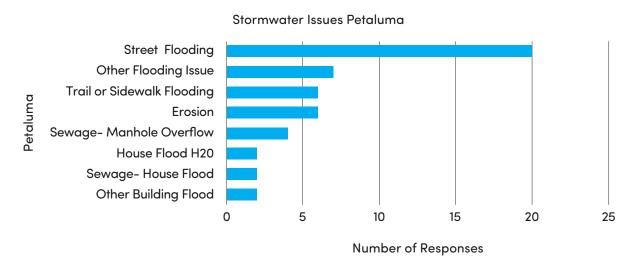
Few respondents relied on well water, and those that did reported no issues with flow rate or quality.



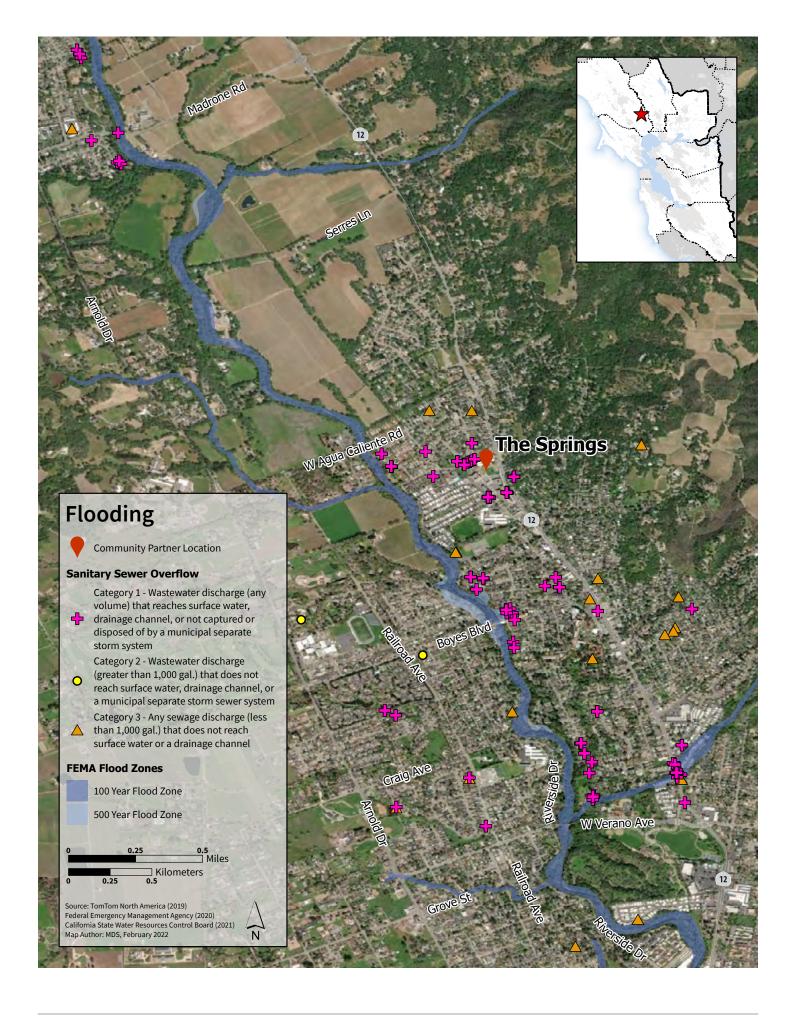
Stormwater

The top stormwater issues identified by survey respondents were street flooding (67%), trail and sidewalk flooding (32%), erosion (23%), and sewage-manhole overflows (14%). While overflow from manholes was observed by a small percentage of respondents, it represents a large public health issue. The concentration of reported overflows was from The Springs area of Sonoma Valley.





Sanitary sewer overflow (SSO) observations are corroborated by State Water Resources Control Board documentation. The map on the following page shows the locations of discharges of between 10,000 and 100,000 gallons of sewage into DAC areas along Highway 12.

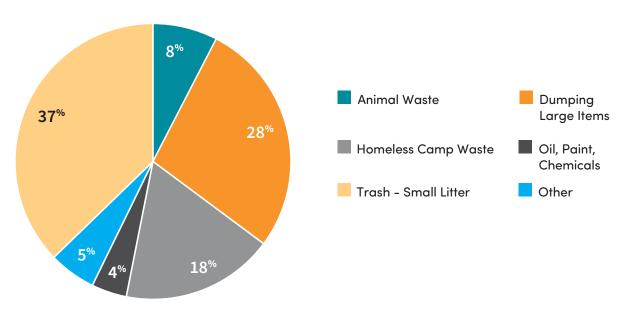


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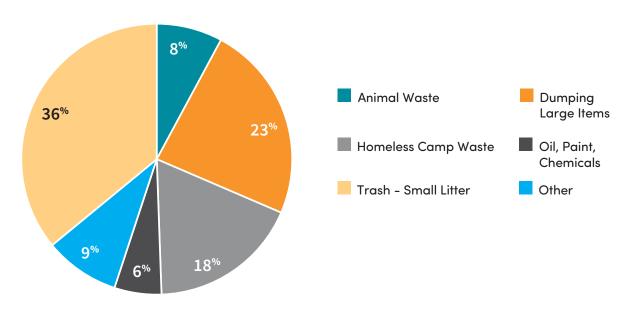


The primary issues reported were trash and small litter, large illegally dumped items, and homeless-camp waste, all of which have impacts on water quality.

Waste and Dumping Issues - Sonoma Valley (The Springs)



Waste and Dumping Issues - Petaluma





Community Improvements

Respondents mentioned a desire for community improvement projects. The highest priority for both communities identified was for creek or trail cleanups to remove garbage accumulation. This was closely followed by a desire for more playgrounds and more trails to improve pedestrian and bicycle circulation. In The Springs, the desire for playgrounds was slightly higher, and in Petaluma, the desire for trails was slightly higher. Both communities also expressed interest in rain barrels, public landscaping, and other improvements.

Next Steps

Drinking Water

SEC and DAO would like to conduct outreach to Petaluma and The Springs communities about water quality (an expanded 'Take it from the Tap' campaign in Spanish); offer water quality testing through the DACTI Program regional tap testing effort; and offer portable water filters. SEC and DAO are also interested in pursuing the development of water bottle fill stations from the local water supply. Such public filling stations could easily be tested and encouraged to address folks' lack of trust in water, and to reduce the amount of bottled water people are buying.

Stormwater

Sonoma Water, the flood protection and water supply agency for the area, has a stormwater resources plan which covers the areas of Petaluma and The Springs, and Sonoma Water has expressed interest in partnering with SEC and DAO on stormwater projects in southern Sonoma. Priority work includes assessing potential stormwater detention properties, conducting landowner outreach, and completing a feasibility assessment to identify opportunities in the hills to retain stormwater onsite. This opportunity would benefit The Springs by reducing stormwater flooding in Sonoma Creek, which can overflow into streets and disrupt community members' daily lives.



Sanitary Sewer Overflow (SSO) in The Springs neighborhood of Sonoma Valley.

Photo: Richard Dale

Sanitary Sewer Overflows (SSOs)

Flooding and creek overflow is getting into the sanitary system, causing it to overflow in some areas. Sonoma Water is now working on a project to expand the capacity of the main sewer line to address some of these overflow issues. SEC and DAO think it would also be beneficial to the Springs to conduct a comprehensive investigation of conditions contributing to downstream SSOs from Sonoma Development Center to The Springs. On-the-ground, wet-weather site assessments and field data collection (photos with timestamps) to assess Sonoma Development Center storm water and major creeks and flooding areas between Sonoma Development Center and Verano Avenue (approximately 4.5 miles) could help identify opportunities to prevent stormwater from getting into the sewer system.



Two participants picking up trash during a Daily Acts community creek cleanup.

Photo: Sarina Consulter

Trash and Dumping

Related to trash and dumping, SEC and DAO would like to organize cleanup events and an outreach campaign about proper garbage disposal, recycling, and community development.



Daily Acts held community listening sessions to receive feedback on thoughts related to water.

Photo: Sarina Consulter

General Next Steps

Overall, SEC and DAO will continue to work with the City of Petaluma and southern Sonoma partners to improve their communities. They are presenting the needs assessment findings back to the community and other stakeholders for feedback and working to co-develop projects and pursue funding to address issues identified in the needs assessment process.

SEC and DAO are following up on several types of projects to address issues from the needs assessment, including:

- Creek or trail cleanups
- Storm water management projects
- Park cleanups and restoration projects to address erosion and other issues
- Outdoor education and recreation programs
- Sewage infrastructure improvements planning

References

Burd-Sharps, S. & Lewis, K. (2014), *Portrait of Sonoma County*, American Human Development Project of the Social Science Research Council. http://ssrc-static.s3.amazonaws.com/wp-content/uploads/2015/08/05141006/English_Complete_POSC.pdf

California State Water Resources Control Board. (Cartographer). (2020). Sanitary Sewer Overflow (SSO) Incident Map [Map] https://www.waterboards.ca.gov/water_issues/programs/sso/sso_map/sso_pub.html

City of Petaluma. (2008, May; updated 2021, May 12). *City of Petaluma: General Plan 2025*. https://cityofpetaluma.org/documents/general-plan/

County of Sonoma Department of Health Services. (2015). 2010 U.S. Census and American Community Survey 2012 and 2008-2012.

United States Census Bureau. (2019). *QuickFacts Petaluma city, California*. https://www.census.gov/quickfacts/petalumacitycalifornia

The Watershed Project



Photo courtesy of The Watershed Project



The Watershed Project's mission is to inspire Bay Area communities to understand, appreciate, and protect their local watersheds.

The Watershed Project's mission is to inspire Bay Area communities to understand, appreciate, and protect their local watersheds. Founded in Richmond, CA in 1997, they work to restore and preserve the unique ecosystems that make up the San Francisco Bay. They bring a watershed perspective to the urban environment, promoting green design and supporting natural cycles. Through their award-winning community stewardship programs, they give youth and adults the information, skills, and support they need to understand how watersheds work and how their individual and collective actions translate into healthier, stronger local communities. They undertake large green infrastructure projects and green schoolyard installations to demonstrate the power and possibility they offer in solving problems like stormwater management, water pollution, and equitable access to green, healthy environments.

Since its inception, The Watershed Project (TWP) has been committed to working together with their communities to build resilience, awareness, and environmental justice in the Bay Area. The Watershed Project envisions a water management system that is sustainable, equitable, and responsive to the needs of both their communities and natural places in Contra Costa County. To achieve this goal, The Watershed Project involves community stakeholders in every step of their projects, in developing priorities and plans, and in implementing and ensuring their success.



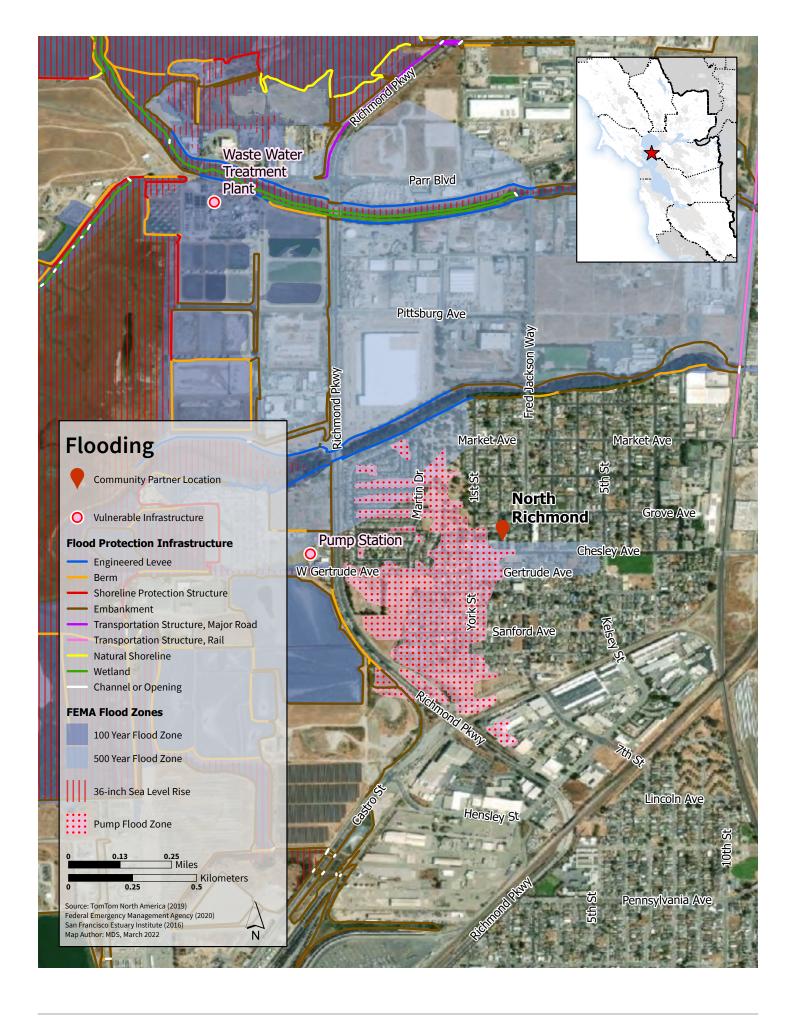
The Watershed Project's staff are acknowledged as local experts in water quality monitoring and trash assessments, and they involve the community, neighbors, and partners in all aspects of water management in their Contra Costa creeks and waterways. They train interns, volunteers, and smaller community groups to do the monitoring in their own neighborhoods. By empowering members of the community with technical training as community scientists, The Watershed Project magnifies its impact and benefit from local knowledge of waterways. Its current data collection and monitoring approach includes:

- Water quality monitoring of five creeks in Contra Costa County, with sharing of this data as a public resource to community groups and local municipalities
- Ten trash assessments along creeks, shorelines, and other waterways, conducted in collaboration with Contra Costa County



Project Description

West Contra Costa County is highly urbanized but has high potential for water quality and habitat improvements. Community interest for these improvements has been expressed and willing partners have been identified as reflected in the minutes of the local watershed council. This area also offers the potential for successful community stewardship opportunities, improving coordination among agencies and other organizations, and increasing drought resiliency and climate adaptation. The Watershed Project worked with disadvantaged communities within the San Pablo, Wildcat, Garrity, Rheem, and Cerrito Creek watersheds to identify and prioritize water-related improvements with the greatest potential for improving quality of life and climate resiliency.



Background on North Richmond

Demographics

North Richmond has a total population of 5,739, which is 74.2% Hispanic, 10.5% African American, 9.1% Asian American, 4.7% white, and 1.3% other. North Richmond falls into the 96th percentile overall in CalEnviroScreen 4.0, compared with the rest of California communities. The area is in the 87th percentile for pollution burden and 95th for population characteristics. Residents have particularly high exposures to lead from housing (81st percentile), toxic releases (77th percentile), cleanup sites (99th percentile), hazardous waste (100th percentile), groundwater threats (86th percentile), solid waste (94th percentile) and impaired waste (90th percentile). The population is in the 99th percentile for asthma, 88th for low birth weight, and 73rd for cardiovascular disease. Residents fall in the 94th percentile for education, 95th for linguistic isolation, 77th for poverty, 45th for unemployment, and 87th for housing burden (CalEnviroScreen 4.0).

History of Environmental Injustice and Inequity in the North Richmond Community

Residents in North Richmond, an unincorporated area in the east San Francisco Bay Area, have faced historic marginalization, geographic isolation, and disproportionate environmental impacts. A historically Black community, North Richmond was one of the few areas where African Americans could purchase homes, and today, the population is predominantly Latino and African American.

North Richmond lies in the floodplain of two creeks and historically was subject to regular flooding. Like most urban communities, North Richmond has a high proportion of impervious (paved) surfaces, preventing natural absorption of rain during storms. Because urban creeks have been channelized and restricted, they often cannot accommodate the volume of water that enters during a storm. As a low-income community with insufficient stormwater infrastructure or green spaces to provide drainage for stormwater runoff, North Richmond is disproportionately impacted by flooding, and sea level rise is projected to exacerbate the issue for this low-lying coastal community. The community is now protected from flooding by levees and a pump station, but without this protection, homeowners would be required to purchase costly flood insurance.

North Richmond is surrounded by railroad tracks, a diesel truck route, a landfill, a wastewater treatment plant, and a Chevron refinery. A history of chemical testing and manufacturing in the area has also left a legacy of contaminated soil and groundwater. The neighborhood has also received fewer services, such as adequate garbage collection and sewage control (Healthy Richmond, 2019), than surrounding neighborhoods.

Community-Identified Strengths and Assets

Despite facing many challenges and discriminatory policies and practices, North Richmond is a close-knit, proud and resilient community with a history of activism, advocacy, organizing, and community leadership. In 1971, the North Richmond Model Cities Plan was developed with intensive community input, and featured Wildcat and San Pablo creeks and the San Francisco Bay shoreline as recreational, educational, and economic assets for the community. When, in 1982, the Contra Costa County Public Works Department and the U.S. Army Corps of Engineers presented their preferred plan to turn Wildcat Creek into a concrete, straightened, flood control channel with dangerous fast-moving water, community leaders including Ivy Lewis, Laura Hunter, and Lillie Mae Jones organized community members and stakeholders to uphold the Model Cities Plan. They formed the Wildcat-San Pablo Creeks Watershed Council, which required collaboration among all agencies and elected officials to produce a consensus-based plan to address the flood risk and environmental protection for Wildcat Creek. In just one year, this planning process overcame a 29-year stalemate and produced a consensus-based plan for the creek that honored the Model Cities Plan. The Wildcat-San Pablo Creeks Watershed Council is the first known watershed council located in urban California and remains active today, more than three decades later. The Wildcat Creek Restoration Project, which began construction in 1986 and was guided by the community's preference to protect the environment along Wildcat Creek as an educational and recreational asset, was the first flood control project of its kind. It eventually became recognized by the U.S. Army Corps of Engineers as a national environmental engineering model. (Riley, 1989; Riley, 2016).

Similarly, the Dotson family and their Parchester Village neighbors spent decades advocating for the preservation of open space along the shoreline. In the early 1970s, Rev. Daniel Dotson helped secure the East Bay Regional Park District's purchase of Point Pinole Regional Shoreline, a former gunpowder and dynamite manufacturing site. A generation later, Ethel and Whitney Dotson organized with their neighbors to prevent the development of then-called Breuner Marsh, slated for several developments including an airport, housing, or industrial use. In the same year that Whitney Dotson was elected to the East Bay Regional Park District Board of Directors (2008), the Park District acquired the marsh after three years of legal battles. Thanks to the hard work of the Parchester Village community advocates, the now-renamed Dotson Family Marsh is preserved as a public park and habitat restoration site. (Alvarez & Pfuehler, 2017; Seltenreich, 2012).

These are just a few examples of North Richmond's rich history of activism and environmental protection, which continues today. Within the last few years alone, residents have led community planning efforts including the North Richmond Shoreline Community Vision (2017), the Home Team's North Richmond planning process for the Resilient By Design Challenge (2018), Healthy Richmond's North Richmond Quality of Life Plan (2019), and Urban Tilth's Wildcat Creek Visioning Project, among others.

Summary of Outreach and Education Efforts

The Watershed Project leveraged their work on other West Contra Costa County assessments, including:

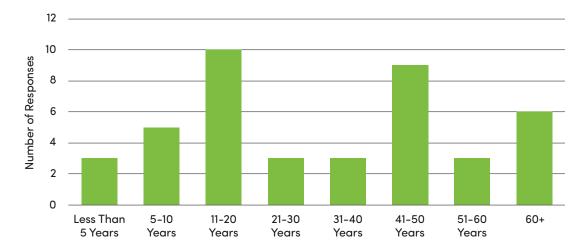
- North Richmond Shoreline Community Visioning in 2017
- The Home Team's North Richmond planning process for the Resilient By Design Challenge in 2018
- · Healthy Richmond's 2019 Quality of Life Plan
- Urban Tilth's Wildcat Creek Visioning Project

The goal for this engagement and needs assessment process was to gain insight into which types of water-related improvements are of greatest priority to the community. The process evaluated community concerns in four topic areas:

- 1. Sea level rise and stormwater
- 2. Habitat protection and access to recreation
- 3. Water supply (drinking water)
- 4. Wastewater and recycled water

In Spring 2019, The Watershed Project recruited 54 North Richmond residents to participate in a focus group, leveraging existing networks such as their Block Ambassadors Program, Healthy Richmond's resident leaders, and the Senior Center. This resulted in a broad range of participants, from those who moved to North Richmond more recently (less than five years ago) to those who have been part of the community for over 60 years. All focus group participants were offered a gift card stipend for participating in an interview and a workshop, as described below.









Residents rank their level of concern with each of the four areas of need at the North Richmond Earth Day Celebration.

Photos: Anne Bremer

Each focus group participant gave an approximately 20-minute individual interview (pre-survey) with TWP over the phone or in person in which they ranked their level of concern with each of the four areas on a four-point scale: not at all concerned, not very concerned, somewhat concerned, or very concerned. They also answered several open-ended questions in which they were prompted to describe their personal experiences with water in North Richmond. For example:

- Have they experienced problems with flooding or sewer backup?
- Do they use the Wildcat Creek path or North Richmond shoreline for recreation? Why or why not?
- How do they use tap water? Have they experienced problems with it?

To ensure that the concerns of the 54 focus group participants aligned with the concerns of the larger North Richmond community, TWP gained additional input from approximately 200 residents at the North Richmond Earth Day Celebration. These residents also ranked their level of concern with each of the four areas on the same four-point scale, and results were similar to those from the focus group participants.

The Watershed Project was interested in assessing whether the community's concerns might change if they had access to additional information about the four areas of need. After their initial interview, each focus group participant was invited to participate in an educational workshop. The Watershed Project hosted two identical workshops at two different times (one on a weekday evening and one on a Saturday morning) and locations (a housing complex and an elementary school), to allow participants to attend the one that would work best for them.

During the workshop, participants rotated around four stations, one for each topic area, and worked to answer a set of guiding questions at each station. They examined hands-on materials such as posters, videos, maps, and models with a facilitator to learn about:

- Existing water-related infrastructure
- Anticipated future challenges
- Potential solutions to these challenges

After rotating through all four stations, each participant took a written post-survey where they reassessed their level of concern with each of the four areas on the same four-point scale, from not at all concerned to very concerned. They were also asked for feedback on what they had learned through the following openended questions:

- Did you learn any new information about these areas in today's workshop?
- What was the most surprising thing you learned during today's workshop?
- What types of water-related improvements would you like to see in your community?

Needs Assessment Findings

Initial Interview Findings



Sea Level Rise and Stormwater

In the initial interview, stormwater flooding was a topic that resonated with residents, since 73% have personally experienced flooding when it rains. They described being impacted by difficulty walking or driving from place to place, and by damage to infrastructure, such as flooding of homes or potholes in streets. They were also concerned about the amount of trash or other pollutants in floodwaters. However, 45% said the flooding used to be much worse than it is now. Only 15% described their concern about sea level rise, indicating that it may not be a topic that is familiar to many residents.



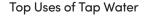
Habitat Protection and Access to Recreation

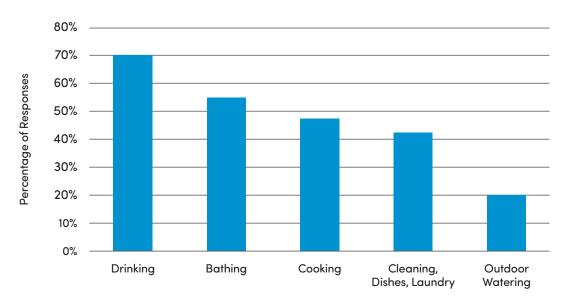
Just over half (55%) of residents use the Wildcat Creek path or North Richmond shoreline for recreation. The vast majority use these spaces for walking, but some also mentioned biking, taking their kids or pets out, or using these spaces for social events. Although some say they don't use the creek or shoreline for recreation simply because they're unaware of it or don't think about it, safety concerns seem to be a big deterrent to using the Wildcat Creek path. 42% of residents said they were concerned about safety on the path—their biggest concerns were flooding and trash/pollution/cleanliness, followed by crime/drugs/needles, homeless encampments, insufficient lighting, and overgrown vegetation.



Water Supply and Water Quality

Most residents (70%) drink tap water, although a significant number (38%) mentioned buying bottled water as well. However, nearly half of residents didn't trust their tap water, even if they drink it, since they are not sure where it comes from and how to tell whether it's actually safe. About 48% of residents have experienced problems with their tap water, including discolored water, bad taste, particles or residue, and drying of hair or skin when washing with it. Drinking was listed as the number one use for tap water, but residents also mentioned using it for bathing, cooking, cleaning/laundry, and watering plants.







Wastewater and Recycled Water

In the initial interview, the sewer system was the topic of least concern for residents. Many residents (58%) have experienced problems with sewage backups in their home, but it varied widely how often it happens and how severe the problem is. A few have seen sewer backups in the street, but not often enough to create the impression that there is any problem with the functionality of the system.

Some residents also mentioned being concerned about water conservation and the cost of water, although TWP didn't ask about these topics specifically.

Areas of Need Identified

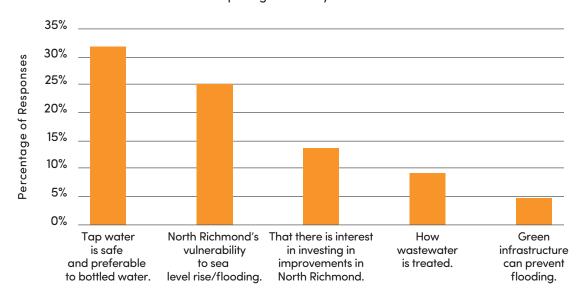
- Clean drinking water improvements
- Urban greening, green infrastructure, or parks
- Solutions to sea level rise and flooding
- Sewer system improvement and protection
- Water conservation and use of recycled water

Overview of what The Watershed Project heard from the community

- Some streets flood when it rains, and community members would like to see improvements to reduce the flooding.
- Community members feel there are not enough safe, accessible outdoor places for recreation in North Richmond and would like to see more parks, green space, and amenities such as lighting and drinking fountains on existing trails.
- North Richmond's drinking water, which comes from the Sierra Nevada mountains, is some of the best
 in the country. Despite this, most residents don't trust the safety of their tap water, and some have
 experienced problems with it. Community members would like to be able to find out for certain whether
 the water in their home is safe to drink, and whether old pipes in buildings are causing any problems with
 the water quality.
- Community members would like to see more water conservation measures and use of recycled water (treated wastewater which can be used for irrigation or construction).
- Climate change or global warming is causing polar ice caps to melt, sending more water into the ocean and causing sea levels to rise. This means areas closer to the shoreline (such as Parchester Village and North Richmond) will be more likely to flood during large storms. The landfill and wastewater treatment plant are also at risk of flooding, which could cause severe pollution problems. Community members hope to see protections from sea level rise along the shoreline.



Most Surprising Takeaways for Residents



Top Takeaways from the Workshop

Top three most surprising things residents learned in the workshop:

- 1. North Richmond's tap water is safe to drink (32%)
- 2. North Richmond's vulnerability to sea level rise (25%)
- 3. There is interest in investing in water-related improvements in North Richmond (13.5%)

Other things people learned about included: living shorelines, the North Richmond pump station, and the proposed bridge overpass.

North Richmond's tap water is safe to drink

After the educational workshop, many residents (32%) said the most surprising thing they learned was that North Richmond's tap water is safe to drink. Access to clean, safe drinking water seems to be a high priority for residents, and they left the workshop feeling less concerned about their source water but more concerned about potential contamination in pipes. They were excited about the possibility of self-testing their tap water, to learn whether there is an issue with their internal plumbing. When asked about the types of water-related improvements they would like to see in North Richmond, 34% of residents said they want to see clean drinking water in North Richmond, and 16% specifically mentioned pipe inspections or upgrades.

Wastewater and North Richmond's vulnerability to sea level rise

After the workshop, levels of concern rose about each of the four areas of need, but only the difference in the wastewater and recycled water area was statistically significant (98% of residents were "somewhat concerned" or "very concerned" on the post-survey, compared to 60% on the pre-survey). As mentioned earlier, residents were not as concerned about the sewer system in their initial interview, but their concern rose after learning that the wastewater treatment plant is highly vulnerable to sea level rise. 88% of residents said they learned something new about sea level rise and flooding during the workshop, and 25% said that North Richmond's vulnerability to sea level rise was the most surprising thing they learned.



There is interest in investing in water-related improvements in North Richmond

The third most surprising thing that residents learned during the workshop was that there is interest in investing in water-related improvements in North Richmond. Residents have the sense that authorities and other residents do not care about their community as much as other places (23% of residents mentioned something to this effect in their initial interview, without prompting), so many said it was hopeful and refreshing to see such positive energy from residents and community partners during the workshops.



Residents discuss their experiences, opinions, and preferences regarding water in their community at a workshop.

Photo: Anne Bremer

What do residents want to see in their community?

On their post-surveys, 23% of residents wrote that they hope to see more urban greening, green infrastructure, or parks, and others wrote that they would like to see solutions to sea level rise and flooding (living shorelines or horizontal levees), an improved sewer system, more water conservation measures, and using some of the recycled water that currently goes to Chevron for irrigation in the community. Overall, residents were supportive of any of the improvements TWP proposed during the workshop, but there was concern about possible resulting gentrification. Future projects should be mindful of these concerns and include protective measures against gentrification along with local job creation. Finally, from an educational standpoint, TWP noticed that residents could much more easily connect with tangible issues such as drinking water, stormwater flooding, and trash rather than concepts they may not have direct experience with, such as sea level rise, living shorelines, or horizontal levees. There was also a fair amount of confusion as to the difference between the stormwater system, sewer system, and drinking water supply—residents are not always clear on where their water comes from and where it goes. Therefore, future projects will need to include an appropriate level of community education, to allow residents to understand and engage with the project.



Aerial view courtesy of The Watershed Project - Community Needs and Opportunities document

Photo: Brian Houx

Project Development and Prioritization

Project Development

After the surveys and workshops, TWP presented their findings to a variety of stakeholders in the North Richmond community (including the City of Richmond, Contra Costa County Flood Control and Public Works Departments, East Bay Municipal Utility District, the Wildcat-San Pablo Creeks Watershed Council, and the East Bay Regional Park District) and worked with them to brainstorm and identify any possible projects that might align with the community's needs and priorities. Involving these stakeholders was an important step in identifying feasible projects and getting buy-in from the agencies that will likely be the primary applicants for funding and implementing the projects.



These meetings resulted in a list of 15 possible projects to take back to the community for feedback:

- 11. North Richmond Pump Station Upgrade The North Richmond Pump Station, constructed in 1974 and nearing the end of its expected life cycle, is an important part of protecting North Richmond from flooding. Without the pump station, homes may flood and homeowners in flood zones would need to pay for flood insurance, which is costly. This upgrade would allow the pump station to continue operating.
- 12. Wildcat Creek Improvements (Fish Ladder and Sediment Basin) The Wildcat Creek fish ladder, which passes under the railroad tracks near Verde Elementary, is intended to provide a way for rainbow trout to migrate along the creek, but is prone to frequent clogging with sediment and trash. This project would retrofit the fish ladder to become functional again, and would alleviate flooding near Rumrill Boulevard.
- 13. Flood Risk Reduction in the Rheem Creek Watershed (Rollingwood) During the rainy season each year, Rheem Creek overflows and the streets and homes in the Rollingwood neighborhood flood severely, preventing community members from getting to school or work, causing expensive damage to homes and cars. This project is a joint effort by neighbors and organizations to find a solution and resolve the flooding issue.
- 14. Citizen Science Creek Monitoring Community members, trained by a community organization, volunteer to collect measurements of pollution and trash in local creeks. The information they collect is used to develop projects and policies to help improve the health of the creeks and community.
- 15. Wildcat Creek Trail Improvements Design and construct park amenities along the Wildcat Creek Trail to make it more inviting, possibly including lighting, emergency phones, trash cans, benches, water fountains, a playground, picnic/BBQ areas, outdoor fitness areas, and informational or educational signage.

- 16. North Richmond Green Street Corridor Conversion of two street segments (Parr Boulevard and Market Avenue) to "Green Streets" with bicycle and pedestrian improvements and plantings which may help reduce localized flooding. These street segments would connect to Fred Jackson Way, which is already planned to become a Green Street in the near future.
- 17. North Richmond Green Benefit District When organizations receive grants to plant trees or gardens in the community, there is often not enough funding to continue to water and care for these trees and gardens over time. A Green Benefit District would create a pool of funds to be used for this purpose, with the goal of hiring community members to care for community green spaces.
- 18. Goodrick Avenue Bay Trail Connector Bicycle and pedestrian improvements along Goodrick Avenue, connecting the existing path that parallels the Richmond Parkway to the Bay Trail that begins at Dotson Family Marsh, next to the Richmond Rod and Gun Club. This would allow community members to more safely walk or bike to Point Pinole Regional Shoreline.
- 19. Interpretive Center at the West County Wastewater District An environmental education center at the wastewater treatment plant would provide educational and recreational programs, exhibits about the North Richmond shoreline, and amenities such as drinking fountains, concessions, and a garden. It would be a destination that people could walk or bike to using the Bay Trail or Wildcat Creek Trail.
- **20. Tap Water Testing, Education and Outreach** Information about the source and quality of the tap water in North Richmond, along with a way for residents to have their tap water tested, verify whether it is safe to drink, and address any concerns they might have.
- 21. Community Water Resource Guide A document containing information about North Richmond's rainwater, creeks and other bodies of water, tap water, and wastewater. The guide (available in English and Spanish) would also include answers to frequently asked questions about water in North Richmond, and which agencies residents can contact for information if they need assistance or are experiencing any problems.
- **22.** Water Conservation Programs Information about programs to promote responsible water use to help residents, landlords, and businesses save water, including the possibility of providing recycled water (treated wastewater) for irrigation or construction use in the community.
- 23. Horizontal Levee at the West County Wastewater District If the wastewater treatment plant is flooded by rising sea levels, wastewater could back up drains into toilets, sinks and showers. A horizontal levee is a constructed marsh habitat that would act like a giant sponge, protecting the wastewater treatment plant from flooding, providing habitat for wildlife and a beautiful shoreline trail for residents to enjoy.
- 24. K-12 Environmental Education with Field Trips Classroom lessons in which students learn about their local environment, including the ways in which people and wildlife use water and how to keep it clean and available for all to enjoy. Educational programs would include free field trips to local creek and shoreline parks, to give students the opportunity to learn, play, and explore outside in nature.
- **25.** Rheem Creek Realignment though Dotson Family Marsh The part of Rheem Creek that flows into the Bay could be converted from a straight, narrow channel to a more natural creek that would flow into Dotson Family Marsh. This would improve water quality and habitat for local wildlife and help protect the shoreline from rising sea levels.

Community Project Prioritization

Under COVID-19 shelter-in-place restrictions in Spring 2020, The Watershed Project staff utilized a combination of digital outreach and "snail mail" to solicit community feedback on the projects. They printed handouts that included contextual information about the needs assessment and initial findings, a map and information about the 15 projects, and a survey and a pre-paid return envelope Leveraging existing community contacts, they sent these mailers to 62 community members in English or Spanish depending on their preference.

The Watershed Project also created a landing web page (available in English or Spanish) with more detailed information, images, and maps of each of the 15 projects and a Google Form version of the survey. The link to this web page was printed on the mailer sent to community members and also emailed to 15 existing contacts. The Watershed Project also shared Instagram and Facebook posts with their 1,512 followers, directing North Richmond residents to the online survey. They provided individual phone support to residents who experienced any technical difficulties with the survey and mailed a gift card stipend to each community member who completed the survey.

In the survey, TWP asked community members to rank seven different types of water-related improvements: solutions to flooding during the rainy season; more green spaces, parks, and opportunities for walking and biking; improvements related to drinking water quality; more water conservation measures; protections against rising sea levels; creating or restoring habitat for wildlife such as fish and birds; and education or access to information about North Richmond's water on a five-point scale: not needed at all, not urgently needed, somewhat needed, definitely needed, or most urgently needed. Community members rated all seven of these types of improvements as being needed, but when asked to prioritize them, the following three emerged as top priorities:

- 1. Solutions to flooding during the rainy season
- 2. More green spaces, parks, and opportunities for walking and biking
- 3. Improvements to drinking water quality

Similarly, on average, community members rated all 15 of the possible projects as being at least somewhat needed, but when asked to prioritize them, the following seven projects emerged as top priorities:

Tier 1 (highest priorities)

- North Richmond Pump Station Upgrade
- Tap Water Testing, Education and Outreach

Tier 2

- Flood Risk Reduction in the Rheem Creek Watershed (Rollingwood)
- Wildcat Creek Trail Improvements

Tier 3

- K-12 Environmental Education with Field Trips
- · Green Benefit District
- Green Street Corridor

Understandably, community members indicated that they are interested in addressing immediate health, safety, and quality of life issues first, specifically drinking water safety and flood prevention. "Flood prevention" in this case encompasses both stormwater flooding and flooding as a result of sea level rise, because the distinction between these causes of flooding is still somewhat unclear to many community members. After addressing these immediate issues, community members prioritized projects that would create more access to parks and green space. Residents appreciated these projects both for their recreational benefit to North Richmond community members and for the opportunity to restore habitat and provide benefits to wildlife.

Community members also reiterated the importance of community education, which emerged as a priority during the interviews and workshops in Spring 2019. Residents expressed that they valued programs that would introduce children to new experiences and knowledge, and stressed the importance of education, transparency, and following plans through with implementation as ways to build trust between agencies and the community. One community member shared,

"In the area where I live, there are a lot of very important projects being proposed but not carried out... I hope some of these projects are completed to see changes in North Richmond."

Despite the physical, emotional, and financial challenges experienced by many as a result of the COVID-19 pandemic, community members shared that they were grateful for the opportunity to continue their involvement in planning for community improvements:

"I am just very happy that we able to work on much needed community improvement. Thank you."

"This was very informational."



Photo: Anne Bremer

Next Steps

Next, working from the list of possible projects identified with the North Richmond community, TWP will engage with stakeholders and partners to finalize project proposals and seek funding for implementation. The Watershed Project will work with stakeholders to identify and engage the primary project applicant, and provide grant-writing, design, or other support. They will share updates and obtain feedback at meetings with stakeholders and community members.

The Watershed Project will also participate in and implement the DACTI Program Tap Water Quality Testing program in West Contra Costa County. They will work with East Bay Municipal Utility District (EBMUD), other government agencies, and other DACTI Program outreach partners in the EBMUD service area to identify existing testing resources and barriers to their use. TWP will adapt the pilot tap water quality testing program from East Palo Alto to align with the circumstances and communities of West Contra Costa County.

References

Alvarez, A.M. & Pfuehler, E., (2017, February). *Preserving a Marsh for People and Wildlife: The Dotson Family Marsh.* National Recreation and Park Association. https://www.nrpa.org/parks-recreation-magazine/2017/february/preserving-a-marsh-for-people-and-wildlife-the-dotson-family-marsh/

California Environmental Protection Agency and Office of Environmental Health Hazard Assessment. (2021). *CalEnviroScreen 4.0.* [Map] https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

Gonzalez, J., Brown, J., and Woodfill, L., Gibbons, S., Strickland, J., Guardian, S., (2017 October). *North Richmond Community Visioning: Outreach and Survey Findings. The Watershed Project*. San Francisco Estuary Partnership. https://thewatershedproject.org/wp-content/uploads/2018/06/TWP-Final-Report.pdf

Healthy Richmond. (2019). *North Richmond Quality of Life Plan*. https://healthyrichmond.net/wp-content/uploads/2020/03/Qol-digital-english.pdf

Mithun. (2018 May). North Richmond: A Priority Resilience Area. Resilient By Design. https://thewatershedproject.org/wp-content/uploads/2018/06/RbD_HomeTeam_FinalReport-May2018.pdf

Riley, A., (2016, September 20). *In Loving Memory of Lillie Jones*. Never Gone. http://www.never-gone.com/memorials/Candles.aspx?m=d07/KFRqbP58ZUWIQ0WEOg%3D%3D

Riley, A. L., (1989) The Wildcat-San Pablo Creek Flood Control Project and Its Implications for the Design of Environmentally Sensitive Flood Management Plans. (Rep. PSW-110). USDA Forest Service Gen. Tech. https://www.fs.fed.us/psw/publications/documents/psw gtr110/psw gtr110 j riley2.pdf

Seltenrich, N. (2012, April 5). Reclaiming the Richmond Shoreline. *Bay Nature*. https://baynature.org/article/reclaiming-the-richmond-shoreline/

Urban Tilth. (n.d.). *Wildcat Creek Trail Visioning Project*. Retrieved February 2, 2022 from https://www.urbantilth.org/earth-care/wildcat-visioning-project/

5. Tribal Needs Assessment Summary



Photo: Karl Nielsen

Introduction

California Indian Environmental Alliance (CIEA) was created in 2006 at the request of impacted California Tribal leadership and Tribal members to address the toxic legacy of mercury left over from the California Gold Rush. Their mission is to "protect and restore California Indian Peoples' cultural traditions, ancestral territories, means of subsistence, and environmental health." Since 2003, CIEA has worked in partnership with Tribes in Northern California, over ninety (90) Tribes today, to increase Tribal participation within the decision-making bodies that affect water quality and to identify strategies to address environmental destruction and resulting toxins that keep families from fishing cultures wherein fish play an important cultural, spiritual, and nutritional role.

CIEA's programs are Mercury Tribal Health, Tribal Self-Advocacy, and Leadership Programs. They provide health education to healthcare providers and community members on ways to avoid mercury and PCBs in fish. CIEA piloted the first Women Infant and Children's (WIC) curriculum, providing nutritional information on wild-caught and store-bought fish. The Self-Advocacy program provides tools for Tribal leadership to advocate on their own behalf with the goal that Indian Nations are at the table whenever decisions are being made that affect traditional Tribal lands, resources, and Tribal members. One of CIEA's guiding principles is that Indigenous Peoples have a right to eat traditional foods and set environmental cleanup standards for their cultural continuance.

CIEA staff continues to provide training to American Indian Health clinics, health care providers (for Continuing Medical Education or CME) and directly to the public. CIEA has successfully worked with California Tribes, the Office of Environmental Health and Hazard Assessment (OEHHA), and the California Department of Public Health (CDPH) to develop materials and clear messaging. Over time, their advocacy work and resulting leadership of partnering Tribes has become stronger and their goals have shifted to creating a future where fish are available at subsistence levels throughout the state. CIEA now provides technical support to this end. Today, CIEA is the Tribal Engagement Coordinator for the North Coast Resource Partnership (NCRP), wherein they coordinate Tribal Representative Elections, water strategy workgroups, and advisory committees, and provide Technical Assistance. In the San Francisco Bay IRWM Region, CIEA coordinates gathering Tribal Advisory Committees, Technical Assistance, and is coordinating and implementing changes to the San Francisco Bay Area IRWM Coordinating Committee governance structure to include Tribes. CIEA has partnered with Tribes to conduct needs assessments within four key IRWM regions; in the Sierra/Sacramento River, Mountain Counties, the North Coast, the San Francisco Bay, and Bay Delta. They are also spearheading a campaign to create new tools for Indigenous Peoples to require cleaner water quality standards under the Clean Water Act.

CIEA supports Northern California Tribes in applying new Tribal beneficial use definitions to develop safer water quality objectives for the Basin Plan Amendments to the Central Valley, San Francisco Bay, and North Coast Regional Water Quality Control Boards (Regional Water Boards). CIEA will support Tribal engagement for Northern California Tribal efforts to regionally designate traditionally used water bodies under the "new" statewide beneficial use definitions, "Tribal Subsistence Fishing" and "Tribal Cultural Uses." These new definitions are now legally defensible under the Clean Water Act (CWA). In addition to meaningful Tribal inclusion, long-term benefits include increased protections for water quality. Integration of the two new Beneficial Uses has been determined as a priority by each Regional Water Board for all four plans. CIEA is currently working to engage 81 San Francisco, Central, and Northern California Tribes to support Tribal engagement and participation in the update process. For Tribal subsistence, CIEA will provide training on how to complete fish consumption and cultural use surveys; build consensus on final recommendations to each Regional Water Quality Control Board; organize and coordinate two planning meetings per basin plan, and provide travel support for Tribal cultural practitioners and staff to attend Regional Water Board meetings and hearings (32 participants to attend Regional Water Board hearings). Tribes will determine which water bodies in their regions need these definitions applied, and the associated water quality objectives. CIEA will then assist Tribes in coordinating testimonies and identifying criteria to support the need for cultural beneficial uses on specific water bodies during different times of the year.



The ancestral lands of the Amah Mutsun Tribal Band, now part of Pinnacles National Park.

Photo courtesy of Alex Tavizon

Integrated Regional Water Management

AB-52 Tribal Consultation requires Tribes to request in writing notification of proposed projects in Tribal footprint areas where proposed projects may have a significant impact. CIEA works with Tribes who are working to increase state agency outreach and consultation to reach Tribes in the source water and receiving water areas. CIEA maintains that consultation should be conducted with Tribes when their cultural resources will be affected by a project. Water is a cultural resource and by consulting only with those in the footprint area the state is not meeting its responsibility of prior and informed consultation.

The Delta Conveyance Project proposes new intake facilities which will remove a total of 6,000 cubic feet per second (cfs) from Northern California to be transferred to Southern California. This limits the possibilities for how surface and groundwater can be enhanced by restoration and enhancement of natural systems, and impacts the footprint and surrounding environment and habitat negatively, making it unsustainable and detrimental to the environment. This plan largely focuses on how much water can be stored and diverted instead of focusing on how upland meadows, slowly meandering streams and rivers supported by wide riparian zones, and wetlands could greatly enhance groundwater sequestration and slowing surface water flow, which would provide water in wildlands for fire protection and cooling water for fish habitat. CIEA is in discussion with California Tribes to put an end to this project and present environmentally friendly and sustainable alternatives spearheaded by Tribes. CIEA and Tribes are in conversations with the Department of Water Resources (DWR) to convince them of the negative impacts of this particular project. They are hopeful that DWR will recognize and listen to the expertise of Tribes who have been stewarding the land since time immemorial. The Delta Conveyance Project is similar to other projects proposed in the past by governors of California only with a different name. CIEA is advocating for DWR to work more closely with Tribes to create a more sustainable plan for California that has less of a detrimental impact on both the environment and the Native American people of California.

Introduction and Methodology

The San Francisco Bay is home to many Tribes. During CIEA's initial outreach, they reached out to all Tribes with ties to historical use and subsequent management responsibilities in the Bay Area including Federated Indians of Graton Rancheria, Lytton Band of Pomo Indians, Kashia Band of Pomo Indians of the Stewarts Point Rancheria, and Mishewal Wappo of Alexander Valley. Some of these Tribes expressed interest in participating but due to capacity issues were not able to join at this time. Others wanted to provide other Tribes within the San Francisco Bay Area the opportunity to expand and grow their capacity, but asked to be kept informed as the work continues.

The survey was developed through consensus at a Tribal Advisory Committee meeting with five Tribal partners in September 2019, including:

- Amah Mutsun Tribal Band/ Amah Mutsun Land Trust
- · Association of Ramaytush Ohlone
- Him-r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok
- Indian People Organizing for Change (IPOC) / Sogorea Te' Land Trust
- Muwékma Ohlone Tribe of the San Francisco Bay Area

This process was used to build trust amongst these Tribal partners and build a stronger relationship between CIEA and the Tribal partners. CIEA continued to meet with Tribal partners throughout this process to continually engage them, and added a new Tribal partner, Napa Suscol Intertribal Council in 2020. While Indian People Organizing for Change (IPOC) / Sogorea Te' Land Trust helped to create the survey, in late 2019 they chose to focus their efforts internally and not complete the needs assessment process.



Pictured from left to right:

Adam French of the Amah Mutsun Tribal Band, Brenda Morris and Ruth Orta of the Him-r^n Tribe at the Tribal Needs Assessment presentation to the Department of Water Resources on February 14, 2020.

Photo courtesy of Alex Tavizon

CIEA's five Tribal partners of the San Francisco Bay Area who completed the needs assessment surveys were:

- Amah Mutsun Tribal Band/ Amah Mutsun Land Trust
- Association of Ramaytush Ohlone
- Him-r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok
- Muwékma Ohlone Tribe of the San Francisco Bay Area
- Napa Suscol Intertribal Council

It is worth recognizing the significant difference in the membership of each Tribe and the resulting wide range in the number of responses from individual Tribes. For example, two of the four participating Tribal partners have fewer than 50 members, while the other two have a membership base of over 500. This is not due to lack of representation in the San Francisco Bay Area but due to active members.

CIEA staff provided the survey from April 24, 2019 through December 1, 2020 using an online digital service, fillable PDF, and paper surveys to Tribal environmental directors, Tribal administration, leadership staff, Tribal elders and members at large. The Tribes of San Francisco Bay Area agreed upon this style of surveying to better encompass an aggregate result of their Tribal communities. Each Tribe who completed this survey has traditional territory within the San Francisco Bay Area. Three of the five Tribal partners have territories that overlap with IRWM regions in funding areas adjacent to the San Francisco Bay Area region.

The needs assessment process was delayed due to the COVID-19 pandemic. CIEA and their Tribal partners had planned major events to gather survey responses and to hold face-to-face discussions about regional Tribal needs, initially to be held in Spring and Summer 2020. For two of these events, two of the Tribal partners expected to have about 200 participants combined at their events. Due to state shelter-in-place directives and because of the risk of endangering Tribal elders and other participants, they postponed these events for a later date. At the time that this report is being published there are still concerns over COVID-19, and these events remain on hold.

In order to continue the needs assessment process during the COVID-19 pandemic, CIEA moved efforts to an online format that yielded 56 additional results across the four Tribal partners. The fact that this online process did not allow Tribal Chairs and Council members to introduce and endorse the survey in-person likely undermined Tribal community engagement and reduced overall response rates. CIEA and the San Francisco Estuary Partnership agreed, therefore, that this report is an initial submission. CIEA continues to conduct follow-up interviews with Tribal partners individually to review their results and to receive additional and/or clarifying information. As part of the DACTI Program, these follow-up conversations are intended to provide additional information about what support is needed by Tribes and Tribal members in the region.

These Tribal Needs Assessment results and the information in the attached appendices are provided in aggregate to protect sensitive information and maintain the anonymity of the Tribes that responded. This enabled Tribes to share transparent and honest answers without the concern that there will be direct or indirect negative outcomes.

San Francisco Bay Area IRWM Tribal Needs Assessment Executive Summary

The majority of the findings presented in this Executive Summary and the full final Needs Assessment Report stem from the Tribal Needs Assessment Survey, which consisted of a combination of closed-ended, open-ended, and multiple-choice questions organized in specific sections focused on Tribal background, demographic information of survey respondents, water access and water quality, environmental issues and watershed-level concerns (e.g. stormwater and flooding, climate change, sea level rise, sources of contamination), fire preparedness and emergency response, other challenges in Tribal communities, and awareness of and participation in IRWM processes.

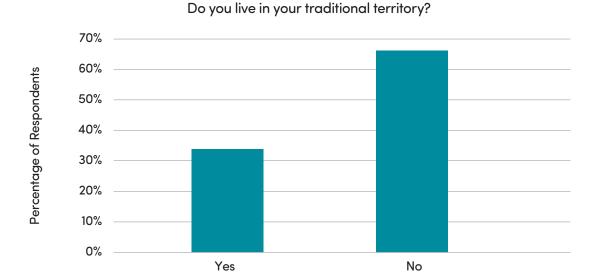
In total, 56 members from the four Tribes participated in the survey. Respondents included Tribal elders, leaders, and general members representing a diversity of age groups and geographic locations. Just over half of these respondents (52%) reported living in urban areas, while 34% resided in suburban areas, and 13% lived in rural areas. It is notable that only 31% of respondents reported living within their Tribe's ancestral territory. This finding underscores the high levels of displacement of Tribal members from their traditional territories throughout the San Francisco Bay Area and adjoining regions, due both to historical colonization processes as well as ongoing socioeconomic challenges such as the region's high cost of living and widespread gentrification. This displacement has not, however, severed the Tribes' connections to these territories nor has it removed the responsibility of Bay Area Tribal members to steward and provide balance to the lands nor, negated the need for access to traditional foods, medicines, and water for subsistence and cultural uses within the region. The fact that a significant number of Tribal respondents reside outside the San Francisco Bay Area region as a result of this displacement means that a portion of the findings reported here correspond to water systems and environmental conditions in geographic locations outside the Bay Area. Additionally, the ancestral territories of some Tribal communities extend beyond the boundaries of the San Francisco Bay Area IRWM region, heightening their responsibilities and costs related to participation and inclusion in IRWM-related resource management activities within multiple IRWM regions.



Ruth Orta, Chairwoman of the Him-r^n Tribe, speaking at Alcatraz about her family history and Tribal heritage.

Photo courtesy of Him-r^n Ohlone

As this graph shows, out of all Tribal respondents, only 31% live on their traditional Tribal lands.

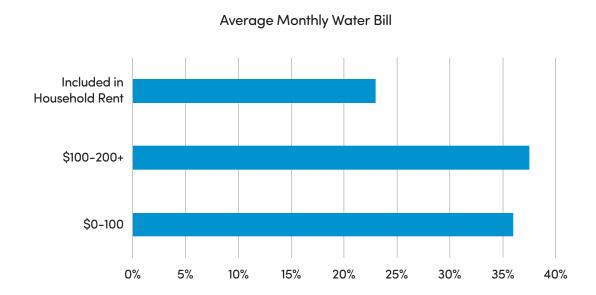






Water Access and Affordability

With regards to water access and affordability, 36% of survey respondents reported a monthly average water bill of \$0-100, while 37.5% reported a monthly cost of \$100-200+, and 23% reported that their monthly water costs were included in their household rent. Broadly, 23% of those surveyed stated that they had experienced difficulty paying for monthly access to water, a concerning finding that requires follow-up investigation. Additionally, 43% of respondents stated that they purchased bottled drinking water, with 72% of this group paying between \$0-50 per month and 14% paying between \$50-100+ monthly for drinking water. Of those purchasing drinking water, 32% reported experiencing difficulty with this expense, a detail that also requires additional investigation and in particular the need to identify solutions for these Tribal members.





When asked about drinking water quality, 18% of survey respondents rated their water quality as poor, 41% considered their water to be of fair or tolerable quality, 23% rated their water as good quality, and 17% considered their water to be of excellent quality. Respondents were largely unaware of the last time their water had been tested to be compared with safe quality standards, and a large majority (71%) expressed an interest in having their household water supplies tested for quality. In addition to the 43% of respondents who reported purchasing bottled drinking water, 36% reported drinking filtered tap water. Together, these findings highlight a widespread avoidance, and potential mistrust, of direct consumption of tap water, a condition that can contribute to significant additional household expense and environmental impacts caused through the purchase of bottled water. As the Needs Assessment process with other communities in the San Francisco Bay Area region and elsewhere has shown, public mistrust of tap water quality is widespread and requires additional investigation and follow-up in many contexts, including with Tribal households.



Environmental Issues and Watershed-Level Impacts

Tribal respondents expressed a wide variety of concerns around environmental issues and watershed-level impacts, many of which were linked to specific geographic locations. Site-specific issues included concerns over pollution of waterways by various sources and contaminants (e.g. chemicals from agricultural and industrial processes, sewage, trash and illegal dumping, homeless encampments, etc.); flooding of homes, roads, and other infrastructure; and erosion. Some of the broader environmental issues mentioned by respondents included climate change impacts such as higher temperatures, growing wildfire risks, sea level rise and saltwater intrusion, drought, declining and over-drafted water supplies, air pollution, declining native plant diversity, and problems with invasive species, pests and disease vectors like mosquitoes. In addition to concerns over these environmental impacts, a number of respondents mentioned impacts to cultural practices and resources or Tribal beneficial uses of natural resources. These include concerns over reduced access to ancestral waterways and landscapes for traditional ceremonies, subsistence and resource gathering, and direct impacts to important cultural sites (including burial sites). Follow-up activities are needed to understand and discuss strategies to address these concerns for both environmental and cultural impacts.

Emergency Response and Fire Preparedness

When asked about emergency response plans and fire preparedness, a majority of survey respondents (64%) reported having no emergency response plan, and 50% of respondents stated that they would appreciate assistance in developing such a plan. When asked if their Tribe or Tribal community needed fire preparedness assistance, 27% of respondents answered "yes," 8% of respondents replied "no," and 52% of respondents answered "I do not know." Similarly, when asked if they would be interested in receiving funding for fire preparedness, 27% of those surveyed said "yes," 21% said "no," and 34% responded "I do not know." These responses coupled with the increasing frequency and intensity of wildfires in the San Francisco Bay Area and California in general, suggest a need for follow-up related to emergency response generally and fire preparedness in particular. There is an opportunity for municipalities to communicate with residents and with Tribal staff and leadership in their regions about any existing emergency response plans.



The ancestral lands of the Amah Mutsun Tribal Band, now part of Pinnacles National Park.

Photo courtesy of Alex Tavizon

Specific Challenges

When queried about specific challenges within their Tribal communities, respondents nearly unanimously (96%) pointed to the high cost of living as a challenge to housing within their traditional territories. When asked about factors limiting access to Tribal culture in their communities, many respondents highlighted issues related to separation from and lack of access to ancestral lands, and associated resources such as traditional foods, including aquatic fish and shellfish, native plants, and medicines. Other issues mentioned by multiple respondents included a lack of educational opportunities and knowledge resources in addition to the ongoing intergenerational trauma linked to colonization and settler colonialism. When asked about other issues impacting their Tribal communities, respondents pointed to problems such as limited job opportunities, poverty, lack of federal Tribal recognition, and limited activities for children towards cultural continuance. When asked about ways to address or overcome these diverse challenges, respondents offered an array of ideas including suggestions for returning land to Tribal communities, creating access opportunities within ancestral territories, improving educational and recreational opportunities, supporting cultural revitalization including activities for youth and emerging leadership, and providing more affordable housing.

Familiarity with IRWM

Only a small percentage (11%) of surveyed respondents expressed familiarity with the IRWM process in the San Francisco Bay Area, likely reflecting those Tribal members who are participating in the Tribal Advisory Committee or facilitating the Needs Assessment and related IRWM activities under the Disadvantaged Communities and Tribal Involvement (DACI/DACTI) Program.

Highlighted Needs Assessment Questions and Responses

Tribal participation in the IRWM Program is challenging for a number of reasons related to IRWM boundaries. Simply stated, this is because the traditional territory of a Tribe often does not align with IRWM boundaries. Half of the responding Tribes indicated that their ancestral homelands and areas of Tribal responsibility are in more than one IRWM region either because of their current physical location, or because IRWM regional boundaries cut across their Tribal traditional aboriginal territories. For some Tribal members, displacement from ancestral territory means they currently reside in regions outside of those territories where they have cultural responsibility for stewardship, and where they want to focus engagement in IRWM efforts.

Only 34% of respondents stated they lived on their traditional territories, which highlights the disparities between being able to live on their traditional territories and being forced out due external factors such as gentrification, cost of living, and other issues resulting from colonization and settler colonialism. This pressure was also a reason CIEA and Tribal partners scheduled out-of-area events to gather survey results': there is an increased cost of hosting meetings within the Bay Area, and there was a need to accommodate Tribal members who do not live in their traditional territories.







The highest rates of concern (32%) were associated with pollution of creeks from chemicals or trash. A few respondents said that homeless populations living near creeks were a concern. One respondent specifically cited that "Silver Creek in San Jose had issues." Another respondent stated that there were issues in the locations of "Plata Arroyo Park, Hayward regional Shoreline area, and Alameda Creek." One respondent said they were "concerned about the quality of creek runoff into the ocean." For those responding about out-of area pollution concerns, respondents cited "urban runoff in downtown Long Beach, and the Sulfur Bank mine adjacent to Clearlake."

Water quality problems from soil or animal waste was an issue for 20% of respondents, and of these responses again "Plata Arroyo Park in San Jose" was indicated as a problem area. Another respondent said, "Alameda Creek had issues." Out of region concerns were related specifically to the "cattle farm pollution in Hanford, California."

Flooding was a concern among 23% of respondents. One respondent said that they live three houses down from the creek and that they have worries about flooding. Another said they were worried about flooding at Plata Arroyo Park in San Jose. For those respondents that stated that flooding was a concern, CIEA has initiated follow-up to receive specific information. These areas could be identified for future IRWM implementation projects. The question of flooding yielded additional information wherein 20% of respondents stated that road flooding was their concern. There was a higher number than expected for house flooding specifically: 12.5% of respondents indicated this was their concern. One respondent said they live on the Hayward fault and there was concern about flooding because of earthquakes. One of the responses related to house flooding didn't list a specific concern and as a result, additional details have been requested.

Park flooding was a concern for 11% of respondents and two respondents listed Plata Arroyo Park as a flooding issue. Another respondent said yes, that park flooding was a concern and follow-up will be needed to ask them to specify their specific concern and the location.

Sewage from manholes was a concern for 12.5% of respondents. In this questionnaire section, Plata Arroyo Park in San Jose and Cameron Street in Hanford were listed as problematic for manholes and sewage. In relation to garbage, one response noted that household waste is a huge problem. Another respondent said Big Silver Creek in San Jose near Muwékma Ohlone territory was an area of concern.

Erosion from flooding was a concern for 16% of respondents. One respondent listed Plata Arroyo Park in San Jose as a concern, and another said that erosion from flooding is a concern. Follow-up is being conducted to identify specific needs to address erosion control.



Pescadero Beach on Amah Mutsun Tribal Band traditional territory.

Photo courtesy of Alex Tavizon



Sea Level Rise and Salinity Intrusion

The first question in this section asked respondents about the impact of sea level rise and sea water intrusion on the respondents' Tribe or their Tribal community. Responses included loss of ancestral lands and cultural resources that will be under water, a worry about an increase in territoriality and fighting, and that there would be further restrictions for Tribes to access resources and cultural sites. The core concern was related to flooding and loss of land, that "sea level rise and sea water intrusion would be bad because our lands are on the coast," including concern for some that they are "already under sea level" and further erosion or events would inundate them. This is worth noting in regional climate adaptive strategies especially where human rights and environmental justice are concerned. For Tribes, especially those in coastal communities, the loss of traditional territories and resources must be elevated because Tribes cannot practice their place-based cultures or steward their territories in another place. Loss of traditional territory is irreplaceable. Another respondent worried "that it will change the shape/function of the coast." There is widespread concern that sea level rise will result in ocean inundation of cultural sites and a revealing of burial sites and remains. Protection of these places should be included in collaboration with regional Tribes in any plan to address climate change. This must be done in a way that protects the anonymity of the site so as not to alert those intending to desecrate Native cultural sites.

Because there is a cultural and nutritional need to maintain traditional food sources for Coastal Tribes, animals, birds, and other species that rely on intertidal and ocean foods sources, there is a general concern that more needs to be done to save the environment.

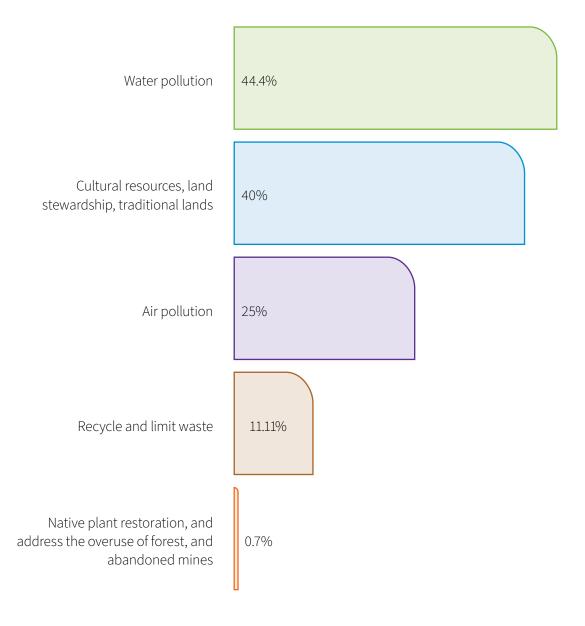
Tribes are worried for the general population in addition to their own members, that sea level rise will threaten Central coast agriculture and food supplies.

Respondents stated their Tribe is not prepared for sea level rise and increased environmental catastrophes, and that they need more research, review of modeling, and assessment of options for mitigation so they can make regional recommendations and engage in activities to protect resources and culturally sensitive areas.

One of the respondents had written a piece on the potential "partial law of symmetries" along the coast, which may be related to the need to review international law and sea level rise as well as enter into policy and water-related work.

Overall Priorities of Tribes

The following were the top environmental priorities identified by Tribal participants:





Lands owned by Suscol Intertribal Council in Napa are managed to promote ecosystem health, including wild mushrooms, some of which are then harvested as a culturally important food.

Photo: Alex Tavizon

The following were the priorities that Tribes identified:

- Resilience to sea level rise
- Need for climate change mitigation and adaptation
- Land management/restoration for water quality
- Restoration of cultural and fire practices
- Responses to catastrophic wildfires like those in California and Australia
- Connecting knowledge systems for environmental stewardship, e.g., connecting helpful parts of western science with Indigenous knowledge is a top priority
- Erosion, sea level rise, and temperature rise
- Removing invasive plants to grow our Native plants
- Need clean water to grow Native plants
- Health effects, affordable drinking water, and food farmed. Reduction of pollution and clean water
- Cleaning up waterways and creeks
- Cultural resources, stewardship, traditional ecological knowledge sharing
- Water quality and communal wellness aligned with environmentalism is a top priority

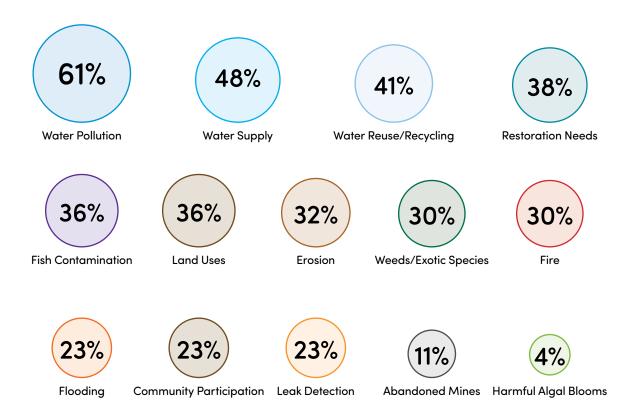


Revegetated riparian corridor on Amah Mutsun Tribal Band traditional territory.

Photo courtesy of Alex Tavizon

Primary Issues Affecting the Watershed(s)

Respondents were asked about the primary issues affecting their watershed(s), and what topics they would like to be covered in a workshop on watershed assessment and management. Respondents were provided with a list to choose from and at the end had the availability to be open-ended. The following are the responses identifying the primary issue by highest percentage; these percentages closely follow the priority topics identified by respondents for a watershed assessment and management workshop:



CIEA is conducting follow-up with these respondents to gain additional information to confirm that planned trainings are tailored for these needs, and then to schedule trainings as part of the DACTI Program. For example, 'leak detection' could refer to different needs for pipes, storage tanks, etc.; 'fire' could refer to how to manage forests to reduce chances of large catastrophic fires using controlled burning or the need for water storage tanks or fire hydrants; and for many issue areas there may be a need for trainings on how to identify regional point sources of toxins. There are some trainings like those for fish contamination that CIEA can provide online given COVID-19. They already have trainings prepared using PowerPoint presentations developed for Tribal families, California Native American health centers, and Bay Area Women, Infant and Children (WIC) clinics on how to continue to eat traditional fish while avoiding or reducing toxins. There were additional training and workshop needs captured in the notes sections after each question. Of these most were listed above, with the exception of a request for funding, and the need for environmental cleanup information and trainings.

Climate Change

One respondent wrote "many Tribal members live in the Central Valley where living conditions could get worse with pollution heat and aridity." Similarly, drought was a concern for another. Respondents were concerned that the "cultural resources in the ocean may be impacted by climate change and the opportunity to revitalize Tribal culture will be affected." Another who taught earth science stated "that with improved air quality they could focus on how to adapt with extreme cold winters and hot summers. There is concern for regional wetlands and native plant diversity." One respondent wrote that "there is so much fire fuel over the lands, which would be addressed in part by Tribal traditional burns." There is concern that cattle ranching ruins the land and is a cause of climate change, whereas traditional cultural practices and Indigenous stewardship protect against climate change. Concerns were also expressed that there will be less access to waterways for traditional ceremonies and gatherings, and less access to fresh water. One respondent said, "we need to be educated about climate change." Another respondent stated, "rising water tides." One respondent wrote, "climate changes have led to abundant fires and drought locally." According to another respondent, "traditionally stewarded territories are drastically changing, ecological systems are shifting, and our traditional homelands are in danger due to settler impacts and a lack of Indigenous stewardship." There is concern that Santa Cruz, in particular, is very vulnerable to climate change due to sea level rise, flooding, drought, and fire.



The first ceremonial arbor in the Bay Area, constructed on property owned by Suscol Intertribal Council, is used as a place for gatherings, ceremonies, and rituals of numerous Native American Tribes throughout the United States.

Photo: Alex Tavizon

Tribal respondents identified the following ways to address these environmental concerns. Answers to this open-ended question included:

- · Let Tribes monitor [and steward] the land
- Renewable energy, near the Monterey Bay windy area but with careful consideration since some strategies may kill birds and/or animals
- Solar energy
- Utilize watershed[s] for traditional foods, fresh water and as a great environmental benefit to Tribe
- Fuel reduction
- Land restoration
- Environmental work
- Restrictions on land use and water uses
- Textile recycling
- Return land to Tribes, return to what they had before as restoration goals
- · Petition and rally to possibly create and change policy of water
- · Land stewardship programs, training of communities on healthy practices
- Changes to system, including anarchy and/or use of collaborative management model

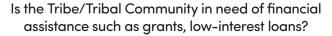
Follow-Up to Needs Assessment Findings

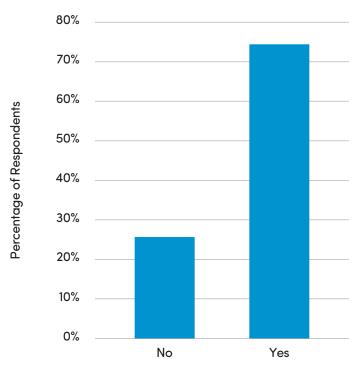
The following are planned activities based on some of the priority identified needs:

Tribes did indicate they are interested in geospatial technology and mapping, but did not give details on the level of training needed. There are a variety of skill sets among users: some are able to use GPS technology to gather data and generate maps documenting historical features; others conduct data entry. The goal is to attend free online training courses offered by the Bureau of Indian Affairs (BIA) Geospatial Division Branch, or if needed hire San Francisco Estuary Institute or other trainer(s) for follow-up classes.

Tribes indicated a need for grant writing or administrative support, stating that there is a lack of staff time available to complete proposals. Other comments identified a need for funding to support Tribal planning and to support the development of successful grant applications. One participant stated, "grant writing is not the issue, it is finding grants." This respondent requested a grant resource list. Other participants expressed a need for specific trainings and support for IRWM proposal development.

Additional Tribal comments were related to a need for training to support water quality sampling to address compliance concerns.





This graph represents the need Tribes have about financial assistance support and capacity-building. 74% of respondents identified this as a concern.



Ceremonial white sage and herbal smudging stick made by Deja Gould and Johnella LaRose of Sogorea Te' Land Trust/Indian People Organizing for Change (IPOC).

Photo courtesy of Alex Tavizon

Process of Surveying and Follow-up with Tribes

In the initial meeting the following question was asked, "Why complete another survey that may not result in issues being addressed?"

This question is not surprising given the experience of many Tribes and Tribal members, who that feel they are superficially studied repeatedly, with little benefit from the outcomes of those studies.

During the first DACTI Program orientation meeting held in October 2018, Tribes expressed concern about the lack of available funding to support meaningful participation in the program, as well as a lack of funding for technical assistance. Tribes requested that funding be set aside specifically for them to participate. This is being provided through the DACTI Program through CIEA. With the funding secured, CIEA convened participating Tribal partners of the Bay Area in a Tribal Advisory Committee, which provides a space for inter-Tribal dialogue and review and approval of project processes and outcomes. The Needs Assessment was the first step to identifying what should be offered and be asked among each of the Tribes.

For the presentation, CIEA was advised to use qualifying statements, to minimize the promise of assistance that might not be available. Tribal participants expressed general discouragement at use of the word "may" as included in the outreach presentation (Needs Assessment May Result in Potential Technical Assistance & Capacity Building). This created challenges and prompted extensive explanations, as Tribes requested a description and detailed information as to the nature of benefits that could be received if they participated in the DACTI or related IRWM programs.

It is important to know what is available and to ensure that Tribes themselves guide how funds will be spent so that the program best meets the needs of Bay Area Tribes.

In follow-up interviews and meetings, participating Tribes identified CIEA as the organization they preferred to conduct initial follow-up questions after completion of the Needs Assessment. Tribes indicated that once the needs assessments and follow-up interviews are completed, a contractor, state agency, or the Tribe themselves with their own staff capacity would provide technical assistance for the Tribal organizations and Tribes. After Tribes choose who they trust and hire, the technical assistance provider will work hand in hand with them to do onsite evaluations and recommendations for workplan activities to develop a potential project.

When Tribes were asked to advise on future outcomes of the needs assessment, future services, and the DACTI Program, participants suggested that convening of Tribes throughout the region would be most beneficial. There was consensus that a formal group discussion would ensure that the assessment is not misinterpreted and would allow Tribes to collectively decide what could be provided to them throughout the life of the program. The Tribes were in consensus that they are best positioned to interpret the results of their Tribal Needs Assessment for their people and to collectively identify solutions that will work best for their individual Tribe. To ensure this opportunity, the Tribal Needs Assessment report will be provided to participating San Francisco Bay Area Tribes for review and next steps development.



Amah Mutsun Tribal Band Chairman Val Lopez with Tribal youth at summer camp outing to Pescadero Beach.

Photo: Alex Tavizon

DACTI Program and Technical Assistance Programs Eligibility

Early on in the planning process, Tribal participants agreed that the DACTI Program should prioritize support and technical assistance to Tribes who are not state or federally recognized, or to small communities ineligible to receive funds as a public water system. This perspective is aligned well with the overall purpose of the DACTI Program as Tribes originally envisioned: to support those in need, and to supplement what state and federal programs cannot fund.

Governance Structure Participation and Inclusion in the IRWM Plan Updates

There are decades-long issues with Tribes being unrepresented in decision-making bodies. Participating Tribes in some IRWMs do not want to fall under a Coordinating Committee IRWM umbrella without Tribal representation in the Coordinating Committee. Providing designated space for Tribal participation in the Coordinating Committee would ensure that there is meaningful representation by Tribal leadership to advocate for their membership when projects are being considered. The best way to move forward is to encourage and include Tribal representatives at the highest levels of decision-making bodies.

There are examples of successful Tribal participation in governance structures that allow for a process to select a Tribal representative and a designated alternate. These were discussed at the March 2020 San Francisco Bay Area Technical Advisory Committee (TAC) meeting. Following these conversations, the Coordinating Committee has allocated two to three seats to specifically be shared among the Tribes and Tribal partners of the Bay Area.

Tribal Oversight of the San Francisco Bay Area DAC Program including Tribal Advisory Committee

Tribes have expressed dissatisfaction with the program name "Disadvantaged Communities" (DACs) because it carries a negative connotation and doesn't reflect the condition of Tribes. Tribes asked for the name to be changed to the Disadvantaged Communities and Tribal Involvement Program, or DACTI Program. Adding the word "Tribes," best captures the unique political status of Tribes, who are not just stakeholders. Tribal governments have responsibilities to their Tribal citizenship, and state and federal agencies have responsibilities to Tribes as acknowledged in the U.S. Constitution, in multiple legal statutes, and by Executive Orders. At the request of Tribal participants, the DACI Program began to be called the DACTI Program in order to respect the special status of Bay Area Tribes and Tribal participants.

San Francisco Bay Area Tribes continue to express agreement that a funding area-wide Tribal Advisory Committee (TAC), is the best way to guide the Tribal DACTI Program. The TAC serves to both encourage Tribes to participate in the DACTI Program and in their own IRWM regions.

As of June 2019, there were five Tribes in the San Francisco Bay Area interested in joining a funding area-wide San Francisco Bay Area TAC to support this DACTI Program. Starting December 2020, CIEA met with the TAC about seven times. The four Tribal partners, none of whom had been in the same room at once, agreed to collaborate to the benefit of this program. The goals are to ensure that Tribes in the region benefit from the remaining years the program will be in place, including needed technical assistance, workshops and training, developing adequate needs assessments, governance structure guidelines, and any other documents or tools created for the Tribes of the San Francisco Bay Area.

Recommendations and Next Steps

- 4. Recognize the DACI, or DACTI, Program as unique and acknowledge its potential for filling service gaps for which many Tribes are unable to find support. Tribes recommend that both federally recognized and federally unrecognized Tribes are supported through the DACTI Program, and that federally unrecognized Tribes be specifically considered for assistance since other federal options are generally not afforded to them.
- 5. Encourage communication between water providers and the Tribes they service. Provide contact information for regional water providers so that Tribes can reach out to address needs, potentially develop collaborative projects, and find out about quality of the drinking water Tribes are receiving. Obtain and share with Tribes the results of the needs assessments from water purveyors in each IRWM region. Ask water purveyors if they know which Tribes they serve and when was the last time they contacted or met with those Tribes.
- 6. For water source resilience there is a need for Tribes to secure secondary or alternative sources of water from different water sources or aquifers to ensure continuity of water supply for their territories to maintain cultural practices and subsistence.
- 7. Identify a bulk storage tank purchase solution because this need is shared by many Tribes in the San Francisco Bay Area region. This need is for both potable and non-potable water sources. In some cases, Tribes need these tanks to be separate so that fire suppression sources are protected.
- 8. Follow up with Tribes who have documented failing infrastructure, document specific needs, including the scope of upgrades, and identify an appropriate funding source.
- 9. Ensure access to water/fire hydrants in emergencies, recommend that Tribal staff and/or leadership are trained as regional fire responders with the appropriate fire hydrant wrench(es), access, and link into a network of water tender "tankers" that are stored for use in the local area.



Photo: Ben Botkin

Training Recommendations

- 1. Hazardous Waste Operation and Emergency Response (HAZWOPER) training: coordinate with Tribes to be sure the training contains the elements respondents need. These can be tailored.
- 2. Program Planning and Management, both IRWM-related and generally: could perhaps invite any who may want to apply to attend Round 1 recipient trainings to see how the process works ahead of time.
- 3. Geospatial trainings can range from very detailed map creation to how to use existing data/programs. More information needs to be gathered and the courses that were well received should be repeated near those that need this.
- 4. Grant writing trainings, templates of successful grants both generally and specifically for IRWM proposals, and lists of grants to which Tribes could apply. CIEA, DWR, Department of Toxic Substances Control (DTSC), EPA, and State Water Resources Control Board have each been gathering these lists; CIEA proposes combining them and linking these in a web hub. Funding to do this could come from multiple sources and San Francisco Bay Area DACTI program can link to that site.
- 5. Provide trainings in: water quality sampling, board governance structuring, visualization software, nonprofit background and information training, and obtain tools for monitoring such as plankton and microplastic monitoring.

Recommendations to Increase Tribal Participation in IRWM Programs

- 1. Dedicate a Tribal Engagement Coordinator or dedicate staff to update Tribal contact lists so that Tribes receive meeting invitations, project solicitations and up-to-date information that enables them to participate in the IRWM Program. In the San Francisco Bay DACTI Tribal Contact List multiple staff and Tribal council persons are included whenever possible including the Tribal Environmental or Natural Resources Director, Tribal Administrator, Member(s) of the Tribal Council, and Tribal Historic Preservation Officers, or others as identified by the Tribe.
- 2. CIEA recognizes the cost associated with outreach and Tribal engagement, therefore the San Francisco Bay Coordinating Committee, Roundtable of Regions and the San Francisco Bay Technical Advisory Committee itself should recommend to the state that there be future IRWM funding and that it includes support specifically for Tribal engagement funds.
- 3. Tribes expressed the importance for the IRWM Coordinating Committee to understand that Tribes have unique political designations as sovereign governments. Federal, state, and local governments have constituencies and responsibilities to protect those interests. Tribes are nations with governing bodies and therefore have similar roles and responsibilities with the added challenge of maintaining cultural continuance of their people.
- 4. Coordinating Committees should include language in their IRWM Plan and related scoring criteria to incentivize funding projects led by Tribes, and encourage projects that support cultural beneficial uses, access to water, and Traditional Ecological Knowledge. This can be in the scoring criteria for project selection and could be supported by intentionally involving Tribes as project partners.
- 5. Project proponents should be required to provide a letter of support from the Tribe(s) listed whenever they state that their project will benefit Tribes. This is especially important when a project proposal can receive increased project ranking if it benefits Tribes or DACs.
- 6. Future IRWM rounds should provide incentives for interregional IRWM collaboration. In many cases, it would be beneficial to collaborate and share resources, and to work with adjacent IRWM funding regions to apply in both regions for overlapping projects. IRWM funding regions could choose to collaborate with neighboring IRWM funding regions to co-fund projects where the project footprint or benefit overlaps with other adjacent IRWM funding regions to result in broader watershed-wide solution-oriented projects.

6. Regional Connections

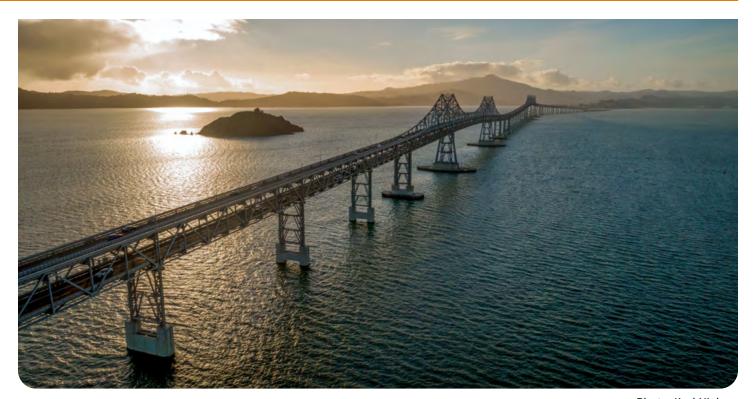
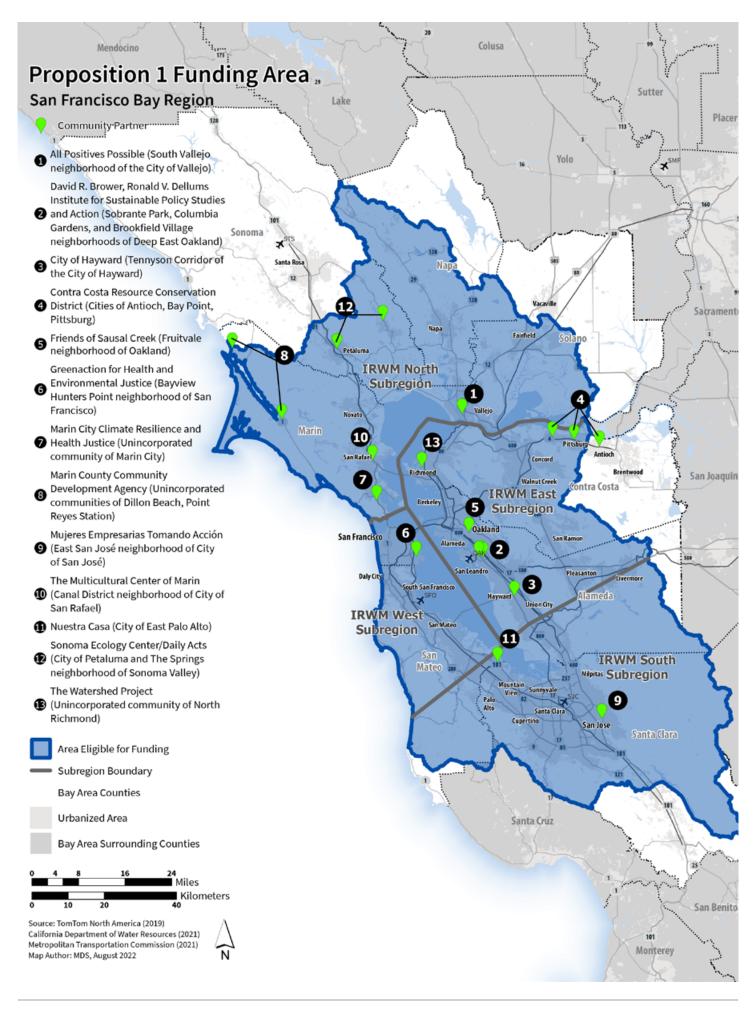


Photo: Karl Nielsen

The Bay Area DACTI Program, in collaboration with Disadvantaged Community and Tribal Partners, used a community and Tribal-specific strategy to develop tailored needs assessment surveys for each focus area. Despite the differences in survey design and methodology, the results showed consistently similar priorities for water management across every location. At the local level, the problems experienced by Disadvantaged Communities and Tribes could be seen as isolated incidents but when reviewed holistically, they present a powerful picture of the systemic effects of decades of racist disinvestment in these communities.

The needs assessments identified these top priorities across all of the Disadvantaged Communities and Tribes surveyed:

- Drinking Water: including water quality, affordability, and related infrastructure
- Flooding: including flooding as a result of storms and resulting overflowing of creeks and storm drains, as well as sea level rise and groundwater rise
- Trash and Litter: including dumping sites and general litter
- Contamination and Pollution: including from industrial sites and other point sources as well as nonpoint sources impacting both land and waterways.
- Green Space: including quantity, accessibility, and quality of recreational green spaces



Needs Assessments Top Priorities











These categories interrelate with one another. Contamination and pollution can impact drinking water quality as well as exacerbate flooding issues if community members must wade through contaminated water. Flooding can also exacerbate contamination issues. For example, many toxic sites are at risk of being exposed by sea level and groundwater rise. Trash and illegal dumping can clog storm drains and exacerbate flooding, and can also contribute to green spaces feeling inaccessible if they are not well maintained.

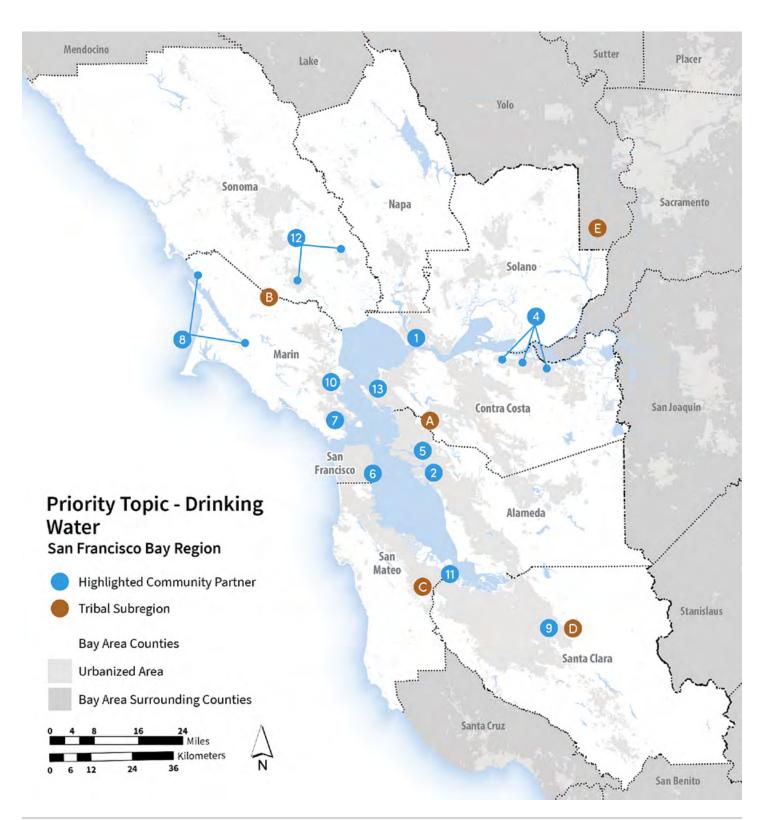
Furthermore, these priorities are intersecting as the result of decades of systemic inequity and injustice. Low-income, African American, Latino, Asian, and Indigenous communities are more likely to live in areas that have been the last to receive funding and upgrades and are more likely to have older tap water infrastructure. Renters with lower incomes are the most likely to have their tap water turned off due to lack of payment, and some fear retaliation if they complain about water quality or other plumbing issues that would cost the owner money to fix. Pollution and hazardous waste from industrial areas, such as refineries and oil wells, highways and warehouses—often located near Black and Brown economically disadvantaged homes and workplaces—can leach into and contaminate drinking water supplies. Trash and illegal dumping often proliferate in economically struggling areas where there is a lack of trash cans, enforcement, and adequate refuse pickup services, though landfills are often located in or near low-income Black and Brown communities. Additionally, even when available, trash service can be unaffordable for low-income communities and encampments of people experiencing homelessness, and high tipping fees at landfills can cause people to dump illegally nearby. Trash and illegal dumping that gets into streets and storm drains can exacerbate flooding issues by clogging drainage. Standing water and flooding due to inadequate and clogged drains systems can carry pollutants from runoff. Green space and green infrastructure can mitigate flooding hazards, but these projects are sorely missing in many Disadvantaged Communities and Tribal locations in the Bay Area.

Most importantly, all of these issues identified by Disadvantaged Communities and Tribes in the Bay are intimately connected to health. Poor tap water quality can cause a variety of negative health effects. Flooding can carry pollution in runoff and contributes to mold and mildew, which can cause negative respiratory impacts. Industrial pollution and hazardous contamination contribute to disproportionately high chronic disease rates. Ultimately, these issues of water pollution and lack of access to clean water and green space accumulate and are manifested in the body. The water issues identified by the participating partners intersect with overarching issues imposed by systemic inequity and injustice including unemployment, underemployment, housing insecurity, public health, and safety. Due to this intersectionality, funding agencies should coordinate to address water-related issues holistically, because water is intimately connected to housing, jobs, and, most importantly, public health.



Many Disadvantaged Communities and Tribes in the Bay Area reported concerns about the safety and quality of drinking water from the tap. Some expressed concern about the role that aging infrastructure plays in water quality, and concern about the lack of agency renters have to address infrastructure issues. Many community members reported relying on bottled water for cooking and drinking.

In addition to drinking water quality, many Disadvantaged Communities and Tribes also mentioned concerns about water affordability, which has been highlighted by the COVID-19 pandemic. The unaffordability of water necessitates calculated trade-offs with other needs for those on tight budgets. This is exacerbated for groups with concerns about the quality of their tap water who, in addition to a water bill, buy bottled water for cooking or drinking.



- 1 All Positives Possible (Vallejo) Drinking water was identified by community members as brownish/discolored and foul smelling. Some residents report a connection between poor water quality and feeling negative health effects, which causes anxiety when drinking water, cooking, or bathing. Many residents feel they have no choice but to purchase bottled water, causing further financial burdens on low-income residents.
- Brower Dellums Institute for Sustainable Policy Studies and Action (Deep East Oakland: Brookfield Village, Columbia Gardens, Sobrante Park) Respondents expressed concerns about polluted drinking water, including taste, cloudy appearance, smell, and cost.
- 4 Contra Costa Resource Conservation District (Antioch, Bay Point, Pittsburg) Taste of water and unsafe drinking water are top priorities. Some participants noted that they buy bottled water for their animals to drink—that is the extent to which they felt their tap water is not safe to drink.
- Friends of Sausal Creek (Fruitvale District, Oakland) Many participants expressed concern that their tap water isn't safe to drink, and many buy purified water to cook and drink. Participants were also concerned about the rising cost of water.
- **Greenaction for Health and Environmental Justice (Bayview Hunters Point)** One-fifth of residents rated their drinking water as bad and almost another fifth rated theirs as poor.
- Marin City Climate Resilience and Health Justice (Marin City) Most residents were concerned about the quality of water in Marin City and use bottled water as their main water source. Many respondents connected poor quality of water to health issues.
- 8 Marin County Community Development Agency (Dillon Beach and Pt. Reyes Station) In Dillon Beach more than half of respondents have water quality concerns. In Pt. Reyes Stations over a third have water quality concerns. In both locations, taste of water is an issue.
- 9 META (East San Jose) Safety of tap water was the top concern. Many participants buy bottled water for cooking and drinking. Specific concerns cited include: water is brown or yellow and tastes/smells like bleach. Other priority issues include old infrastructure, and the cost of water.
- Multicultural Center of Marin (Canal District, San Rafael) Many community members feel that faucet water is not safe, and have concerns of possible health effects. Specific concerns about tap water cited include: water being unclear, having an unusual color, being cloudy, and having a chlorine or metallic smell. Many homes rely on purchased bottled water.
- 11 Nuestra Casa (East Palo Alto) Three quarters of respondents report buying bottled water for cooking and drinking. Respondents indicated that water quality depends on location and believe that expensive water is of better quality. There is concern about the environmental effects of buying so much bottled water. Specific water quality issues identified include: water is brown, yellow, rusty, black, cloudy, contaminated, tastes bad, smells bad, smells of chlorine, smells of bleach, causes health issues including rashes, burns skin, people's hair falling out, and eyes burning.
- Sonoma Ecology Center and Daily Acts (Petaluma and The Springs) Many people, especially in the Latinx community, do not trust tap water for drinking. Many people are choosing to purchase bottled water or filter their tap water in place of drinking water directly from the tap.
- 13 The Watershed Project (North Richmond) Almost half of respondents experience problems with their tap water and many choose to drink bottled water.
- A East Bay Tribes Forty percent of respondents stated they noticed a difference in the quality and taste of their water. Additionally, most of the East Bay subregion residents stated they pay between \$10-\$50 extra a month on bottled water and/or five-gallon jugs for drinking water purposes.
- North Bay Tribes The Tribal organizations desire to have their water tested since well water is the source of their drinking and cooking water. They host large gathering sites for Tribal ceremonies where clean water is necessary. Respondents were also concerned about how climate change affects water quality and supply.
- Peninsula Tribes Respondents have all experienced some fluctuation in taste. All respondents identified they would like their tap water tested against the standard of the region. Half of respondents said they have had trouble paying for drinking water and identified access to affordable water as a priority. Half of respondents have experienced disruptions in their water service. Half of respondents identified having enough water as a concern.
- South Bay Tribes Eighty-eight percent of respondents have noticed a difference in their water quality while living in their communities. Some Tribal members have stated that they taste chemicals in their water, or note a slight metallic smell, or that it is a bit gritty, and over time they developed less trust in their water quality. One-third of respondents rated the quality of their water as poor. Forty-four percent used bottled water for cooking and for mixing baby formula because they do not trust their tap water sources. All of South Bay subregion residents stated they pay between \$26-\$75 extra per month on bottled water and/or five-gallon jugs for drinking water purposes. A third of respondents said they have trouble paying for their drinking water.
- Tribes living outside of the SF Bay Region Fifty-seven percent of respondents stated they use a different method for cooking and cleaning than their tap water. Forty percent of respondents pay over \$100-\$150 on their water bill a month. Thirty-eight percen of respondents stated they have trouble paying their monthly water bill.

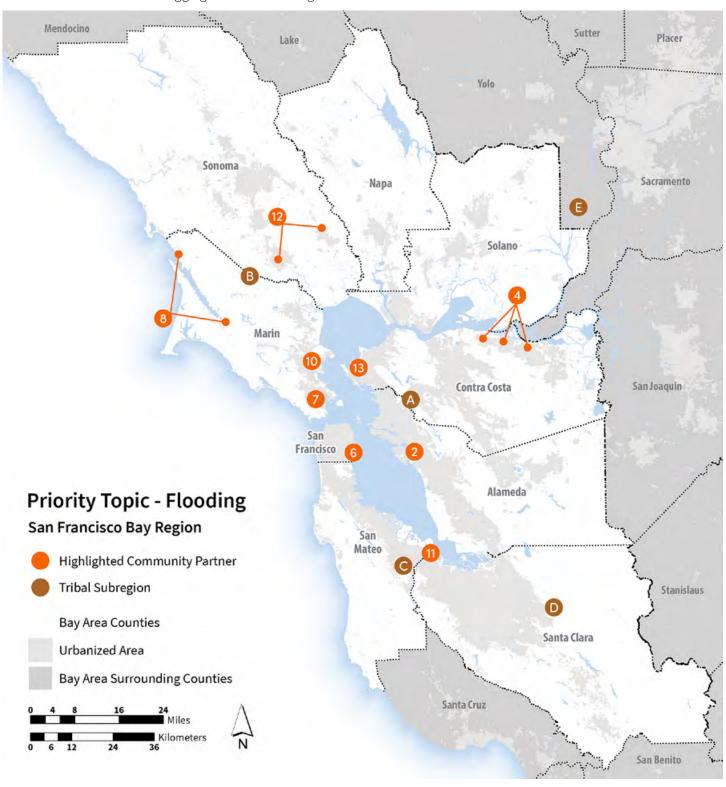
Many Disadvantaged Communities and Tribes in the Bay Area reported concerns about flooding related to storm surges, sea level rise, and groundwater rise. Flooding also causes a variety of other issues related to:

26) Public Health: Flood waters mix with contaminated materials that communities and Tribes are exposed to, or must wade through.



- 27) Transportation Access: Flooding cuts off access to homes, community centers, grocery stores, doctor's offices, and other important areas.
- 28) Infrastructure: Flooding damages or destroys critical infrastructure, including utilities such as electricity and gas, which can endanger public health.

Many Disadvantaged Communities and Tribes also express concern over trash, illegal dumping, and storm drains clogging with debris during flood events.

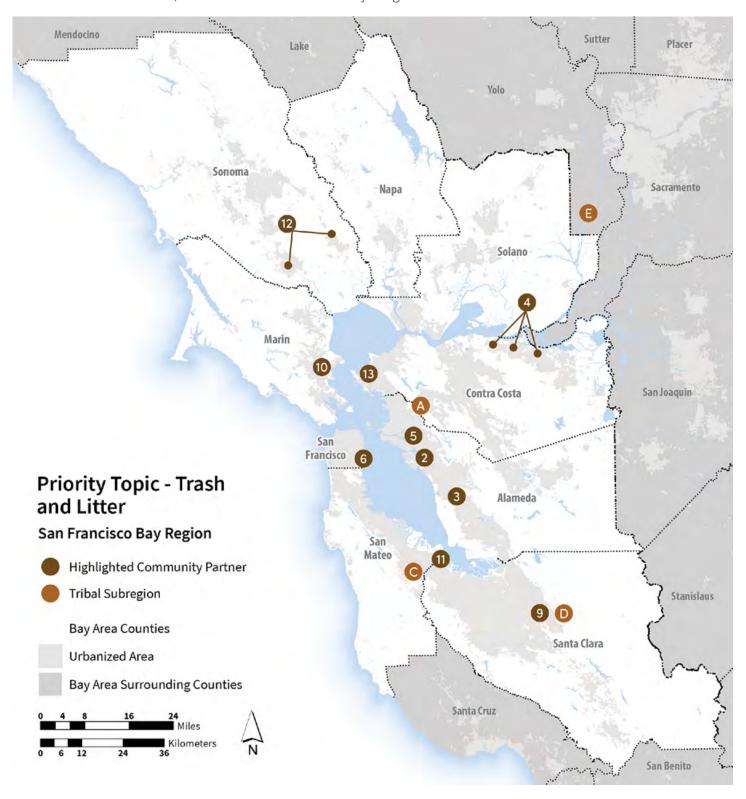


- 2 Brower Dellums Institute for Sustainable Policy Studies and Action (Deep East Oakland: Brookfield Village, Columbia Gardens, Sobrante Park) Flooding was one of the biggest issues raised in the needs assessment. Residents expressed concern that drainage lines are inadequate to handle the rainy season. This type of flooding disrupts pedestrian access to sidewalks.
- 4 Contra Costa Resource Conservation District (Antioch, Bay Point, Pittsburg) Respondents are concerned with poor drainage and problems during king tides or long periods of rain. In listening sessions, participants said that flooding due to blocked storm drains is associated with neglected waterways, storm drains, homes and commercial areas. Antioch participants also mentioned a sewage smell.
- Greenaction for Health and Environmental Justice (Bayview Hunters Point) Sixty-three percent of respondents are concerned about vulnerability to flooding and sea level rise. Sea level rise and storm surges could cause flooding of many of the hazardous and radioactive waste contamination sites, transportation infrastructure, and utilities along the waterfront. Toxic materials and waste beneath the surface could be dredged up and exacerbate public health risk of the area.
- Marin City Climate Resilience and Health Justice (Marin City) Flooding was the top concern expressed by respondents. Marin City is subject to flooding from stormwater, groundwater emergence, and sea level rise. Chronic flooding has twice shut down southbound traffic completely on Highway 101. Residents refer to the area as "the bowl without a spout." Community members must wade through contaminated floodwaters to access necessary services. Recurrent contaminated floodwaters create other public health impacts.
- Marin County Community Development Agency (Dillon Beach and Pt. Reyes Station) Dillon Beach: 27% of respondents were concerned about flooding of drinking water wells; 17% flooding from storm surges. In Pt. Reyes Station, 64% were concerned about flooding outside of town interfering with access in and out of town. 56% were concerned with flooding within the town, and 40% were concerned with homes along creeks flooding.
- Multicultural Center of Marin (Canal District, San Rafael) "Stormwater accumulation" is the second most important priority for this community: heavy rain floods the streets and limits access to markets, community centers, schools, and residents' homes. Trash in streets can clog drains and exacerbate flooding issues.
- 11 Nuestra Casa (East Palo Alto) After drinking water quality and infrastructure and pipes, flooding was the next most identified issue, noted by 38.6% of respondents (275). Many respondents said they would use any available public funding for flood control measures. In the listening sessions, many mentioned several areas that were said to flood severely in the winter.
- Sonoma Ecology Center and Daily Acts (Petaluma and The Springs) Stormwater was one of the top issues that flood streets (67% of respondents), trails or sidewalks (32%), cause erosion (23%) and sewage-manhole overflows (14%), a public health issue.
- The Watershed Project (North Richmond) 73% have personal experience with flooding including difficulty walking or driving, and damage to infrastructure including flooding of homes, or potholes in streets. Other related concerns include sea level rise and vulnerability of the wastewater treatment plant, and trash or other pollutants in floodwaters.
- A East Bay Tribes Respondents said they see road flooding in Union City. Respondent stated strong concern about the potential for sea level rise to expose burial sites and remains. Respondents also expressed concern regarding destruction of ancestral homelands and inundation of their territories due to rising sea levels.
- **B** North Bay Tribes Respondents have stated that downtown urban areas of Napa and the Napa River have flooded severely and are due for more intense flooding in the future.
- Peninsula Tribes Respondents have identified this as a concern but did not provide further follow-up.
- South Bay Tribes Respondents stated that Alma Avenue floods often along with Plata Arroyo Park. Tribal members identified a strong concern about the potential for sea level rise to expose burial sites and remains. Also, they are concerned about the destruction of ancestral homelands and inundation of their territories due to rising sea levels. Tribes want to use Traditional Ecological Knowledge (TEK) to combat sea level rise and erosion (e.g., planting native species and continuing cultural practices for stewarding the land).
- Tribes living outside of the SF Bay Region Numerous respondents have identified the most hazardous flood areas and have provided specific locations including addresses that get inundated. Respondents have also said that with the sea levels rising it will change the shape and function of the coast. Some members shared that during their lifetime they have noticed the effects on the wildlife and changes to the way of the land. They have also seen water agencies try to prepare for the sea levels rising, however; the aid given was insufficient.



Many Disadvantaged Communities and Tribes in the Bay Area report concerns about illegal dumping and trash in streets that ends up in storm drains and surrounding water bodies. This concern was often linked to crime, disinvestment, and lack of services as well as to housing insecurity. Trash and litter that backs up storm drains can exacerbate flooding issues and result in Disadvantaged Communities and Tribal members wading through contaminated standing water.

Waterway pollution and contamination – including oil, plastic, and paint - was further detailed under this problem, as Disadvantaged Communities and Tribal members connected the street level trash with their concerns with the pollution and contamination in creeks and other waterways. One community member summed up the health effect on the community, "Fish eat the plastic, and then we eat the fish, and the other animals and everyone gets sick...".



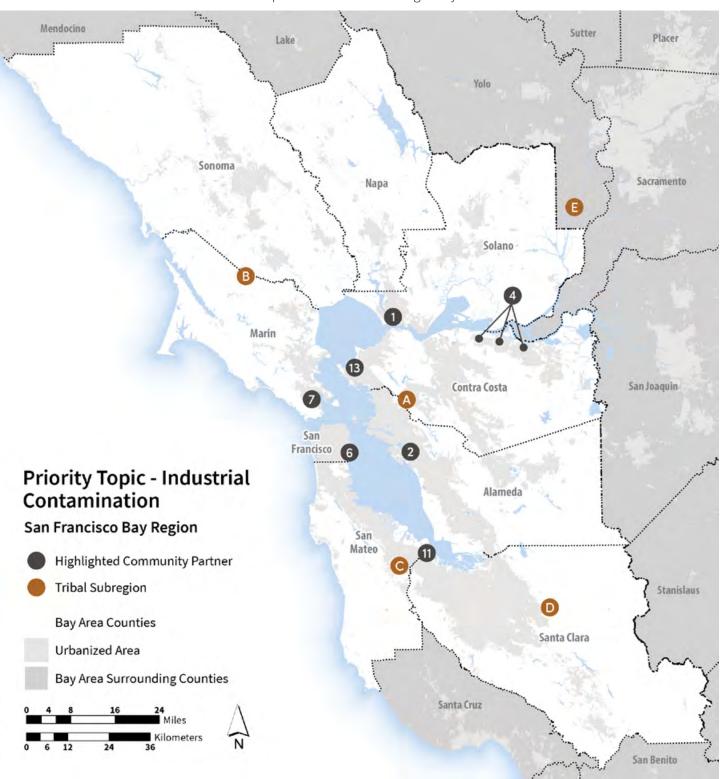
- Brower Dellums Institute for Sustainable Policy Studies and Action (Deep East Oakland: Brookfield Village, Columbia Gardens, Sobrante Park) Illegal dumping was the third most identified issue through the needs assessment process and was particularly highly identified through the San Leandro Creek water survey.
- 3 City of Hayward (Tennyson Corridor) Pollution, litter, and plastic going into the ocean were identified as issues.
- 4 Contra Costa Resource Conservation District (Antioch, Bay Point, Pittsburg) Polluted stormwater and trash in creeks, waterways, and streets were among the most common problems identified in the listening sessions. In surveys, litter in streets and storm drains was most frequently chosen as the top priority. 67% of survey respondents identified it as an issue in their community and 40% of survey respondents said it was the issue they would address first. Illegal dumping was also identified as an issue contributing to trash on roadways.
- Friends of Sausal Creek (Fruitvale District, Oakland) Illegal dumping and trash in streets and in storm drains are identified as top concerns and some attribute the increase to the homeless encampment growth in Oakland and a lack of security and enforcement of laws in the community.
- **6** Greenaction for Health and Environmental Justice (Bayview Hunters Point) 55% of respondents are concerned about illegal dumping.
- 9 META (East San Jose) Trash was one of the top three issues identified by Spanish-speaking respondents.
- Multicultural Center of Marin (Canal District, San Rafael) Trash was observed floating in the streets of the neighborhood during and after big rains, causing clogged drains and unsightly neighborhoods.
- 11 Nuestra Casa (East Palo Alto) 23.8% (170) respondents identified litter/trash as an issue in East Palo Alto. In the listening sessions, many mentioned worries about trash/litter pick up and control, better waste management, including more trash cans, and cleaning trash from storm drains.
- Sonoma Ecology Center and Daily Acts (Petaluma and The Springs) The primary trash and dumping issues reported were trash and small litter, large illegally dumped items, and homeless-camp waste, all of which were thought to have impacts on water quality.
- 13 The Watershed Project (North Richmond) Respondents were concerned about the amount of trash or other pollutants in floodwaters.
- A East Bay Tribes Respondents identified trash accumulating in empty lots, next to the freeway, and heading out to Oakland and San Lorenzo. Trash also accumulates in Alameda Creek, off the Hayward Shoreline, and Lisjan Creek.
- Peninsula Tribes All respondents indicated that trash is a major concern. Respondents mentioned that the ocean and beaches are full of trash and debris and that ends up in the ocean and further adds to the ocean trash mass that continues to destroy sea life, fish and other aquatic life.
- South Bay Tribes Respondents identified Guadalupe Creek as a trash dumping site and a homeless encampment. 85% from the South Bay identified pollution in creeks from chemicals or trash as a concern. Trash and homeless encampments along highways and along freeways 101, 680, and Balboa Avenue were mentioned as trash dumping sites. Large homeless encampments are along the intersection of Monterrey Road on Highway 82.
- **Fig. 1 Tribes living outside of the SF Bay Region** Fresno and Marina were identified as trash dumping points.

Many Disadvantaged Communities and Tribes in the Bay Area report concerns about industrial and hazardous contamination, and how this contamination and pollution can get into waterways, and ultimately into peoples' bodies through exposure and/or ingestion.



There are many sources of hazardous and industrial contamination and pollution in communities: old gas stations, dry cleaners, and highways contaminate groundwater and pollute stormwater runoff, exposing Disadvantaged Communities and Tribal members to toxins in waterways and possibly leaching into drinking water supplies.

Clogged storm drains from trash and illegal dumping can cause contaminated runoff and flood waters to back up in Disadvantaged Communities and Tribal areas, resulting in residents wading through these contaminated waters to access important services such as grocery stores and work.

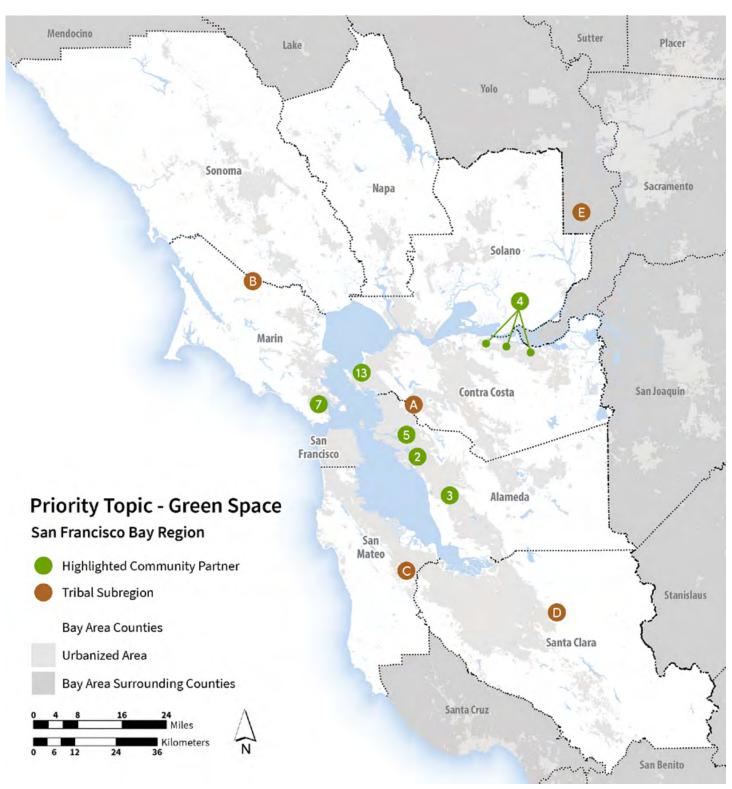


- All Positives Possible (Vallejo) South Vallejo has historical and current pollution from many sources, including the Old Sperry Flour Mill, Mare Island Former Naval Base, the Ryder Street Wastewater Treatment Plant, the old 7-Up Plant, the former Pacific Gas & Electric Manufacturing Gas Plant, and other companies, some of which have closed down, leaving their contamination behind. Some polluters have further impacted community health through incidents such as the NuStar Energy explosions that sent toxic particles into the air. Additional polluters attempting to start business in Vallejo have been stopped by community activism.
- **Brower Dellums Insitute for Sustainable Policy Studies and Action (Deep East Oakland)** Salt water incursion pushes existing polluted groundwater closer to the surface where it can infiltrate into sewers, buildings, etc.
- **Greenaction for Health and Environmental Justice (Bayview Hunters Point)** 64% of respondents are concerned about industrial/hazardous contamination.
- Marin City Climate Resilience and Health Justice (Marin City) Current and historic sources of pollution and toxic environmental conditions are creating serious health consequences in the community. Those sources include one unassessed Superfund site and possibly others. Residents are concerned about chemicals and petroleum contaminants or residue persisting in the soil, as well as contamination from the shipyard area, flood water containing toxins, contamination from Highway 101 stormwater runoff, lead pipes, and sewage leaks. Longtime residents share reports of toxic dumping as part of wartime industry. Prior to the Gateway Shopping Center there was both a dry cleaner and a gas station located on the property, and three kerosene stations throughout the community.
- 8 Marin County Community Development Agency (Dillon Beach and Pt. Reyes Station) Listening session participants voiced concerns about contaminated fish and Keller Canyon landfill pollution.
- 11 Nuestra Casa (East Palo Alto) 27.8% (198) respondents indicated that industrial contamination is an issue in East Palo Alto.
- 13 The Watershed Project (North Richmond) Community members hope to see protections from sea level rise along the shoreline, where the landfill and wastewater treatment plant are at risk from flooding and thus severe pollution problems.
- A East Bay Tribes Respondents were concerned with pollution of Hayward Shoreline and Alameda Creek.
- **B** North Bay Tribes Respondents stated they do not trust Napa County's reporting on water sustainability. They are concerned about pesticides and other chemicals being used for grapes.
- Peninsula Tribes Some top priorities of respondents include ocean pollution, land use, air pollution, abandoned mines, and harmful algal blooms.
- O South Bay Tribes Respondents reported that parks and spaces such as local and traditional creeks are highly polluted by human waste, trash, and invasive species.
- Tribes living outside of the SF Bay Region Respondents identified Clear Lake as a massive Tribal concern due to the mercury and other chemical pollutants and a sulphur mine that is polluting Clear Lake. Fresno and Marina are trash dumping points. Madera has polluted creeks and rivers from the spraying of pesticides.



Many Disadvantaged Communities and Tribes in the Bay Area report concerns about lack of access to green space and nature for recreation. Many Disadvantaged Communities and Tribal members felt that there were few well-lit, safe, nearby green spaces where children and families can recreate. There is also limited access to existing spaces: folks don't know where to go or how to get there, or parks that are considered safe are too far away. This includes bodies of water such as creeks, rivers, and the ocean.

Many Disadvantaged Communities and Tribes that participated in the Bay Area DACTI Program have historically been excluded from green public spaces, and/or have been the last to receive green infrastructure improvements. Disadvantaged Communities and Tribal members mentioned lack of trees and plants along sidewalks in their areas. Lack of greenery is also connected to lower physical and mental health.



- 2 Brower Dellums Institute for Sustainable Policy Studies and Action (Deep East Oakland: Brookfield Village, Columbia Gardens, Sobrante Park) Lack of park space and lack of safe attractive access connecting parks were the most identified issues in the needs assessment process.
- 3 City of Hayward (Tennyson Corridor) Respondents identified community gardens and access to food as priorities, as well as depaying and more green spaces, beautification, and celebrating Hayward's water assets.
- Contra Costa Resource Conservation District (Antioch, Bay Point, Pittsburg) Listening session participants communicated the need for more water for park landscaping, better access to shorelines, safer fishing, as well as safe drinking fountains in parks. Antioch listening session participants want safe places to view and access the river. Some mentioned reducing homeless encampments along the waterfront, access to recreation facilities, and outreach fairs or festivals sponsored by water districts. Bay Point residents mentioned the need to improve access to safe parks and trails.
- Friends of Sausal Creek (Fruitvale District, Oakland) The lack of public parks and green space was one of the top identified issues. Many of the respondents felt that there were few safe, outdoor recreational spaces for children and families and very little access to creek and green spaces.
- Marin City Climate Resilience and Health Justice (Marin City) Marin City does not have a community green space for gatherings and recreation.
- The Watershed Project (North Richmond) Community members feel there are not enough safe, accessible outdoor places for recreation in North Richmond and would like to see more parks, green space, and amenities such as lighting and drinking fountains on existing trails. On their post-surveys, 23% of residents wrote that they hope to see more urban greening, green infrastructure, or parks.
- A East Bay Tribes Tribal Members cannot afford to live on their traditional territories, and because Tribes of the Bay Area don't have land, it's difficult for them to access green spaces for recreation and cultural practices, either because they cannot afford them or because their cultural sacred sites are now owned by private companies and landowners.
- **B** North Bay Tribes Tribal members stated there is a lack of access to state parks and traditional land bases. They are required to request access to spaces that are reserved or owned privately in order for them to gather medicinal plants and basketry materials for ceremonial purposes. Poor water quality puts Tribal members at risk of contaminants and other pollution, and prevents them from being able to access cleaner, safe materials and water.
- Peninsula Tribes Respondents stated there is a lot of access to beaches, different parks, and community gardens; however, beaches are full of trash and there are homeless encampments in parks.
- South Bay Tribes Respondents stated that parks and spaces such as local and traditional creeks are highly polluted by human waste, trash, and invasive species.
- E Tribes living outside of the SF Bay Region Similar to the East Bay Tribes, Tribal Members cannot afford to live on their traditional territories, and because Tribes of the Bay Area don't have land, it's difficult for them to access green spaces for recreation and cultural practices, either because they cannot afford them or because their cultural sacred sites are now owned by private companies and landowners.

7. Best Practices for Equitable and Accessible Grant Programs



Photo courtesy of Brower Dellums Institute for Sutainable Policy Studies and Action

Highlighting Persistent Problems and Sharing Recommendations from Disadvantaged Community and Tribal Partners

Disadvantaged Communities and Tribes in the Bay Area have experienced institutional discrimination, disinvestment, and exclusion, and the resulting inequities have had severe health and water impacts, as explored over the course of this report. This inequity has also been implicitly and systematically baked into the way many government agencies undertake planning processes and allocate grant funding. Throughout the DACTI Program needs assessment process, different Disadvantaged Communities and Tribes reiterated many of the same issues they have experienced with previous grant programs and planning processes and put forward recommendations for addressing them. This section collates and highlights these persistent issues and emphasizes the crucial best practices that Disadvantaged Communities and Tribes have put forward.

These best practices are not new, but because they have been ignored or underutilized, they are restated here. To change business as usual, the Disadvantaged Communities and Tribes and DACTI Program Team respectfully request responses about how DWR intends to recognize and implement these best practices for equity in future planning processes and grant programs. Where DWR does not plan to or is not able to implement these best practices, the Partners request an explanation of the barriers to implementation in order to increase transparency and begin to develop a blueprint for actions that can be taken at all levels to make grant processes and planning efforts meaningfully equitable.

An overarching best practice that has been expressed by Outreach Partners is the importance of not combining disparate Disadvantaged Communities together, and not combining Tribes together with Disadvantaged Communities. Shared issues and best practices are restated here, though not all groups agree on how these best practices should be implemented. Implementation of these practices needs to be tailored to meet local needs and should follow the lead of Disadvantaged Community or Tribal partners.

Issues Identified by Disadvantaged Communities and Tribes

Not enough funding goes to programs that directly benefit Disadvantaged Communities and Tribes. The limited funding that is available creates competition between different Disadvantaged Communities and Tribes that are all working to address chronically underfunded needs.

Available funding often goes to non-local groups and does not support sustainable, long-term engagement by grassroots organizations. There is limited funding to support full-time positions within grassroots organizations to expand their impact at the local level, and for stipends for Disadvantaged Community members and Tribal members to pay them for their time and expertise.

Consultants and non-governmental organizations (NGOs) staffed by non-Disadvantaged or non-Tribal individuals are often paid to attend meetings, participate in planning processes, and work with Disadvantaged Communities and Tribes, while Disadvantaged Community members and Tribes are typically not funded to participate. This means that many Disadvantaged Community and Tribal members must balance their participation with personal commitments and responsibilities. This decision is made even more difficult without tools to help ease the barrier to participation, providing food and childcare. Disadvantaged Communities and Tribes have also expressed concern that non-local NGOs take their ideas and intellectual property back to public agencies or other funders, rather than funding grassroots groups directly for their expertise.

Funding allocation decisions meant to benefit Disadvantaged Communities and Tribes are often made by non-local funding and grantmaking institutions and therefore might not address the problem(s) as they are best understood by those experiencing them. When Disadvantaged Communities and Tribes are consulted in planning and decision-making processes, it is often to a limited extent and late in the process. This can set up a disconnect between available funding and Disadvantaged Community- and Tribal-identified needs, often resulting in Disadvantaged Communities and Tribes needing to spend significant time and effort applying for multiple sources of funding for a project that provides a holistic solution. This places the burden again on Disadvantaged Communities and Tribes. Planning grant funding and technical assistance were specifically identified by Disadvantaged Community and Tribal partners as huge gaps in funding needed to move from identified needs to shovel-ready projects.

Typical grant payment/reimbursement protocol can be unworkable for Disadvantaged Community and Tribal groups, and the administrative burden can dissuade or prohibit some from participating. Many smaller, under-resourced, frontline Disadvantaged Community and Tribal groups cannot perform large amounts of work up front and then wait for reimbursement. Without an option for advanced payment, these groups who cannot front the cost of the work are not able to participate in state funding programs, particularly those with many restrictions or high administrative burden. Reimbursement periods of four months (or even one month) can be a prohibitive roadblock to the inclusion of community-engaged groups.

Many efforts led by outside entities to engage Disadvantaged Communities and Tribes and develop projects presuppose needs, desired solutions, and preferred ways of engaging, rather than supporting Disadvantaged Communities and Tribes in leading these conversations.

Technical and outside perspectives are often prioritized over the local expertise and lived experience of Disadvantaged Community and Tribal members in defining the problem and developing solutions. Those involved in decision-making and planning, however well-intentioned, rarely come from the Disadvantaged Communities and Tribes who experience the impacts of the proposed solutions and resulting projects. Most often, Disadvantaged Communities and Tribes are brought in to give feedback on well-developed projects long after the initial stages. Projects that are developed from the outside might claim to benefit the Disadvantaged Community or Tribe, but without their meaningful inclusion, the resulting solution can miss the mark on addressing real Disadvantaged Community or Tribal-identified needs.

Outside entities will often be paid to engage and gather ideas from Disadvantaged Communities and Tribes without understanding or addressing historic context and barriers to participation, and without taking the time and resources to build meaningful partnerships and trust. These outside groups often ask for perspectives and make promises about outcomes without meaningful follow-up actions, which has caused survey fatigue and lack of trust in these agencies by Disadvantaged Communities and Tribes.

Disadvantaged Communities and Tribes have experienced long histories of government promises of benefits that either did not materialize or were provided and then taken back.



Photo courtesy of The Watershed Project

Best Practices Identified by Disadvantaged Communities and Tribes

ELEVATING PERSISTENT PROBLEMS AND SHARING RECOMMENDATIONS FROM DISADVANTAGED COMMUNITY AND TRIBAL PARTNERS

- Funding is a Keystone
- Build Relationships and Earn Trust

The following best practices from Disadvantaged Communities and Tribes recommend how to address these structural inequities related to funding and engagement.

Funding is a Keystone

Increase the amount of funding for Disadvantaged Communities. More funding needs to be directed to Disadvantaged Communities to address the needs that still exist after centuries of racism, underrepresentation, and disinvestment.

Increase the amount of funding for Tribes. More funding needs to be directed to Tribes to address the needs that still exist after centuries of erasure, genocide, assimilation, and colonization.

Address the disconnect between available amounts and types of funding and the needs of Disadvantaged Communities and Tribes. Work directly with Disadvantaged Communities and Tribes in the initial development of grant programs to ensure meaningful access, benefit, and leadership. To truly engage and address equity and environmental injustice, public agencies need to recognize that the burden should not be placed on Disadvantaged Communities and Tribes to work to fit the challenges they face into various funding boxes. Public agencies and jurisdictions must work to better connect funding to needs and do so in partnership with the Disadvantaged Communities and Tribes they are intended to benefit.

Recognize the unique histories, challenges, strengths, and needs of different Disadvantaged Communities and Tribes and structure funding to address inequities as they exist. Different Disadvantaged Communities—for example, African American communities—and Tribes have experienced different effects of structural inequity and oppression, and funding should be tailored to specifically address these effects. Public agencies have a responsibility to listen and respond to these unique circumstances.

Require grant applicants to provide a letter of support from representatives of the Tribe or Disadvantaged Community when claiming a benefit to them. This will ensure meaningful inclusion in the project. This is especially important when a project can receive increased project ranking if it benefits Tribes or Disadvantaged Communities.

Contract directly with and prioritize funding for Disadvantaged Community groups with deep roots and Tribes, rather than outside consultants. When administering community engagement programs, funders and/or grantees should contract directly with and prioritize funding for Disadvantaged Community groups with deep roots and Tribes to develop their own data, rather than paying a consultant or other outside intermediary to gather ideas from Disadvantaged Communities and Tribes. Grassroots organizations should be able to receive the full grant allocation to work with their Disadvantaged Community or Tribe, rather than working through an outside agency or organization. Reach deeply into communities to elevate local grassroots organizations that can engage in the work and increase the economic benefits to the Disadvantaged Community or Tribe itself. If no Disadvantaged Community or Tribal groups or organizations with deep local roots are able to engage in the work, then nonprofits or other groups that are already engaged and have built trust within their communities should be prioritized for funding. These outside entities should work with the Disadvantaged Community or Tribe to leverage funding to support organized, deeply rooted community groups and build subject matter expertise and capacity to lead future work.

Hire staff directly from Disadvantaged Communities and Tribes. This provides in-house local knowledge and brings jobs and resources directly to residents. Where possible, require locally targeted hiring practices. For example, the majority (at least 50%) of the workforce for implementation and other projects should be hired locally from the Disadvantaged Community or Tribe where a project takes place. State and local contracting and payment laws are barriers to hiring locally if they have a requirement to hire the lowest bidder, even if the funds are to benefit under-represented communities. DACTI Program administrators have been able to specifically name outreach partners in a proposal, which allowed for contracting with the named partners without having to do a competitive bid.

Allow expenses that increase Disadvantaged Community and Tribal engagement, such as for food, childcare, and stipends for community member time and expertise. Changes at the legislative/administrative level are needed to allow the very items that enable Disadvantaged Community and Tribal members to participate in this kind of funding program.

Fund Operations and Maintenance (O&M) and ideally require it to be included in implementation project budgets. This will ensure projects are sustained over the long term.

Streamline advanced payment and other contracting/invoicing processes and shorten payment delays. Ensure that Disadvantaged Communities and Tribes can access awarded funding expeditiously and do not have to front the project cost while waiting for reimbursement.

Reduce reporting burdens. Disadvantaged Communities and Tribes should be able to focus on completing the work instead of reporting on it.

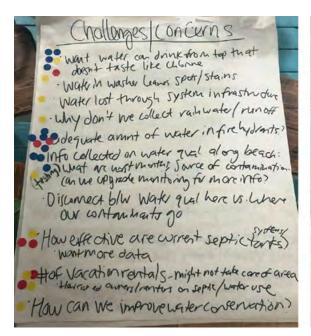
Proactively support Disadvantaged Communities and Tribes in accessing funding.

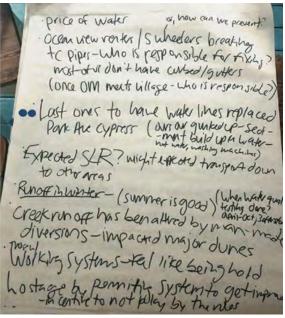
- Lengthen grant application lead time to allow more Tribal and Disadvantaged Community groups to prepare to participate.
- Provide meaningful outreach to Disadvantaged Community and Tribal groups significantly before application deadlines, and hold workshops and webinar tutorials to support Disadvantaged Community and Tribal groups in submitting applications and accessing funding.
- Provide grant writing to Disadvantaged Community and Tribal groups to support the development of proposals for funding to address identified needs.
- Work with Disadvantaged Communities and Tribes to understand and address potential barriers to
 entry in grant funding applications, including lengthy and complicated account registration processes
 and application length. Ensure that all requirements are clearly and consistently stated in the funding
 announcements and guidelines.
- Provide technical assistance to projects that benefit Tribes and Disadvantaged Communities before, during, and after the application process. Technical assistance should include scientists, engineers, responsible regulatory agencies, and other relevant experts.
- Ensure equitable access to funding opportunities, not just equal access. If a funder merely releases guidelines and a Project Solicitation Package, not everyone is in the same position to respond. Well-funded and well-resourced agencies often have experience and dedicated grant writing staff, while some, like Disadvantaged Communities and Tribes that are most impacted by structural inequities, require additional capacity-building and support to apply for and participate in administratively burdensome programs.
- Ensure grant opportunities are very widely distributed, not just through normal channels, such as agency or professional listservs, but also intentionally circulated to grassroots organizations, and posted in community centers and meeting places.
- Ensure outreach and application materials are available in multiple languages.
- Reimburse Disadvantaged Communities and Tribes for the time they spend putting together a successful grant application.

Ensure grant programs are inclusive by critically examining eligibility metrics.

- Do not restrict funding eligibility to agencies or local governments, as this prohibits Disadvantaged
 Communities and Tribes from leading funding efforts. When jurisdictional obligations or legislation
 requires that a municipality or agency lead a project with an impact on Disadvantaged Communities
 or Tribes, the funding opportunity should include a requirement to partner with a deeply rooted, local,
 grassroots organization from within the community.
- Expand eligibility requirements to acknowledge cumulative burdens Disadvantaged Communities and Tribes face in addition to income, including pollution burden, health inequities, and people experiencing homelessness. There are many cumulative burdens that communities face outside of income. Particularly in densely populated areas such as the Bay Area, depending on how census lines are drawn, very under-resourced communities may or may not qualify as a Disadvantaged Community due to surrounding community income. While the DACTI Program included Underrepresented Communities and Tribes, for a community to be eligible for the Disadvantaged Community set-aside for Integrated Regional Water Management (IRWM) implementation funding, they need to meet the income metric.

These metrics are extremely important because they dictate which areas qualify for funding, and they should be evaluated and re-evaluated to ensure they are capturing those Disadvantaged Communities and Tribes who have historically been excluded and are most overburdened. Updating the requirements for underrepresented and historically burdened communities to qualify as "Disadvantaged Communities" or other terms and metrics applied by the state and the prioritized funding available, and ensuring the inclusion of Tribes, is an important next step for the Legislature and other state agencies. These decisions should follow the lead of Disadvantaged Communities and Tribes.





Photos courtesy of Maddie Duda

Build Relationships and Earn Trust

Acknowledge structural inequity, its history, and the effects Disadvantaged Communities and Tribes are still experiencing. It is an important first step to recognize that local Tribes are the First Peoples whose traditional territory all others occupy. This includes recognition by members of other out-of-state Tribes and respect and support for local Tribes in addressing local challenges. It is also important to explicitly acknowledge structural racism and the role government agencies have played in creating and maintaining inequities. The historic context of a Disadvantaged Community or Tribe must be recognized in order to meaningfully understand the present situation and develop informed solutions.

Invest the time to build trust and learn about Disadvantaged Communities and Tribes and their histories through long-term relationships. The most important part of community engagement is long-term relationship- and trust- building. Groups with no or fewer existing relationships with Disadvantaged Community and Tribal members can develop relationships and build trust through attending and participating in local events, including school events and food distribution campaigns, as well as partnering with groups that have ties in the community. Keep showing up: Disadvantaged Community and Tribal engagement takes time and requires a long-term investment in building relationships and trust. It can be challenging to make connections through mail or online. Consider what your organization can bring to the table to assist Disadvantaged Community or Tribal members.

Be transparent and do not overpromise. Be clear and forthright about all goals of a project, including the potential for benefits as well as potential negative impacts to Disadvantaged Community members and Tribes. If a benefit is not certain, be transparent about the degree of certainty.

Acknowledge and respect the self-defined labels and burdens of Disadvantaged Communities and Tribes. Outreach Partners have expressed the importance of Disadvantaged Community and Tribal self-determination and self-description, rather than labels projected by state agencies and other outside entities. Disadvantaged Communities and Tribes should lead conversations on how they would like to be identified. An overarching best practice is to not lump disparate Disadvantaged Communities together, and not lump Tribes together with Disadvantaged Communities with regards to funding or other efforts. Tribes should be identified clearly as Native Americans or Tribes.

Aggregate labels can erase or dilute attention given to an individual's and single community's unique identities and needs. Some Disadvantaged Community partners have expressed that the use of aggregate terms such as BIPOC (Black, Indigenous, People of Color) lump people with different backgrounds, experiences, and histories together from the outside and do not explicitly acknowledge the unique histories and experiences of their community.

There are differences in perspective on labels applied to communities that have experienced structural inequities, and outside entities should follow the lead of different communities and Tribes regarding how they would like to be referred to. Some partners have expressed support for the term Disadvantaged Community as an important acknowledgment of the effects of systemic racism, discrimination, and inequity, and have shared that it accurately describes their condition and the issues they are facing on a day-to-day basis. The designation "Disadvantaged Community" has also been acknowledged as an important tool for earmarking and allocating funding to communities who most need it, and currently, it is the term for the metric many organizations use for eligibility for programs meant to address inequity, including the bond funding this program. At the same time, "Disadvantaged Community" is not the term of choice that all members of communities or Tribes use to describe themselves. Some Community and Tribal partners have shared that the term "disadvantaged" projects a disempowering status on resilient communities, and prefer different terms such as "frontline", "under-resourced", "historically disenfranchised", or "underrepresented community", though there is no consensus between community partners who took part in this process on a single collective term.

There might be many different perspectives, senses of urgency, and concerns in any single Disadvantaged Community or Tribe. It is important to reach deeply into Disadvantaged Communities and Tribes to understand perspectives so that those with the loudest voice are not the only ones heard.

Respect Disadvantaged Community and Tribal expertise as critical to success. The lived experience of Disadvantaged Communities and Tribes is as critically important to decision-making, project development, and the identification of solutions as the knowledge of agency staff and paid consultants. Disadvantaged Communities and Tribes know their needs and priorities better than anyone.

Increase transparency and education for Disadvantaged Communities and Tribes around water-related problems, the entities working on these problems, and what can be done to address them. More information about water infrastructure and management (and other processes) is desired—and needed—by Disadvantaged Communities and Tribes: for education, for capacity building, and to develop projects and solutions to identified issues.

Provide organizational capacity building and technical assistance to support community- and Triballed solutions.

Support Disadvantaged and Tribal Communities to hire and train staff from their own community to increase lasting capacity.

Support conversations and planning processes led by Disadvantaged Communities and Tribes, rather than presupposing what their priorities will be. Do not presuppose Disadvantaged Community and Tribal priorities. Support Disadvantaged Communities and Tribes in leading conversations to inform future processes. Begin by defining the problem with Disadvantaged Communities and Tribes and make them a partner in the development of projects to address issues they have first identified.

Agencies should be prepared to listen and hold difficult conversations in understanding Disadvantaged Community and Tribal needs, including stories of historic and perpetuated trauma and frustration and outrage directed at government agencies. Skilled facilitators from diverse backgrounds should be used when appropriate. Communications between community partners, residents and public agencies should be regularly maintained over time.

Understand and address barriers to participation. There are many reasons why Disadvantaged Community and Tribal members might be reluctant to engage or to provide personal information, for instance, distrust of outside entities due to historic injustice and broken promises. In addition, Disadvantaged Community and Tribal members could be concerned that complaints could affect their relationships with agencies that support their work, housing status, immigration status, etc. Some community members are fearful of retribution ("Will this information be used against me by the Housing Authority who wants to kick us out anyway?"; "If I tell the truth and say my water tastes bad, will that get me in trouble?").

- Be mindful of the accessibility of meeting times and places. Meetings in the middle of the day are not
 accessible to many Disadvantaged Community and Tribal members who have competing priorities.
 Don't set up meetings and assume that because Disadvantaged Community and Tribal members were
 not able to show up that they did not have input. Consider competing events and priorities, such as work
 and popular sports events, and well used modes of travel in the community and schedule accordingly
 with Disadvantaged Community and Tribal leaders.
- Provide food and childcare, as well as interpretation, at meetings.
- Translate any outreach, engagement, and informational materials into the languages widely spoken
 in the community to make sure they are readily accessible and understandable to all Disadvantaged
 Community and Tribal members.
- Make sure advertising for any engagement events is made available in forums where Disadvantaged
 Community and Tribal members are most likely to see it, relying on community members to inform
 the strategy. Locations (e.g. libraries, popular stores, Park and Rec Centers, churches, senior centers)
 and format (text, email, paper poster/flyer) should be tailored to the community. Meet Disadvantaged
 Community and Tribal members where they are.

Develop engagement tools and surveys with Disadvantaged Communities and Tribes.

- Keep questionnaires as short and simple as possible. Surveys should be written in user-friendly, non-technical language and should be designed so participants only need to give one response at a time.
- Engage Disadvantaged Community partners and Tribal members in developing and revising surveys to make sure these tools are appropriate in length and tone and offer clear descriptions of the survey goals and uses of the data.
- Hold listening sessions in concert with conducting surveys to gather more robust information and dig into community needs and concerns.
- After conducting surveys, follow up with Disadvantaged Community members or Tribes to review and validate the findings before publication or other actions are taken.
- Conduct outreach/surveys in person in places where Disadvantaged Community and Tribal members regularly gather, such as food distribution sites, school meetings, libraries, faith-based organizations like churches, senior centers, and community events as well as powwows, Intertribal Houses, and Tribal gatherings. When leveraging events hosted by another group that already has an audience, coordinate with them and have them announce your efforts. Speak with Tribal Elders to have them introduce you and your survey to the Tribal community to provide trust and encourage responses.
- When possible, hold face-to-face conversations; they are more meaningful and provide richer discussion than online surveys.
- Be flexible in your willingness to go back two or more times to finish collecting additional survey information when needed to understand the full picture.
- Consider a mix of questions to meet desired outcomes. For instance, open-ended questions ensure
 people identify their concerns, and are not limited to pre-identified issues; however, open-ended
 questions are more time-consuming to answer and make it more difficult to develop a quantitative
 report on results.
- Recognize that concerns about water or other environmental issues are not separate from concerns
 about other factors and make questions relevant to everyday life. Stand-alone water-related questions, if
 isolated from all the other elements of life like housing, jobs, education, health, food, or culture, are less
 meaningful for Disadvantaged Community and Tribal members to answer.
- The human health effects of water-related (and other) issues should be addressed as the highest priority. Many partners found that needs-based quantitative questions, especially those which contained a question that included "problem" or "concern" yielded a list of health and safety worries.
- Decrease survey to action ratio: many Disadvantaged Communities and Tribes are experiencing survey
 fatigue and are not interested in answering surveys without some assurance of action
 or response.
- Hire trusted survey and outreach workers who live in and are familiar with the area.
- Train staff in role playing—learning how to make people feel safe to open up and participate.

Follow Tribes' lead on Tribal-specific engagement. During meetings and interview processes, Tribes will ask the following questions regarding eligibility for participation in your programs. The following should be considered ahead of time:

Is this Tribe eligible to receive support through your program?

- 1. What funds can this program provide to augment other funding sources and/or elevate capacity for Tribes to receive support?
- 2. Does the Tribe need to be federally recognized to participate?

When working with identified Tribal organizations and newly identified Tribes, self-identification is key when coupled with historical and/or contemporary inter-Tribal recognition by other regional Tribes.

Ensure that the Tribal representation and support staff for Tribal engagement are chosen by Tribes themselves.

When working with Tribes to survey, it is extremely important to try to meet with a Tribal Member/Tribal Representative or reach out to them via their websites. This may take several attempts, but it helps provide trust and develop a partnership.

When the Tribal partnership has been developed, do not expect to meet with the Tribal Chair or Council as their time is extremely limited. In the beginning, try to identify an amount of time for this work. This will allow the Tribe to appoint a trusted Tribal member as your point of contact.

Before surveying Tribes, allow Tribal Chairs and Council members to introduce and endorse the survey. This increases trust between the surveyor and the Tribal communities.

Attending and surveying Tribes during planned major Tribal events will produce the highest number of survey responses, which can give more valuable feedback. Having physical copies of the survey present and trained Tribal members/Tribal representatives to administer the survey face-to-face have proven to be highly effective in generating responses.

Reassure Tribal members/Chairpersons that upon completion of the survey there will be formal action arising from the needs of the Tribes. Also reassure Tribal members/Chairpersons that final results will be communicated with Tribes after the survey, or that follow-up will be done at the request of the Tribe. Communicating clearly what this will accomplish and what will be the result along with clear follow-up time frames is key.

Always capitalize the T in Tribes or Tribal organizations.

Engage with Tribes as if they are a government agency and give them adequate time to review all documents, even if you believe it would be irrelevant to the Tribe.

When meeting with Tribes/Tribal organizations, do your research of their Tribal territories to be aware of how you are benefiting from them, and acknowledge how you benefit from their land.

Administrative Lessons Learned from the Agency

ADMINISTRATIVE LESSONS LEARNED FROM THE AGENCY

- Funding is a keystone
- Streamline contracting
- · Robustly support and simplify invoicing
- · Plan to spend the time to get it right
- Transparency and setting expectations are critical

In addition to elevating best practices from Disadvantaged Community and Tribal Partners, the Bay Area DACTI Program Team would like to share lessons learned regarding the administration of a grant that funds an array of Disadvantaged Community and Tribal partners. This section will explore lessons learned regarding funding allocation and distribution, contracting, invoicing, and the amount of time and dedication it takes to meaningfully engage Disadvantaged Communities and Tribes.

This program worked to streamline administrative processes at the forefront by creating templates, holding kickoff meetings, and building capacity with partners to successfully meet administrative requirements, and then worked throughout the grant term to try and reduce administrative burdens where possible. While this effort was successful in many cases and even used novel approaches to typical government administrative processes, there are many more improvements needed to effectively manage grants that fund Disadvantaged Community and Tribal efforts to increase capacity and ensure equitable outcomes. Some of those novel approaches included the use of sole source contracting to ensure continuity of community and Tribal engagement and the review/assembly of invoice components by the agency project manager that were then sent back for approval by the community or Tribal outreach partner. Local agency and state administrative processes are often extremely burdensome for lower-resourced groups working directly with Disadvantaged Communities and Tribes. The administrative burden of this grant program dissuaded some groups from participating and further efforts should be made in future grant programs to reduce this hardship. Such a reduction in administration will reduce the capacity threshold necessary to participate and will allow more public funding to be used to implement projects and programs led by Disadvantaged Community and Tribal partners.

Public agencies must work to change structures and systems that disadvantage or further marginalize Disadvantaged Communities and Tribes. Many of the changes required are substantial and will require public agencies to consider the unintended consequences of status quo operations and how the continuance of such operations will continue to entrench the systems that have resulted in incredible economic and social disparity. These lessons are the result of honest reflection and meaningful engagement with Tribal and Disadvantaged Community members and leaders. The DACTI Program Team encourages agencies to think critically about their funding and administrative approaches as they review this section. The recommendations and reflections described below can be applied from the highest legislative initiatives to staff-level decisions as a means of integrating equitable approaches to governance. Specifically:

Funding is a Keystone

Funding is one of the most important tools that public agencies throughout California have to assist Disadvantaged Communities and Tribes that have been oppressed, underrepresented, ignored, and underfunded for generations. Funding isn't the only element needed to affect structural change, but without it, Disadvantaged Communities and Tribes are constantly forced to choose between participating in potentially lifesaving projects and programs or making a living. The amount of funding, how funding is programmed, and how it is distributed at the local level need to be rigorously evaluated alongside Disadvantaged Community and Tribal partners if public agencies are to reverse the centuries-long trend of oppression and structural inequity that Disadvantaged Communities and Tribes still experience today.

To emphasize the points made in the Outreach Partners' section above, more funding should be designated to address structural inequities that have been experienced by Disadvantaged communities and Tribes. Proposition 1 was a step towards a fundamental shift in how public funding is targeted in the state of California. By requiring 10% of the funds authorized by Chapter 7 of the Water Quality, Supply, and Infrastructure Improvement Act of 2014 to go directly towards initiatives and projects that benefit Disadvantaged Communities and Tribes, the state directed millions of dollars into communities that need it most. Unfortunately, the most vulnerable communities throughout California have been subjected to generations of explicit and implicit oppression and racism that has manifested in many ways, one of them being how funding is targeted in federal and state legislation. The funding needed far surpasses what has been allocated in this program. While 10% of the funding set aside for Disadvantaged Community and Tribal involvement allowed participation in novel ways in the Bay Area, it is not enough given the challenges Disadvantaged Communities and Tribes are facing. There are significant needs for ongoing funding and continued engagement. The state needs to develop long-term funding programs that provide opportunities for Disadvantaged Communities and Tribes to expand their engagement and participate fully in the public process in ways that also reduce competition between these groups.

A major change needed in the way public funds are dispersed was described in detail in the above section from Disadvantaged Communities and Tribes. Public funds often go to entities that are established, have capacity, and are positioned to move quickly on funding opportunities. This is structured into grantmaking processes that create a competitive environment between deeply rooted, grassroots groups and non governmental organizations and non profits from outside Disadvantaged Communities and Tribes. This mechanism is also used in other competitive procurement processes like requests for proposals (RFPs) and requests for bids. These competitive processes are typically difficult to understand and require extensive time and effort to respond to. In conjunction, many grassroots Disadvantaged Community and Tribal groups don't have the capacity to engage in such processes, essentially limiting their ability to participate, get funding, build capacity, and work within their own communities to address issues from within. Funding mechanisms that favor well-prepared and -resourced entities need to be reevaluated to target local Disadvantaged Community and Tribal groups where benefits from funding extend beyond the scope of the program and into the economy of the local Disadvantaged Community or Tribe. There might be some Disadvantaged Communities that don't have grassroots organizations with the capacity to participate in environmental or equity efforts, and nongovernmental organizations and non profits can be helpful in building capacity, obtaining funding for Disadvantaged Communities and Tribes, and implementing projects.

Streamline Contracting

Disadvantaged Communities and Tribes do not trust government agencies because of the long history of broken promises and direct harm caused by government. Government processes, notably contracting and legal risk analysis, are not set up to foster trust with Disadvantaged Communities and Tribes. Standard government contracting terms such as non-mutual indemnification and data ownership terms require Disadvantaged Communities and Tribes to participate in a contractual relationship with an inherent structural imbalance that perpetuates the existing lack of trust in government. Government agencies who contract with Tribes must understand that Tribes have an inherent right to govern themselves at the foundation of their constitutional status as sovereign nations.

Agencies must accept more risk in indemnification. Working with Disadvantaged Communities and Tribes inherently has more "risk" as defined by public agencies and processes than working with consultants and contractors. Public agencies are going to have to accept increased risk, in order to change the systems and structures that disadvantage Communities and Tribes. This includes taking on more risk in indemnification language and insurance requirements. Insurance is necessary, but agencies must offer support. Agencies have a level of discretion with insurance requirements. They can be waived or reduced in certain circumstances where the risk is minimal. Agencies should thoroughly consider what insurances are necessary, and which ones are not, based on the scope of the work. The DACTI Program engaged Outreach Partners when contracting to discuss insurance and how they planned to execute their work and found opportunities to waive requirements that presented a burden and had minimal risk.

Agencies need to provide robust support for smaller community-based organizations to meet insurance requirements. This could include recommending brokers that have successfully provided insurance for other partners or connecting community-based organizations to each other so that they can share information about insurance brokers that have successfully met contract requirements.

If a Disadvantaged Community or Tribal group cannot afford insurance that a public agency requires, that public agency needs to find a solution to enable their participation, even if such a solution requires a repayment of insurance premiums. Insurance requirements, without offering financial or other support, can prohibit many Disadvantaged Community and Tribal grassroots groups from participating and the benefits gained through contracting directly with Disadvantaged Community groups and Tribes can be lost. This barrier would likely result in contracts with larger non governmental organizations from outside the Disadvantaged Communities and Tribes who are the intended beneficiaries of these funding programs, as discussed above. The state should investigate a publicly funded insurance option for Tribes, nonprofits and community-based organizations that struggle to meet insurance requirements.

Comflict of interest requirements can disrupt trust. Trust is key when working with Disadvantaged Communities or Tribes. Standard conflict of interest clauses and regulations that prohibit subcontractors from being involved with the development of processes and work plans on which they could subsequently bid can create a revolving door of participating partners that make building trust very difficult. If Disadvantaged Community groups or Tribes work with a consultant they trust to develop workplans or strategize programmatically, that consultant is very likely to be barred from bidding on that work due to these conflict of interest restrictions. It should be acknowledged that conflict of interest regulations and policies are well-intentioned and important in protecting public funding, but that there need to be overriding considerations that can be applied to enable public agencies to continue to contract with a consultant to promote continuity in relationships and building trust.

Strategize around Personally Identifiable Information (PII). Set expectations and be transparent about the pitfalls with collecting Personally Identifiable Information (PII) if possible, since it can complicate and delay contracting processes. If the project requires the collection of PII, discuss the scope with Disadvantaged Communities and Tribes and the implications of collecting such information.

It should be noted that PII can be integral to Disadvantaged Community groups and Tribes when engaging their communities. Collecting contact information for continued engagement and follow up is a good example of this. In such cases, it is critical for Disadvantaged Community groups and Tribes to communicate to attendees that the information they are collecting is for their purposes and not necessarily connected to the grant-funded work. Separate sign-in sheets are a good example how partners can capitalize on opportunities to collect such information without it being attributable to the grant funded work and regulated by PII language in contract for such work.

PII is regulated by the state and federal government, and unlike many other parts of contracts that are subject to negotiation, terms regarding PII are generally non-negotiable. This delayed the DACTI Program's contracting process with a lab to do tap water testing in Disadvantaged Communities and Tribes for several months to ensure all agency and legal requirements were met regarding the protection of such information. This delay caused a great deal of frustration and impacted the trust the DACTI Program Team had spent years building.

Disadvantaged Communities and Tribes should have rights to data and intellectual property.

Disadvantaged Communities and Tribes should have the rights to their own data and the data they collect through community engagement efforts. Contract terms that define all work products as property of the contracting agency are extractive and limit the ability of Disadvantaged Communities and Tribes to build off publicly funded work. If publicly funded, whatever is collected is the domain of the public (with the exception of PII). This needs to be explicitly defined in contracts.

Robustly Support and Simplify Invoicing

Invoicing is one of the most critical elements in project success with Disadvantaged Communities and Tribes. Advanced payment is necessary, as mentioned earlier. If advanced payment is not possible, then it is critically important to pay all invoices promptly upon receipt and not in arrears. Many groups cannot pay for work up front and wait many months to be reimbursed. A commitment to timely processing of invoices is essential. Disadvantaged Community-based groups and Tribes often have very limited funding and depend on public agencies to pay invoices promptly. This means payments made in days or weeks, not months. Agencies need to ensure they have the staff to meet this goal when working with Disadvantaged Communities and Tribes.

Agencies should never simply send back invoices for correction without offering robust support and engagement. This takes a lot of time and agencies should be prepared to step in and assist whenever needed. Staff managing the SF Bay Area DACTI Program had 21 contracts under their grant and were not prepared for the volume of invoices and the assistance needed by Outreach Partners to accomplish invoicing tasks. This resulted in delays in payment that could have been avoided with more robust staffing.

Plan to Spend the Time to Get It Right

A shift in programmatic approach or priorities may be needed to meaningfully engage Disadvantaged Communities and Tribes. Government agencies might see Disadvantaged Community or Tribe-identified priorities as outside of their traditional scope of work; however, this perspective sends Disadvantaged Community and Tribal members on an endless search for the "right" agency to address their concerns and perpetuates distrust in government. Agencies need to reach beyond these traditional boundaries and redefine programs and plans to be able to integrate Disadvantaged Community and Tribal needs into planning efforts. Administrators need to take a broader look at the work they do as government or environmental agencies. If agencies are to meaningfully engage Disadvantaged Communities and Tribes, they need to address the priorities as identified and articulated by the community.

This work takes time, effort, and resources to build (and restore) relationships and trust. Do not underbudget or under-resource administrative elements as this can result in a breakdown of trust if expectations are not met. One reason why this grant program took so much time to administer is that agency staff took the time to streamline contracting and invoicing for Disadvantaged Community and Tribal partners, walk through documents, and build capacity throughout the process.



Photo courtesy of Friends of Sausal Creek

Transparency and Setting Expectations is Critical

From the outset of any program, public agencies should set expectations and be transparent about the legal and administrative obligations of public funding with Disadvantaged Communities and Tribes.

Transparency is extremely important to building trust. Providing as much information as possible about processes at the beginning of a project helps Disadvantaged Communities and Tribes to both understand them and feel confident in their implementation.

With public funding, there are many legal and administrative requirements that require attention. This includes timely progress reports, detailed invoices, adherence to contractual terms, and compliance with state and federal laws that are not always easily accessible or understood. Public agencies must be good stewards of public funds and this requires an incredible amount of documentation to ensure audits can be passed. This documentation is often provided by project partners. When Disadvantaged Communities and Tribes are asked to meet these burdensome administrative requirements, it can be perceived as a lack of trust. It's important to be transparent, explicitly acknowledge these requirements and their basis, and be realistic about the time they will take.

Simply put, agencies need to be frank and not overpromise. Public agencies are not created to be administratively nimble or to move quickly. There are a host of transparency, accountability, legal, contractual, and other requirements that result in drawn-out processes, even when a program is fully staffed. Acknowledging that delays will happen and that the administrative burden of public funding is not small is critical at the forefront. Honesty is typically met with respect, and it goes a long way to building trust and minimizing negative impacts on relationships when delays do happen.

8. Next Steps and Recommendations



Photo: Karl Nielsen

Next Steps

The needs assessment is one step in understanding, collating, and elevating water-related issues from the perspective of the Disadvantaged Communities and Tribes who experience them. Important next steps identified by Outreach Partners include activities in service of each Disadvantaged Community's and Tribes' development or continuation of visions and projects to address identified issues, such as:

- Holding further conversations and gathering data where necessary to better understand Disadvantaged Community and Tribal perspectives on specific issues and preferred solutions
- Collecting environmental, technical and spatial information related to these issues to inform the best solutions
- Completing feasibility studies and engineering plans for priority projects
- Developing funding proposals to address identified needs

The planned next steps to follow up on the specific issues each group identified are included in the Disadvantaged Community and Tribal sections of this report. These next steps are moving forward quickly as Disadvantaged Communities and Tribes work to develop projects for IRWM Implementation and other funding sources to address identified needs.

Alongside project development work, further capacity building and technical assistance are important to ensure Disadvantaged Communities and Tribes can participate in water-related decision-making and planning processes. Getting from identified needs to shovel ready projects is no small task, particularly for groups without the capacity and budget of a large agency.

The DACTI Program Team assessed capacity building needs from each Disadvantaged Community and Tribe. The top needs identified were mainly centered on potential project applications, particularly assistance with understanding proposal guidelines and grantee expectations. Many partners expressed needs for engineering and design support to develop project concepts into competitive proposals. Partners also asked for administrative support or training as the reporting burden for state contracts is very high and time-consuming. A full ranked list of the needs identified is included in the Appendix (page 320).

The DACTI Program Team also developed the DACTI Program Collaborative Space as a response to the identified need for a resource sharing platform. The Collaborative Space is a Google Drive folder that houses a contact list, events page, collaborative forum, project concept sharing sheet, notes from webinars and conferences, and a number of other resources to aid community partners in collaboration. The Collaborative Space also includes a continuously updated matrix of federal, state, local, and private funding opportunities related to issues raised in the needs assessment process. The current version of this matrix can be found in the Appendix (page 326).

The DACTI Program Team is providing grant writing and other capacity building support throughout the duration of the DACTI Program grant and is exploring avenues for continuing this support after the DACTI Program ends.

Programmatic Next Steps

Tap Water Quality Testing Program

One concern that was expressed by every Disadvantaged Community and many Tribes who participated in the DACTI Program was a mistrust in tap water, based in either observed aesthetic issues with tap water, or general distrust in infrastructure or public agencies to provide safe drinking water. In the post Flint, Michigan era, general mistrust of tap water has increased, even if there aren't readily observable issues with tap water. Additionally, many of the more serious contaminants, like lead, are not detectable by those using and consuming affected tap water. High levels of mistrust have economic and health impacts on Bay Area communities that will persist until public sectors actively engage to address the issue.

The DACTI Program is working with Disadvantaged Community and Tribal outreach partners to launch a grant funded tap water quality testing effort throughout the Bay Area. Each participating Disadvantaged Community is developing and implementing their tap water quality testing initiatives with programmatic and funding support from the DACTI Program. Disadvantaged Community members, Tribal members, and Tribal organizations will be able to test their water, and will collect detailed feedback on water quality experiences and perceptions to provide comparative information for future educational and advocacy efforts. Through this process, local stakeholders will be engaged to inform and support the Disadvantaged Community and Triballed effort, and to partner with the program and their communities to build and strengthen relationships.

In addition to supporting Disadvantaged Communities and Tribes in the development and implementation of their tap water quality testing programs, the DACTI Program is developing educational information for Disadvantaged Communities and Tribes regarding tap water quality, water sources, and in-home filtration options to address unsafe or flawed tap water. The program will also work to assess long term solutions to address premise plumbing that may be affecting water delivered by the utility. Where no tap water issues are found through testing, the DACTI Program will support Disadvantaged Communities and Tribes with educational campaigns to increase trust in tap water.

Implement Best Practices For Equitable and Accessible Grant Programs Elevated by Disadvantaged Community and Tribal Partners

In addition to supporting Disadvantaged Communities and Tribes in addressing identified issues, the DACTI Program Team will support the implementation of Best Practices for Equitable and Accessible Grant Programs (Chapter 8, page 307) that have been highlighted again and again by Disadvantaged Community and Tribal partners. "The Best Practices" chapter lays out issues Disadvantaged Communities and Tribes have experienced with grant programs and planning processes and best practices for making these processes more equitable, inclusive, and accessible to these groups. The Bay Area DACTI Program and the Disadvantaged Community and Tribal outreach partners ask that DWR respond to these best practices with a plan for implementation, and recommend that other agencies review and work to implement these into their grant programs and planning processes.

Continued Support after DACTI Program Funding Ends

Through the DACTI Program, Disadvantaged Community and Tribal partners identified projects and project concepts that would address their top needs. Alongside the DACTI Program, the Bay Area IRWM Coordinating Committee governance structure has been updated to include Tribal and Disadvantaged Community members. Additionally, the region-specific evaluation criteria for Round 2 of IRWM Proposition 1 Implementation funding are being updated in partnership with Disadvantaged Community and Tribal members to elevate projects that address issues identified through the needs assessment process, as well as those that have a letter of support submitted by Disadvantaged Community and Tribal leaders, members, or organizations. Representation in decision-making bodies and evaluation criteria is very important in determining who is most likely to receive funding. Ensuring that Disadvantaged Community and Tribal members are actively participating in the process of determining priorities for funding opportunities is vital so that communities can access said funding for identified projects. These advances in the Bay Area IRWM will only be able to continue, however, if there is additional funding through IRWM. The Bay Area IRWM is advocating for continuation and funding to support the development of these important relationships and program advances.

The DACTI Program Team will continue to develop the relationships that have been built and will support Disadvantaged Communities and Tribes past the funding program in some way, with or without IRWM funding. The San Francisco Estuary Partnership (SFEP) will continue its support of Disadvantaged Community and Tribal partners by integrating them and their needs into their planning processes, such as the Estuary Blueprint and will work to integrate the best practices that have been put forward by Disadvantaged Community and Tribal partners in the "Best Practices for Equitable and Accessible Grant Programs" chapter of this report. SFEP will also encourage other agencies to integrate these practices so they can better serve and include Disadvantaged Community and Tribal groups and address their specific needs.

Many of the agencies and utilities that participate in the Bay Area and other IRWM regions run their own grant funding programs, and the DACTI Program Team highly encourages those agencies and utilities to undergo a similar process with the Disadvantaged Communities and Tribes that they serve.

The relevant agencies should work directly with Disadvantaged Communities and Tribes to support the development of project concepts into competitive proposals. It is important that when these proposals are developed, the Disadvantaged Community or Tribe is included, as well as properly credited and acknowledged for its contributions.



Photo courtesy of Friends of Sausal Creek

Recommendations

- 1. The State should prioritize funding for the continuation of the DACTI Program, including the implementation of priority projects;
- 2. The relevant agencies should follow up with Community and Tribal partners in their area to support community-led solutions to identified needs;
- 3. Federal, state, regional, and local agencies and other grant administrators should implement the best practices as stated in the "Best Practices for Equitable and Accessible Grant Programs" chapter of this report.

Most importantly, grant and planning processes should engage and acknowledge the leadership of Disadvantaged Communities and Tribes from the very beginning, and allocate more funding, resources, and time to building long-term, sustained relationships with Disadvantaged Communities and Tribes, and addressing structural inequities.

9. Appendices

Appendix A. Complete Tribal Needs Assessment

Introduction to Regional Needs Assessment

In the spirit of restorative justice, the following land acknowledgement statement evolved out of the collaborative efforts of the original Native Peoples of the Bay Region. While merely a symbolic statement, it is intended to foster a recognition of the tragic history and resilience of Native Peoples, to affirm their continued presence and contributions, and to remind non-Natives that the land upon which they live, work, and recreate is stolen from the original stewards of the land. Bay Area Native Peoples responsibility for stewardship continues as it has with each generation since time immemorial.

Please consider that although this statement acknowledges the ancestral and unceded territories of the original Native Peoples of the Bay Area, additional steps are required to move towards meaningful restorative justice, this can be working with Bay Area Tribes toward ecological restoration, building beneficial and constructive relationships, supporting Tribes in restoring their role as land stewards, etc.)

You are welcome to use this acknowledgement, as long as you credit the people who created this document, research the specific Tribal community whose territory encompasses your local city and/or county, and work towards the inclusion of those original Native Peoples and support their efforts towards restorative and continued stewardship. By taking these actions, you illustrate your intent to learn about Tribal and colonial history and show respect for and allyship with Native Peoples to ensure that their experiences are centered and valued.

Acknowledgement

We acknowledge that we are on the ancestral territory of the (research what Tribal Territory you are on). We recognize that through a violent history of colonization and dispossession, today, as guests, we (or Name of Org/Agency/Person) benefit(s) from living and working on the traditional homeland of these Native People. We wish to show our respect to them and their ancestors by acknowledging the injustices inherent to this history and by affirming their sovereign rights and their current efforts to achieve restorative justice. We want to acknowledge the ancestors, elders, and relatives, and we affirm their Sovereign Rights as First Peoples. We acknowledge that the (Name of Org/Agency/Person) is benefiting from the displacement and dispossession of Native people from their traditional homelands.

Consistent with our values of community, inclusion, and diversity it is vitally important that we recognize that the land on which we reside is unceded Tribal territory, and also acknowledge and support the Native Peoples that continue to form a crucial part of our SF Bay Area community today. We also acknowledge that Native Peoples remain dedicated to fulfilling their obligation to Creator to care for Mother Earth and all living things and return sacredness to the land, water and air through the restoration of traditional knowledge and stewardship led by

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the original SF Bay Areas Tribe(s) of the project location throughout the nine counties of the SF Bay Area region and beyond.

Thank you.



Photo 1: A member of the Amah Mutsun Land Trust's Native Stewardship Corps harvesting tule

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Figure 1: The stewardship area of the Amah Mutsun Land Trust.

Amah Mutsun Tribal Band Land Acknowledgement Statement

Popeloutchom, the ancestral and unceded territory of the Amah Mutsun, encompasses lands and waters within regions of present-day Santa Clara, Santa Cruz, Monterey, and San Benito counties. Today this territory is represented and stewarded by the Amah Mutsun Tribal Band, whose ancestors were taken to Mission Santa Cruz and Mission San Juan Bautista during Spanish colonization of the Central Coast. Currently, the Amah Mutsun are working hard to fulfill their obligation to Creator to care for Mother Earth and all living things and return sacredness to the land through the restoration of traditional knowledge and stewardship. This work is supported through the Amah Mutsun Land Trust.

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Figure 2: Association of Ramaytush Ohlone provided ancestral territory map.

Association of Ramaytush Ohlone Land Acknowledgement Statement



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Photo 2: This photo is of Trina Marine Ruano in 1934, Ruth Orta Mother who pushed her to always acknowledge and be proud of her Native American Heritage roots.

Him- r^n Ohlone, Jaliquin, Saclan Tribe, Bay Miwok, Plains Miwok Land Acknowledgement

My name is Ruth Orta I am an Ohlone elder from the Him- r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok. I was born in Newark California August 20th 1934, and I still live in Newark. My mother whose name was Trina Marine Ruano she was the first generation of our native people who had non-native blood in her she was born in Pleasanton on June 16 1902 and her mother Avalina Cornate was full blooded native from Pleasanton In 1863. Therefore my connection to this land is through my mom and grandmother. I've seen these lands go from an excess of water, fish in the creek, plants, and trees all over it was abundant. I knew I belonged to this part of the world because my mother told us we were native, "this land is our land." I am really concerned on what is happening to it today, we have no water in the creeks, streams, and rivers water is important to our native land, life, plants, and animals also the air we breathe. It's important for me to stay connected to the land and protect for my four generations that I have and beyond.



Photo 3: Ruth's Oldest daughter Ramona Garibay as she gathers the Soaproot plant a Coyote hills regional parks and prepares it to create a Soaproot brush.

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In the early 1990s, my oldest daughter, Ramona Garibay and I became involved with the Coyote Hills Regional Park. Under the leadership of Bev Ortiz, we formed the Ohlone Intern Program. Throughout the program we learned from other Tribes how our ancestors lived. I learned how to prepare and cook the acorn while Ramona learned how to harvest the Soaproot plant and create a Soaproot brush. Ramona has two daughters who also participated in the program. Sabrina Garibay makes cordage out of dogbane. Rita Garabay learned how to create jewelry out of abalone shell and pine nuts. Overtime, my two youngest grandchildren Brenda and Davis Morris, as well as Sabrina's two children and Alfred Caldron are all involved with jewelry making. Our family has been involved for 26 years with Practicing our cultural Practices and presenting them to the general public at the Annual Ohlone Gathering every year for 26 years and continuing.



Photo 4: Ruth Orta attending at Coyote Hills Regional Parks presenting how her ancestors would prepare the acorns to eat and what each of the tools on the table were used for.

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Photo 5: Muwékma Ohlone Tribal Members pictured at the 26th Annual Gathering of Ohlone Peoples at Coyote Hills Regional Park in Fremont, CA on Sunday, October 6, 2019. It was a celebration of the living cultures and traditional skills of Ohlone Peoples.

Muwekma Ohlone Tribal Land Acknowledgment

For The City and Counties of San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, and Surrounding Towns Within the Ethnohistoric Yelamu/Aramai, Saslson, Lamchin Ramaytush Ohlone-Speaking, the Puichon Thámien Ohlone-Speaking, and the Carquin,

Huchiun, Jalquin/Yrgin, and Tuibun/Causen Chochenyo Ohlone-Speaking
Ancestral

Muwekma Ohlone Tribal Territory

Horše tuuxi! (Hor-sheh troo-hee) We recognize that we are located on the ethnohistoric territory of the Yelamu/Aramai, Ssalson and Lamchin Ramaytush Ohlone-Speaking tribal groups of the San Francisco Peninsula whom were intermarried with the Puichon Thámien Ohlone-Speaking tribal groups of San Mateo and Santa Clara Counties; as well as the Yelamu/Aramai Ramaytush who were also intermarried with the East Bay Carquin, Huchiun, Jalquin/Yrgin and Tuibun/Causen Chochenyo Ohlone-Speaking tribal groups of Alameda and Contra-Costa Counties. This greater Bay Region's aboriginal territory includes the ancestral and legally <u>unceded lands</u> of the ancestors of the Muwekma Ohlone Tribe of the San Francisco Bay Area whom were missionized into the three Bay Area Missions San Francisco, Santa Clara, and San Jose, and who are the successors of the historic, sovereign, federally recognized Verona Band of Alameda County. Muwekma means La Gente – The People in their traditional Chochenyo-Ohlone language.

This land was and continues to be of great historic significance to the Muwekma Ohlone Tribe, and other familial descendants of the Verona Band whose ancestors appear on the 1900, 1905-06, 1910 Indian census, Bureau of Indian Affairs (BIA) correspondences and annual reports, BIA Indian Boarding Schools, were members of the Bay Area California Indian Council (1940s-1950s), and who also enrolled with the BIA from 1928-32, 1948-57, and 1968-71, as part of the 1928 California Indian Jurisdictional Act. Additionally, Muwekma men, and later women, served with honor in all branches of the U.S. Armed Forces from WWI, WWII, Korea, Vietnam, Desert Storm, Iraq and are still serving today.

We recognize that every citizen residing within the greater Bay Area has, and continues to benefit from, the use and occupation of the Tribe's aboriginal holse warep (hol-sheh wah-rehp) ~ beautiful land. Consistent with our values of community, inclusion, and diversity, we have a responsibility to acknowledge our relationship to Native Peoples. As members of the Bay Area community, it is vitally important that we not only recognize the history of the land on which we reside, but also, acknowledge that the Muwekma Ohlone People, with an enrolled Bureau of Indian Affairs documented membership of over 600 Tribal members, are alive and flourishing members within the greater San Francisco Bay Area communities today.

Aho!

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Photo 6: Group Picture of Muwékma Ohlone Tribal Members at the Muwékma Ohlone Tribe Town Hall Meeting on Saturday, November 3, 2018. Tribal Members are holding the Muwékma Flag. The meeting was held at the Clubhouse Ballroom at Stanford University. The Town Hall Meeting provided an update to our Tribal Members on various issues, projects, and activities the Tribe is involved in. The Muwékma Tribal Council hosted the meeting and provided lunch for the members. We also socialized and held a raffle. It was a very good gathering with many enrolled Tribal members and lineages represented at the meeting.

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Photo 7: The Muwékma Ohlone Tribe of the San Francisco Bay Area set up an information and cultural exhibit booth to share information about the Tribe. We also conducted a mini tule boat cultural project demonstration with the public. The Muwékma Ohlone Tribe also offered a Welcoming Declaration to our ancestral home land and provided a land acknowledgment. The photo represents the Tribal Members who sang the Muwékma Welcoming song as part of our Welcoming Declaration. Our Tribal Youth also helped run the pole and hoop game.

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San Francisco Bay Area Funding Area Tribal Needs
Assessment

FINAL Report

(10/15/21)



I. Introduction and Methodology

This report was completed by the California Indian Environmental Alliance (CIEA) for the Disadvantaged Community and Tribal Involvement Program of the San Francisco Bay Area Funding Area. It was funded by the Proposition 1 Integrated Regional Water Management Grant Program. This report has been reviewed for accuracy by CIEA's SF Bay Area Tribal partners who completed the Needs Assessment. For more information or to obtain the final version of this report please contact (510) 848-2043, or email info@cieaweb.org.

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(CIEA) was created in 2006 at the request of impacted California Tribal leadership and Tribal members to address the toxic legacy of mercury left over from the California Gold Rush. Our mission is to "protect and restore California Indian Peoples' cultural traditions, ancestral territories, means of subsistence, and environmental health." Since 2003, CIEA has worked in partnership with Tribes in Northern California, over eighty (80) Tribes today, to increase Tribal participation within the decision-making bodies that affect water quality and to identify strategies to address environmental destruction and resulting toxins that keep families from fishing cultures wherein fish play an important cultural, spiritual, and nutritional role.

Our programs are Mercury Tribal Health, Tribal Self-Advocacy, and Leadership Programs. We provide health education to healthcare providers and community members on ways to avoid Mercury and PCBs in fish. CIEA piloted the first Women Infant and Children's (WIC) curriculum, providing nutritional information on wild-caught and store-bought fish. The Self-Advocacy program provides tools for Tribal leadership to advocate on their own behalf with the goal that Indian Nations are at the table whenever decisions are being made that affect traditional Tribal lands, resources, and Tribal members. One of CIEA's guiding principles is that Indigenous Peoples have a right to eat traditional foods and set environmental cleanup standards for their cultural continuance.

CIEA staff continues to provide training to American Indian Health clinics, health care providers (for Continuing Medical Education (CME) and directly to the public. We have successfully worked with California Tribes, the Office of Environmental Health and Hazard Assessment (OEHHA) and the California Department of Public Health (CDPH) to develop materials and clear messaging. Over time, our advocacy work and resulting leadership of partnering Tribes has

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become stronger and our goals have shifted to creating a future where fish are available at subsistence levels throughout the state. We now provide technical support to this end. Today, CIEA is the Tribal Engagement Coordinator for three key Integrated Regional Water Management (IRWM) regions, in the Sierra/Sacramento River, the North Coast, and the San Francisco Bay and Bay Delta, wherein we coordinate Tribal Representative Elections, water strategy workgroups, and advisory committees. We are spearheading a campaign to create new tools for Indigenous Peoples to require cleaner water quality standards under the Clean Water

CIEA supports Northern California Tribes in applying new Tribal beneficial use definitions to develop safer water quality objectives for Central Valley, San Francisco Bay and North Coast Basin Plan Amendments, and the Pacific Ocean Plan Update. CIEA will support Tribal engagement for Northern California Tribal efforts to regionally designate traditionally used water bodies under the "new" statewide beneficial use definitions. "Tribal Subsistence Fishing" and "Tribal Cultural Uses. These new definitions are now legally defendable under the Clean Water Act (CWA). In addition to meaningful Tribal inclusion, long-term benefits include increased protections for water quality. Integration of the two new Beneficial Uses, has been determined as a priority by each Regional Water Board for all four plans. CIEA is currently working to engage 81 San Francisco, Central and Northern California Tribes to support Tribal engagement and participation in the update process. For tribal subsistence. We will provide training on how to complete fish consumption and cultural use surveys: build consensus on final recommendations to each $regional\ water\ board;\ organize\ and\ coordinate\ two\ planning\ meetings\ per\ basin\ plan,\ and\ provide$ travel support for Tribal cultural practitioners and staff to attend regional board meetings and hearings (32 participants to attend water board hearings). Tribes will determine which water bodies in their regions need these definitions applied, and the associated water quality objectives. We will then assist Tribes in coordinating testimonies and identifying criteria to support the need for cultural beneficial uses on specific water bodies during different times of the year.

Integrated Regional Water Management

AB-52 Tribal Consultation requires Tribes to request in writing notification of proposed projects in Tribal footprint areas where proposed projects may have a significant impact. CIEA works with Tribes who are working to increase state agency outreach and consultation to reach Tribes in the source water and receiving water areas. We maintain that consultation should be conducted with Tribes when their cultural resources will be affected by a project, by Tribes need to be Water is a cultural resource and by only consulting with those in the footprint area the state is not meeting its responsibility of prior and informed consultation.

The Delta Conveyance Project proposes new intake facilities which will remove a total 6,000 cfs from Northern California to be transferred to Southern California. This limits the possibilities for how surface and groundwater can be enhanced by restoration and enhancement of natural systems and impacts the footprint and surrounding environment and habitat negatively making it unsustainable and detrimental to the environment. This plan largely focuses on how much water can be stored and diverted instead of focusing on how upland meadows, slowly meandering streams and rivers supported by wide riparian zones, and wetlands could greatly enhance groundwater sequestration and slowing surface water flow, which would provide water in wildlands for fire protections and cooling water for fish habitat. CIEA is in discussion with California Tribes to put an end to this project and present environmentally friendly and sustainable alternatives spearheaded by Tribes. CIEA and Tribes are in conversations with the Department of Water Resources (DWR) to convince them of the negative impacts of this particular project. We are hopeful that DWR will recognize this and listen to the expertise of Tribes who have been stewarding the land since time immemorial. The Delta Conveyance Project is similar to other projects proposed in the past by governors of California only with a different name. CIEA is advocating for DWR to work more closely with Tribes to create a more sustainable plan for California that has less of a detrimental impact on both the environment and on the Native American people of California.

I. Introduction and Methodology

This San Francisco Bay Area Funding Area (SF Bay Area) Tribal Needs Assessment Report is an initial assessment of the results of the targeted Tribal Needs Assessment surveys, follow-up interviews and meetings completed from April 24, 2019 through December 1, 2020 by the California Indian Environmental Alliance (CIEA), for San Francisco Estuary Partnership (SFEP), and the San Francisco Bay Area Funding Area Disadvantaged Community and Tribal Involvement (DACTI) program. This assessment was funded under the Department of Water Resources Integrated Regional Water Management (IRWM) Program. Four Bay Area Tribes, each asked their Tribal members to complete the needs assessment survey.

CIEA staff provided the survey using an online digital service, fillable pdf and paper surveys to Tribal Environmental Directors, Tribal Administration, leadership staff, Tribal Elders and members at large. The Tribes of SF Bay Area agreed upon this style of surveying to better encompass an aggregate result of their Tribal Communities. Each Tribe who completed this survey has traditional territory within the San Francisco Bay Area. Two of the four Tribal partners have territories that overlao with IRWM regions in funding areas adiacent to the San

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Francisco Bay Area region.

CIEA's four Tribal partners of SF Bay Area who completed the needs assessment surveys were:

- Amah Mutsun Tribal Band/ Amah Mutsun Land Trust
- Association of Ramaytush Ohlone
- Him-r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok
- Muwekma Ohlone Tribe of the San Francisco Bay Area

It is worth recognizing the significant difference in the membership of each Tribe and the resulting wide range in the numbers of responses from individual Tribes. For example, two of the four participating Tribal partners have fewer than 50 members, while two of the Tribes have membership base of over 500. This is not due to lack of representation in the San Francisco Bay Area but due to active members.

CIEA acknowledges that the SF Bay is home to many Tribes. During our initial outreach we have reached out to all Tribes with ties to historical use and subsequent management responsibilities in the Bay Area including Federated Indians of Graton Rancheria, Lytton Band of Pomo Indians, Kashia Band of Pomo Indians of the Stewarts Point Rancheria, and Mishewal Wappo of Alexander Valley. Some of these Tribes expressed interest in participating but due to capacity issues were not able to join at this time. Others wanted to provide other Tribes within the San Francisco Bay Area the opportunity to expand and grow, but asked to be kept informed as the work continues. For some Tribes their aboriginal territory is within both the Bay Area and the North Coast IRWM region and their information can be found within that Needs Assessment Report.

CIEA wants to express that the needs assessment process was delayed heavily due to the COVID-19 pandemic. CIEA and our Tribal partners had planned major events to gather survey responses and to hold face-to-face discussions about regional Tribal needs initially to be held in Spring and Summer 2020. For two of these events, two of our Tribal partners expected to have about 200 participants combined at their events. Due to state shelter-in-place directives and because of the risk of endangering Tribal Eliders and other participants, we postponed these events for a later date. At the time that this report is being published there are still continued concerns over COVID-19, and these events remain on hold.

In order to continue the needs assessments process during the COVID-19 pandemic, we moved efforts to an online format that yielded 56 additional results across the four Tribal partners. The

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fact that this online process did not allow tribal Chairs and Council members to introduce and endorse the survey in likely undernined Tribal Community engagement and reduced overall responses rates. CIEA believes the size of the survey roughly 50-100 questions impacted the ability of respondents to meaningfully engage and respond to the survey. Another factor that impacted our survey was not being able to attend in person to reassure Tribal members that upon completion of the survey there will be formal action arising from the needs of the Tribes, as opposed to inaction promised by agencies who do not follow up or communicate the final results with Tribes after survey's or requested our completed by the Tribes. CIEA and SFEP agreed therefore, that this report is an initial submission. CIEA continues to conduct follow-up interviews with our Tribal partners individually to review their results and to receive additional and/or clarifying information. As part of the DACTI Program, these follow-up conversations are intended to provide additional information about what support is needed by Tribes and Tribal members in the region.

These Tribal Needs Assessment results and the information in the attached appendices are provided in aggregate to protect sensitive information and maintain the anonymity of the Tribes that responded. This enabled Tribes to share transparent and honest answers without the concern that there will be direct or indirect negative outcomes.

CIEA has also shared this report, appendices and individual needs assessment and notes with each Tribe who completed a Tribal Needs Assessment survey. Tribes will be encouraged to share their results with the SF Bay Area DACTI team, their IRWM Coordinating Committee, and others to help address their identified needs. Bay Area Tribes requested that CIEA convene a Tribal Advisory Committee (TAC) to assist in interpreting the results of this survey and to prioritize the services they will be offered through the DACTI program towards the development of IRWM implementation project(s). This recommendation is aligned with basic environmental justice principles, supports Tribal sovereignty and self-determination, and reflects the policies of the State of California to support Tribal self-governance.

II. SF BAY AREA IRWM Tribal Needs Assessment Executive Summary

This Executive Summary introduces the process and preliminary findings of the water-related Tribal Needs Assessment conducted in the San Francisco Bay Area Integrated Regional Water Management (IRWM) Region between April 2019 and May 2020, and will be updated to produce additional findings as they become available. The Needs Assessment process described here was undertaken with four Bay Area Tribal groups with ancestral territory within the SF Bay Area IRWM Region (the Amah Mutsun Tribal Band; the Association of Ramaytush Ohlone; the

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Him-r^n Ohlone, Jalquin, Saclan Tribe, Bay Miwok, Plains Miwok; and the Muwekma Ohlone Tribe of the San Francisco Bay Area). The process consisted of introductory meetings with Tribal leadership and members, the administration of a Needs Assessment survey (both in-person and via a web-based platform), and follow-up discussions. Importantly, this process was substantially impacted by the Covid-19 pandemic and associated restrictions for in-person meetings and public gatherings, and, as a result, a number of planned activities have been postponed until in person meetings can be safely conducted.

The majority of the findings presented in this Executive Summary and the full Final Needs Assessment Report stem from the Tribal Needs Assessment Survey, which consisted of a combination of closed-ended, open-ended, and multiple-choice questions organized in specific sections focused on Tribal background, demographic information of survey respondents, water access and water quality, environmental issues and watershed-level concerns (e.g. stormwater and flooding, climate change, sea level rise, sources of contamination), fire preparedness and emergency response, other challenges in Tribal communities, and awareness of and participation in IRWM processes.

In total, 56 members from the four Tribes participated in the survey. Respondents included Tribal Elders, leaders, and general members representing a diversity of age groups and geographic locations. Just over half of these respondents (52%) reported living in urban areas, while 34% resided in suburban areas, and 13% lived in rural areas. It is notable that only 31% of respondents reported living within their Tribe's ancestral territory. This finding underscores the high levels of displacement of Tribal members from their traditional territories throughout the San Francisco Bay Area and adjoining regions, due both to historical colonization processes as well as ongoing socio-economic challenges such as the region's high cost of living and widespread gentrification. This displacement has not, however, served the Tribes connections to these territories not has it removed the responsibility Bay Area Tribal members have to steward and provide balance to the lands, or negated the need for access to traditional foods medicines and water for subsistence and cultural uses within the region. The fact that a significant number of Tribal respondents reside outside the San Francisco Bay Area region as a result of this displacement means that a portion of the findings reported here correspond to water systems and environmental conditions in geographic locations outside the Bay Area, we therefore attempted to divide these out of area responses where possible by comparing responses to the residence status. Additionally, the ancestral territories of some Tribal communities extend beyond the boundaries of the SF Bay Area IRWM region, heightening their responsibilities and costs related to participation and inclusion in IRWM-related resource management activities within multiple IRWM regions

Water Access and Affordability

With regards to water access and affordability, 36% of survey respondents reported a monthly average water bill of \$0-100, while 37.5% reported a monthly cost of \$100-200+, and 23% reported that their monthly water costs were included in their household rent. Broadly, 23% of those surveyed stated that they had experienced difficulty paying for monthly access to water, a concerning finding that requires follow-up investigation. Additionally, 43% of respondents stated that they purchased bottled drinking water, with 72% of this group paying between \$0-50 per month and 14% paying between \$50-100+ monthly for drinking water. Of those purchasing drinking water, 32% reported experiencing difficulty with this expense, a detail that also requires additional investigation and in particular the need to identify solutions for these Tribal members.

Drinking Water Quality

When asked about drinking water quality, 18% of survey respondents rated their water quality as poor, 41% considered their water to be of fair or tolerable quality, 23% rated their water as good quality, and 17% considered their water to be of excellent quality. Respondents were largely unaware of the last time their water had been tested to be compared with safe quality standards, and a large majority (71%) expressed an interest in having their household water supplies tested for quality. In addition of the 43% of respondents who reported purchasing bottled drinking water, 36% reported drinking filtered tap water. Together, these findings highlight a widespread avoidance, and potential mistrust, of direct consumption of tap water, a condition that can contribute to significant additional household expense and environmental impacts caused through the purchase of bottled water. As the Needs Assessment process with other communities in the SF Bay Area region and elsewhere has shown, public mistrust of tap water quality is widespread and requires additional investigation and follow-up in many contexts, including with Tribal households.

Environmental Issues and Concerns

Tribal respondents expressed a wide variety of concerns around environmental issues and watershed-level impacts, many of which were linked to specific geographic locations. Sitespecific issues included concerns over pollution of waterways by various sources and contaminants (e.g. chemicals from agricultural and industrial processes, sewage, trash and illegal dumping, homeless encampments, etc.); flooding of homes, roads, and other infrastructure; and erosion. Some of the broader environmental issues mentioned by respondents included climate change impacts such as higher temperatures, growing wildfire risks, sea level rise, and saltwater intrusion; drought, declining and over-drafted water supplies; air pollution; declining native plant diversity; and problems with invasive species, pests and disease vectors like mosquitoes. In addition to concerns over these environmental impacts, a

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number of respondents mentioned impacts to cultural practices and resources or Tribal beneficial uses of natural resources. These include concerns over reduced access to ancestral waterways and landscapes for traditional ceremonies, subsistence and resource gathering, and direct impacts to important cultural sites (including burial sites). Follow-up activities are needed to understand and discuss strategies to address these concerns for both environmental and cultural impacts are required.

Emergency Responses and Fire Preparedness

When asked about emergency response plans and fire preparedness, a majority of survey respondents (64%) reported having no emergency response plan, and 50% of respondents stated that they would appreciate assistance in developing such a plan. When asked if their Tribe or Tribal community needed fire preparedness assistance, 27% of respondents answered "yes", 8% of respondents replied "no", and 52% of respondents answered "I do not know". Similarly, when asked if they would be interested in receiving funding for fire preparedness, 27% of those surveyed said "yes", 21% said "no", and 34% responded "I do not know". These responses coupled with the increasing frequency and intensity of wildfires in the San Francisco Bay Area and California in general, suggest a need for follow-up related to emergency response generally and fire preparedness in particular. There is an opportunity for municipalities to communicate with residents and with Tribal staff and leadership of Tribes in their regions about any existing emergency response plans.

Specific Challanges

When queried about specific challenges within their Tribal communities, respondents nearly unanimously (96%) pointed to the high cost of living as a challenge to housing within their traditional territories. When asked about factors limiting access to Tribal culture in their communities, many respondents highlighted issues related to separation from and lack of access to ancestral lands, and associated resources such as traditional foods, including aquatic fish and shellfish, native plants, and medicines. Other issues mentioned by multiple respondents included a lack of educational opportunities and knowledge resources in addition to the ongoing intergenerational trauma linked to colonization and settler colonialism. When asked about other issues impacting their Tribal communities, respondents pointed to problems such as limited job opportunities, poverty, lack of federal Tribal recognition, and limited activities for children towards cultural continuance. When asked about ways to address or overcome these diverse challenges, respondents offered an array of ideas including suggestions for returning land to Tribal communities, creating access opportunities within ancestral territories, improving educational and recreational opportunities, supporting cultural revitalization including activities for youth and emerging leadership, and providing more affordable housing.

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Familiarity with IRWM

Only a small percentage (11%) of surveyed respondents expressed familiarity with the IRWM process in the SF Bay Area, likely reflecting those Tribal members who are participating in the Tribal Advisory Committee and/or facilitating the Needs Assessment and related IRWM activities under the Disadvantaged Communities and Tribal Involvement (DACI/DACTI) Program.

III. Needs Assessment Summary

The first two questions included the name of the respondent and which IRWM they are in. Results by IRWM region are found in Appendices A-1 through A-4.

Questions (Q) 1-12. Contacts, Personal Information, Tribal Information, & IRWM Self-Identification

Personal information divulged by respondents provided context related to specific locations of their concern and to issues that have long affected Tribal communities due to the effects of colonization and settler colonialism, which have led to a Tribal diaspora from the San Francisco Bay Area.

Tribal participation in the IRWM program is challenging for a number of reasons related to IRWM boundaries. Simply stated, this is because the traditional territory of a Tribes often does not align with IRWM boundaries. Half of the responding Tribes indicated that their ancestral homelands and areas of Tribal responsibility are in more than one IRWM region either because of their current physical location, or because IRWM regional boundaries cut across their Tribal traditional aboriginal territories. For some Tribal members, displacement from ancestral territory means they currently reside in regions distinct from those territories where they have cultural responsibility for stewardship, and where they want to focus engagement in IRWM efforts. Responses can be attributed to the following adjacent IRWM regions and associated funding areas:

North Coast Funding Area

Central Coast Funding Area

Santa Cruz IRWM

Pajaro Watershed IRWM

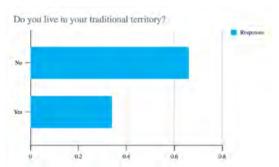
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Greater Monterey IRWM

Q 13-16. Demographic Information by Individual Tribal members (including but not limited to type of residence, geographic location (on or off traditional territories), length of time at residence)

Respondents indicated their role within their Tribal communities and specified type of residency in order to be able to respond to capture differences in residency and in type of community of residence. Of the three options provided 52% of respondents said they lived in an urban community, 13% of respondents sated they lived in a rural community, and 34% of respondents said they lived in a suburban community.

Only 31% of respondents stated they lived on their traditional territories, which highlights the disparities between one being able to live on their traditional territories and being forces out due external factors such as gentrification, cost of living, and other issues resulting from colonization and settler colonialism. This pressure was also reflected as a reason CIEA and Tribal partners have scheduled out of area events to gather Needs Assessments: there is an increased cost of hosting meetings within the Bay Area, and there was a need to accommodate Tribal members who do not live in their traditional territories.



Graph 1: This Graph shows that out of all our Tribal Members who responded only 31 percent have the ability to live on their Traditional Tribal Lands.

Q 17 - 29. Status and Source of Tribal and/or Community Services for Drinking and Tap Water Services and Quality

The first subset of questions (17-18) in this section are related to the approximate monthly average cost a resident pays for water access. This was a multiple-choice question

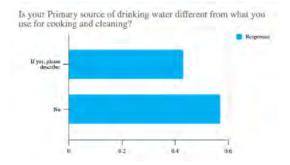
Of respondents 36% said their bill average was \$0-\$100, 37.5% stated their bill average was \$101-\$200+, and 23% said they rented and that water was included in their rental payment.

In a follow-up question the survey asked if Tribal respondents have difficulty paying for access to water and of these 23% stated that they did have difficulty paying for their access to water.

The second subset of questions (19-21) are related to sources of drinking/tap water

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and asked if it was different from their primary source. This question was also multiple choice. Of these 43% of respondents said their drinking water was different from their primary source. We asked if respondents noticed changes in their water and multiple respondents have noticed a difference. One respondent stated the water has small change and that it is "not as delicious". One said it "looks dirty." Another stated that it "takes a while to go from foggy to clear." One said "there is a subtle, slight metallic smell, and more grit." Two respondents agreed that there is a little difference in their sources of water and they were therefore less stressed about their water quality.



Graph 2: This graph represents that 43% of our Tribal Respondents use a different source of water then their Tap water for cooking and cleaning purposes.

When asked if their drinking sources was different than unfiltered tap water 43% stated they drink bottled water and 36% said they drink filtered tap water.

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The third subset of questions (22-23) are about costs associated with paying for drinking water. This is a multiple-choice question. The first question asked if the respondent pays for drinking water, that is not tap water and what is the cost. The largest percentage, 72% salid they paid \$1.550 a month, and the remaining 14% stated they paid \$51-\$100+ monthly. The last question asked if respondents have trouble paying for drinking water, and 32% said they did have trouble paying for this

The last subset of questions (24-29) are related to disruption of services, access to services, and water quality standards of the region. This is also a multiple-choice question. The first question asked if respondents have experienced disruptions of services at any given time due to problems associated with respondents' water systems and 22% said yes due to drought related issues.

When asked if members had access to drinking water, only 1% said no, which can be interpreted to mean that all members have some access to water and that it is the quality that is in question.

When asked if services are disrupted who would they contact 2% of respondents stated they would contact their landlord, 36% of respondents said water agencies/providers, 8% stated the city and 16% said they were unsure of who to contact if they experienced disruptions in their services. This was an open-ended custoffice.

We then asked how they would rate their drinking water 18% of respondents rated their drinking water poorly. 11% of respondents rated their drinking water fairly. 30% of respondents rated their drinking water as tolerable. 41% of respondents rated their drinking water good or above average. This question was multiple choice.

When asked the last time their water quality was tested and if they knew the results of said test 82% of respondents said no, they did not know the last time their water quality was tested. We then asked respondents that answered no, would they like to receive a water quality test and 71% of the respondents said yes. This was a close-ended question.

Q 30 - 33. Rain and Stormwater

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The following questions asked participants if there were concerns about rainwater or stormwater in their community. This question provided respondents with a list to choose from and at the end had the availability to be open-ended.

The highest rates of concern 32% were associated with pollution of creeks from chemicals or trash. A few respondents said that homeless populations living near creeks were a concern. One respondent specifically cited that "Silver Creek in San Jose had issues." Another that there were issues in the locations of "Plata Arroyo Park, Hayward regional Shoreline area, and Alameda Creek." One respondent said they were "concerned about the quality of creek runoff into the ocean." For those responding about out of area pollution concerns, respondents cited "urban runoff in downtown Long Beach, and the Sulfur Bank mine adjacent to Clearlake."

Water quality problems from soil or animal waste was an issue for 20% of respondents, and of these responses again "Plata Arroyo Park in San Jose" was indicated as a problem area." Another respondent said "Alameda Creek had issues." Out of region concerns indicated were related specifically to the "cattle farm pollution in Hanford, California."

In addition to direct water quality issues, concern was expressed about pests that carry viruses associated with agricultural and/or water mismanagement including fruit flies and mosquitos. Notably, 30% of respondents stated mosquitos were a concern and of these the Plata Arroyo Park in San Jose was identified, while another respondent said that West Nile Virus was common in the San Jose area.

Flooding was a concern among 23% of respondents. One respondent said that they are three houses down from the creek and that they have worries about flooding. For another they were worried about flooding at Plata Arroyo Park in San Jose. For those respondents that stated that flooding was a concern CIEA has initiated follow-up to receive specific information and these areas could be identified for future IRWM implementation projects. The question of flooding yielded additional information wherein 20% of respondents stated that road flooding was their concern. There was a higher number than expected for house flooding specifically, 12.5% of respondents indicated this was their concern. One respondent said "they live on the Hayward fault and there was concern about flooding because of earthquakes." One of the responses related to house flooding didn't list a specific concern and as a result additional details have been requested.

Park flooding was a concern for 11% of respondents and two respondents listed Plata Arroyo Park as a flooding issue. Another respondent said "that park flooding was a concern" and a follow-up will be needed to ask them to specify their specific concern and the location.

Sewage from manholes was a concern for 12.5% of respondents. In this questionnaire area Plata Arroyo Park in San Jose, and Cameron Street in Hanford were listed as problematic for manholes and sewage. In relation to garbage, waste and trash one response noted that household waste is a huge problem. Another respondent said Big Silver Creek in San Jose near Muwekma Ohlone territory was an area of concern

Erosion from flooding was a concern for 16% of respondents. One respondent listed Plata Arroyo Park in San Jose as a concern and another said that yes erosion from flooding is a concern. Follow-up is being conducted to identify specific needs to address erosion control.

We also asked an open question to determine additional concerns not listed in the survey and 9% of respondents stated there were other concerns. One respondent said that they were concerned about the climate change impacts to regional water including sea level rise and the upcoming variability in freshwater and precipitation. Heavy rains were cited as the reason for one respondent to change their water heater and placement of sand bags for heavy rain.

For the following questions the needs assessment asked respondents to indicate their level of concern for each category. For each they indicated a "Strong", moderate, or "Extreme Concern" for any category we asked that they briefly explain. We have been interviewing respondents and other Tribes to receive more details to seek solutions to challenges and to guide an appropriate follow up. This question was multiple choice.

Raw water quality: 25% had a moderate concern, 29% a strong concern, and 18% said

Irrigation water supply: 30% had a moderate concern, 21% a strong concern, and 14% said extreme concern

Water pressure: 36% had moderate concern, 12.5% a strong concern, and 12.5% said

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extreme concern.

Water use and recycle: 32% said moderate concern, 23% said strong concern, and 20% said extreme concern

Groundwater recharge: 25% had moderate concern, 18% a strong concern, and 21%

Lack of data/information: 11% had moderate concern, 21% a strong concern, 29% said this was an extreme concern.

Resources and Sunnort Needed

The next question asked respondents to indicate what kinds of resources and support would be most helpful in addressing each issue that they had ranked above. This section was aimed at solution identification. This question was open-ended.

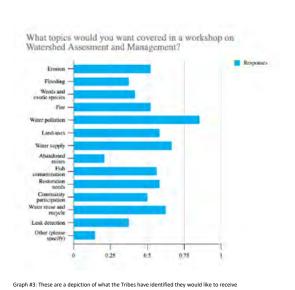
One respondent said "they want to make sure they do not live in an area where raw sewage would reach their home." The respondent also mentioned they would like more knowledge on grey water, and a desire to "become a good steward for water in our tribal area." Respondents stated a "need for water enforcement regulations. water testing, better quality control from local government, and a need to be more informed and knowledgeable on how to have their water tested." One respondent stated that "there was a need for an independent testing organization."

The last question in this section asked respondents if they have ever been under water restrictions during summer months, periods of drought or during peak demand periods: 62.5% of respondents said ves and a smaller number, 20% of respondents said no. This was a close-ended question.

Q 34 - 35. Miscellaneous (Policies/Dumping)

The first question in this section asked respondents what policies to choose from or add to the list which policies, regulatory approaches, and management programs do they think are most impactful and/or important to watershed work. Responses listed by highest response rate were:

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trainings on throughout the life of this program

- 52% Water quality and improvement under Clean Water Act
- 41% City planning
- 37.5% IRWM Program
- 36% Restoration of Degraded Land
- 36% CalFed or DWR watershed programs
- 34% Federal Land Management
- 28.5% Endangered Species Regulation
- 9% chose other issues that are impactful and/or important and listed the

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following key issues

- o Cultural/Tribal /Traditional knowledge of land management
- o Water stewardship
- o Fire/water connections (Use of fire as a sacred tool that can boost water yield, traditional cultural practices and food production).
- . One respondent said "government doesn't have an effect on anything. potentially indicating a mistrust of government to provide benefit to water quality or quantity."

The last question in this section asked respondents which areas were of concern regarding trash and dumping, and asked where these areas were located. This question provided respondents with a list to choose from and at the end had the availability to be open-ended. The following were those responses:

- A) Dumping large material: 32% said this was a concern. Locations of concern were under freeways in San Jose and San Lorenzo due to homeless, Balboa Avenue in San Jose, Plata Arroyo Park in San Jose, along freeways 101, 280, 680. McLaughlin and Story Road in San Jose. Entire watersheds were of concern to one respondent including the Pajaro, Guadalupe, and Alameda creeks and rivers. Out of the area areas of concern due to dumping included Arrowhead Drive in Clear Lake that was listed as being full of trash. Respondents noted that in these dumping areas they are concerned about
- B) Trash: 29% stated this could be seen in trash in parks, generally everywhere around town, at beaches and sewers, vacant lots and freeways. There were specific concerns that animals eat the trash, and that trash is only an issue if it cannot be recycled noting a solution to regional trash is revising the materials being used by consumers.
- C) Homeless/Encampment trash: 48% said this was a concern, and this concern was listed in the narrative responses of the two proceeding questions. Locations included include under overpasses, and along the sides of freeways and open spaces in park, near Lake Merritt in Oakland, Ross Camp on Highway 1 in Santa Cruz, River Street in Santa Cruz, Cowell's Beach in Santa Cruz, under freeways in San Jose and San Lorenzo, "everywhere around town-all over the city of San Jose, Alameda Creek Niles area; Pajaro, Guadalupe, and Alameda watersheds; Highway 82 Monterey Road to San Jose, intersection of Monterey

Road and Senter Road in San Jose. Related to Homeless issues respondents were worried not just about trash, there was also concern about raw sewage and that this is a human justice issue that should be addressed more broadly.

- D) Oil, paint, or chemicals: 25% said this was a concern and included types of toxic sites such as sewers, and car/auto places. Specific locations listed included the Pick-n-Pull on Dolan Road adjacent to Elkhorn Slough near Moss Landing, and Plato Arroyo Park in San Jose. Respondents noted proximity to waterways, that this is all around town and that it causes the ground to be the wrong color and/or to smell toxic.
- E) Dog or other animal waste in water: 16% stated this was a concern. Locations of concern included everywhere around town, at beaches, at Plata Arroyo Park in San Jose. One respondent did state they was unconcerned stating that animal waste in small amounts is natural.
- F) Recycling facilities: 12.5% said this was a concern. Of these respondents one location was cited again, Plata Arroyo Park in San Jose. For one respondent this problem was hindered by the current federal administration.
- G) Other-5% chose this option and stated that there was a need for more public drinking water sources at parks and highly populated areas, especially in recreation areas. This respondent again cited the need for this at Plata Arroyo Park in San Jose

O 36 - 38. Sea Level Rise and Intrusion

The first question in this section asked respondents about the impact of sea level rise and sea water intrusion on the respondents Tribe or their Tribal community Responses included loss of ancestral lands and cultural resources that will be underwater, a worry of increase in territoriality and fighting, and that there would be further restrictions for Tribes to access resources and cultural sites. The core concern was related to flooding and loss of land, that "sea level rise and sea water intrusion would be bad because our lands are on the coast," including concern for some that they are "already under sea level" and further erosion or events would inundate them. This is worth noting in regional climate adaptive strategies especially where human rights and environmental justice are concerned. For Tribes, especially those in coastal communities the loss of traditional territories and resources must be elevated

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because Tribes cannot practice their place-based cultures or steward their territories in another place. Loss of traditional territory is irreplaceable. Another respondent worried "that it will change the shape/function of the coast." There is widespread concern that sea level rise will result in ocean inundation of cultural sites and a revealing of burial sites and remains. Protection of these places should be included in collaboration with regional Tribes in any plan to address climate change. This must be done in a way that protects the anonymity of the site so not to alert those intending to desecrate Native cultural sites.

Because there is a cultural and nutritional need to maintain traditional food sources for Coastal Tribes, animals, birds and other species that rely on intertidal and ocean foods sources, there is a general concern that there needs to be more done to save the environment. Tribes are worried for the general population in addition to their own members, that sea level rise will threaten central coast agriculture and food supplies.

Respondents stated their Tribe is not prepared for sea level rise and increased environmental catastrophes, and that they need more research, review modeling and assessment of options for mitigation so they can make regional recommendation and engage in activities to protect resources and culturally sensitive areas. One of the respondents had written a piece on the potential "partial law of symmetries along the coast, which may be related to the need to review international law and sea level rise as well as enter into policy and water related

The following were the top environmental priorities listed by largest percentage from Tribal participants they identified themselves:

- 44.4% Pollution of water
- · 40% Cultural resources, land stewardship, traditional lands
- · 25% Air pollution.
- . 11.11% Recycle and limit waste
- $\bullet \quad 0.7\%$ Native plant restoration, and address the over use of forest, and

The following were the listed priorities that Tribes identified:

- Resilience to sea-level rise
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- Need for climate change mitigation and adaptation
- · Land management/restoration for water quality
- Restoration of cultural and fire practices
- Responses to catastrophic wildfires like those in California and Australia
- · Connecting knowledge systems for environmental stewardship, e.g. helpful parts of western science connected with indigenous knowledge is a top priority
- · Erosion, sea level rise, and temperature rise
- · Removing invasive plants to grow our Native plants
- Need clean water to grow Native Plants
- Health effects, affordable drinking water, and food farmed. Reduction of pollution and clean water
- . Erosion, sea level and temperature rise
- Cleaning up waterways and creeks
- Cultural resources, stewardship, traditional ecological knowledge sharing Water quality and communal wellness aligned with environmentalism is a top priority

Primary Issues Affecting the Watershed(s)

The Respondents were asked about the primary issues affecting their watershed(s), and what topics they would like to be covered in a workshop on watershed assessment and management. Respondents were provided with a list to choose from and at the end had the availability to be open-ended. The following are the responses identifying the primary issue by highest percentage; these percentages closely follow the priority topics identified by respondents for a watershed assessment and management workshop

- 61% Water pollution
- 48% Water supply
- 41% Water reuse/recycling
- 38% Restoration needs
- 36% Fish contamination
- 36% Land uses • 32% Erosion
- 30% Weeds/exotic species
- 30% Fire
- 23% Flooding

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- 23% Community participation was an issue.
- 23% Leak detection
- 11% Abandoned mines
- 4% Harmful Algal bloom

Of the responses 9% said there were other issues, to find out what those issues are CIEA is conducting follow-up questions and interviews.

Q 39- 40. Miscellaneous: Watershed Assessment and Toxins in Water Source

Question 39 asked respondents what topics they would like to be covered in a workshop on watershed assessment and management. This question provided respondents with a list to choose from and at the end had the availability to be openended. The following listed by largest percentage of responses for each, will assist us in scheduling workshops and trainings for Bay Area Tribes and Tribal members:

- · 69.6% Water pollution
- 53.6% Water supply
- 51.8% Water reuse/recycle • 46.4% Fish contamination
- 46.4% Land uses
- 46.4% Restoration needs
- 42.9% Fire
- 39.3% Need for community participation
- 33.9% Weeds/exotic species
- 30.4% Flooding
- 30.4% Leak detection • 16% Abandoned mines
- . 0.7% other without specification

CIEA will need to do a follow-up with these respondents to gain additional information to confirm that planned trainings are tailored for these needs, and then to schedule trainings as part of the DACTI Program. For example, 'leak detection' could be different for pipes, storage tanks, etc.; 'fire' could be how to manage forests to reduce chances of large catastrophic fires using controlled burning or the need for water storage tanks or fire hydrants; and for many issue areas there may be a need

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for trainings on how to identify regional point sources of toxins. There are some trainings like those for 'fish contamination' that CIEA can provide online given COVID-19 since we already have trainings prepared using PowerPoint presentations developed for California Native American health centers, and Bay Area Women, Infant and Children (WIC) clinics on how to continue to eat traditional fish while avoiding or reducing toxins. There were additional training and workshop needs captured in the notes sections after each question. Of these most were listed above, with the exception of a request for funding, and the need for environmental clean-up information and trainings.

Respondents provided the following list of toxins and problems with their water sources that the Tribal members identified:

- Harmful Algal Blooms: In estuary near the Inns "two acres where it should be clean but is super dirty with trucks and boats," where there is camping, and in park ponds
- Invasive plants
- Herbicides/pesticides in waterways- head [waters] region Salinas river, and from residential area
- Sediments pesticides/metals
- Agricultural fields
- · Traditional foods such as water lilies in the Delta
- · Mercury from gold mines
- · Certain public water sources smell like sewage
- Water Quantity: Minimal flow and temperature rise

Q 41 - 42. Climate Change

Respondents were asked what they know about their Tribe/Tribal communities' climate change vulnerability and most respondents provided detailed responses. This was an open-ended question.

One respondent wrote "many Tribal members live in the Central Valley where living conditions could get worse with pollution heat and aridity." Similarly, drought was a concern for another. Respondents were concerned that the "cultural resources in the ocean may be impacted by climate change and the opportunity to revitalize Tribal culture will be affected." Another who taught earth science stated "that with improved air quality they could focus on how to adapt with extreme cold winters and hot summers. There is concern for regional wetlands and native plant diversity." One

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respondent wrote that "there is so much fire fuel over the lands, which would be addressed in part by Tribal traditional burns." There is concern that cattle ruins the land and is a cause of climate change, whereas traditional cultural practices and indigenous stewardship protects against climate change. Concerns were also expressed that there will be less access to waterways for traditional ceremonies and gatherings, and less access to freshwater. One respondent said, "we need to be educated about climate change." Another respondent stated "rising water tides." One respondent wrote, "climate changes have led to abundant fires and drought locally." According to another respondent, "traditionally stewarded territories are drastically changing, ecological systems are shifting, and our traditional homelands are in danger due to settler impacts and a lack of indigenous stewardship." There is concern that Santa Cruz in particular is very vulnerable to climate change due to sea level rise, flooding, drought, and fire.

Tribal respondents identified the following ways to address these environmental concerns. This was an open-ended question:

- Let Tribes monitor [and steward] the land
- Renewable energy, near the Monterey Bay windy area but with careful consideration since some strategies may kill birds and/or animals
- Solar energy
- Utilize watershed[s] for traditional foods, fresh water and as a great environmental benefit to Tribe
- Fuel reduction
- Land restoration
- · Environmental work
- · Restrictions on land use and water uses
- · Textile recycling
- Return land to Tribes, return to what had before as restoration goals
- Petition and rally to possibly create and change policy of water
- · Land stewardship programs, training of communities on healthy practices
- Changes to system, including anarchy and/or use of collaborative management model

Q 43 - 44. Funding/Project Implementation

Most Tribes responded to the question related to staffing and training, and we had many

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conversations about this need during meetings with SF Bay Area Tribes. Tribes indicated a strong need for staffing and training, particularly that funding is needed for their staff.

When asked if their Tribe needs financial assistance including grants, low interest loans, etc. 48.2% of respondents said yes, and 17.9% of respondents said no. Where respondents could provide more details, answers included the need for grant and grant-writing, education and funding for administrative operations, educators and other resources especially for Elders, housing and rental control, to address the inequity and the unsustainability of the cost of living, need for funding for environmental programs, organizational and leadership development, environmental awareness, networking, capacity-building, infrastructure assistance, information on how to navigate institutions, bureaucracy and agency criteria, and how to get more groups communicating with other groups more widely. This was a close-ended question with the ability to input commentary.

When asked what resources are needed in order to implement IRWM projects the following were provided listed by largest percentage. This is an open-ended question:

- 28% Financial resources / funding
- 6% Time
- 14% Education and help from government or other resources

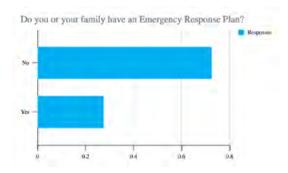
Additional narrative responses included "funding, creation of infrastructure for project implementation, training, solidarity, education including what is needed for the general public to teach accountability, reciprocity and recognition of environmental impacts." One respondent included "ceremony including rain dances for weather modification."

Q 45 - 52. Fire Preparedness and Emergency Response

Tribes in all areas of the SF Bay Area expressed concern for water **supply for fire suppression** and access to fire hydrants. Tribes stated they have limited or no storage for fire suppression and that they are in regions that have experienced intense fires within the last four years, therefore fire suppression and access to fire hydrants is an extreme concern. Tribes in rural areas or isolated at the end of water delivery systems are looking for water tanks so there is dedicated water for fire suppression, and back up pumps should the electricity go out. There may be a difference for respondents living in urban and rural areas, therefore we do need to confirm where these needs physically are and encourage Tribal staff and leadership to

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communicate with local fire responders about the source and availability of water in their areas, and location of fire hydrants. This question was close-ended.



 $Graph \ 4: 64.5\% \ percent \ of \ Tribal \ members \ responded \ that \ they \ do \ not \ have \ an \ emergency \ plan.$

We asked respondents if they have an emergency response plan. [Most respondents answered individually for their families. Only 22.3% did have an emergency response plan, while 64.3% said they did not. For those that did not have such a plan, 50% said they would like to develop one. This is an opportunity for cities and counties to better communicate emergency response plans with their residents and with local Tribes who can assist their members in knowing what to do in an emergency and how they can receive support. This question was close-ended.

When asked if their Tribe/Tribal community been impacted by recent wildfires. 33.9% of respondents said 1 do not know. 37.5% of respondents said no, and 14.3% of respondents said yes. Next respondents were asked if their fire suppression supply/plan was reliable. 3.6% of respondents said no, 60.7% of respondents said they do not have one and 19.6% of respondents said yes.

Following this question respondents were asked if they have an adequate supply of water for fire/emergency suppression. 32% of respondents said no. 51.8% of respondents said 1 do not know. 5.4% of respondents said yes. This was a close-ended question.

Next respondents were asked if there were fire hydrants available in their area. 7.1% of respondents said no. 17.9% of respondents said I do not know. 64.3% of respondents said yes. This was a close-ended question.

When asked if their Tribe/Tribal community need fire preparedness assistance 51.8% of respondents said 1 do not know, 7.5% of respondents said no and 26.8% of respondents said yes. In the narrative comments section one response was that "we all need to become fire practitioners and return fire to our homelands" and another said that "not every Tribal member get an opportunity to learn about cultural uses of fire, due to our families being separated without land." Responders said that in addition to better management, Tribes and Tribal members need training, equipment, emergency kits, plan development assistance, funding, capacity and training for more community members. This was a close-ended question but had the ability to input commentary.

When asked if they needed funding for fire preparedness 21.4% of respondents said no, 34% of respondents said I do not know and 26.8% of respondents said yes. Six respondents agreed that training, programs, and equipment, along with training for fire preparedness would be of interest. Two respondents said they need funding. One respondent wrote there is a need for fire insurance and preparedness plan. Another respondent mentioned they are very "interested in fire preparedness." It would be worthwhile to touch base with the respondents that said they did want funding for preparedness and align more detailed needs with what support we can provide. This was a close-ended question with the ability to input commentary.

Q 53 - 58. Miscellaneous - Tribal Input on Challenges in Their Communities

When asked what factors make housing a challenge in this community 96% of respondents said that they struggled against the barrier of the cost of living in the Bay Area. This was an open-ended question.

When asked how to address these needs the following potential solutions were offered by Tribal members:

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- · 100% said funding
- · Employment and training opportunities
- Subsidize fair housing, because Silicon Valley bedroom communities in Santa Cruz skew costs where incomes are too low to live there
- Increase income and provide equal resource opportunity
- Provide access to traditional lands and create rooms outside, spend most time outside
- Build/rehab more affordable housing and accessible housing for disabled people
- Revitalize Cultural Practices
- Governmental intervention, such as regulations for affordable housing
- One respondent wanted to include this as a future meeting topic

When asked what factors **limit access to culture in their community** respondents gave the following detailed responses that collectively lay out short and long-term strategies for a return to their homelands and access to traditional resources? This was an open-ended question.

Three respondents agreed that there are physical and ontological disconnection to ancestral lands. One respondent documented a "lack of knowledge." Another respondent mentioned transportation limitations due to various issues.

There is general agreement that displacement has driven Native communities from their traditional territories and the ability to reacquire lands through purchase is not feasible. Land urbanization and displacement has left Tribal communities without access to traditional foods, medicines and cultural resources. Tribal community displacement has also impacted traditional burials and other cultural practices. Respondents feel that displacement and land dispossession has scattered families and contributed to the loss of cultural education and tribal resources. Tribal members are not willing to share cultural information because due to historical trauma and the effects of (settler) colonialism Tribes are weary of divulging intimate cultural information. Participants expressed that transportation and lack of funding to support leadership as significant barriers to capacity-building.

Participants feel there is a lack of acknowledgement for Tribal communities within the region, and commented that there is wide continuation of Tribal community post-colonial trauma, lateral oppression and intergenerational trauma. They expressed the importance of educating non-native people on local tribal histories.

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The following question asked respondents to provide ideas on how to receive support for cultural projects. This was an open-ended question. The following suggestions were documented in response to the question by Tribal members:

- Return of traditional land base and resources to support tribal communities and cultural practices
- Coordination and with state, local, federal agencies and private land owners
- Cultural revitalization one respondent suggested all children learn their traditional language
 Spiritual revitalization Support cultural/spiritual leadership and the Tribal community
- Bring people together to share ideas better in close proximity. This includes the need for transportation support since many no longer can live in close proximity to each other
- Project coordination, resources and capacity building-
- Funding and organizational support including grant-making support
 Communication, education to spread awareness, and land acknowledgement
- Replanting more native plants, trees, and shrubs in the city area
- Replanting more native plants, trees, and shrule
 Secure locations for educational opportunities
- Leadership development
- Identifying the needs of all members and reaching out to all

One respondent wrote, "Capacity build, solidarity, collaborative educational outreach, empathy, cultural sensitivity training, and funding Indigenous led projects".

In order to capture any questions not gathered before the Needs Assessment asked an open-ended question where Tribal members could identify other issues impacting their community. The following issues were identified and can be grouped into two listing again.

Visibility, Colonial Paradigm, Access and Lack of Understanding

- Intergenerational trauma and lack of federal recognition and land base
- Need for building connection and communicating with other Tribes.
- Various pollutants
- "Inaccessibility of my own lands"
- "Settler colonialism oppresses Indigenous Peoples, it's focused on consumerism, it's
 exploitive and extractive, it's divorced from accountability, its spiritually-morallyethically bankrupt. Settler colonialism is affluent and entitled. These things are a
 mindset that takes us away from our Indigenous pedagogues."

Economic Inequity

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- Employment Opportunities, housing and education
- Not a lot of job opportunities for people, families are in poverty
- "We cannot live close to our lands because of the high residential costs" not being able to live on or access Tribal territory impacts them.
- Inequality, cost of living are other issues impacting their community.
- Education inequity

Solutions and Opportunities to Overcome Issues

The last question asked respondents to provide ideas on how to overcome the disadvantages identified. This was an open-ended question. Tribal members suggested the following:

- Federal recognition
- Land repatriation
- Development of a Tribal community center that supports healing workshops
- That the city installs more recreational for families
- State and/or city provide more educational opportunities
- Local politicians support benefits for local Tribes
- Taxation and redistribution
- Financial Assistance
- Affordable housing
 Transportation support
- Educate the masses on different perspectives Honor truth in history, teaching and practices of land stewardship and communal accountability, need for listening to Indigenous communities
- Connecting to language revitalization and Traditional Ecological Knowledge teaching
- Need to continue to be protective of the Tribe "keep trying to salvage what we do have"

59 - 60. SF BAY AREA IRWM Feedback

In addition to the Needs Assessment questions related to Tribal participation in IRWMs, during the Tribal Meetings, participants discussed what is needed to increase Tribal participation within the IRWM program. The overall sentiment was that Tribal participation must be a consistent element in the IRWM governance structure and that Tribal perspectives need to be

included in all IRWM Plans

In one case, a Tribe was discouraged from participating in their local IRWM, and was told to work with an adjacent IRWM instead because that is where the Tribe was physically/located at this time. This kind of discouragement ignores the history of displacement and forced removal from Tribal homelands. The history of colonization, settlement and land dispossession has separated Tribes from their original traditional territories. This disregards the responsibility of Tribes to their traditional Tribal territory and doesn't allow the Tribe the opportunity to participate in the stewardship efforts for resources that they rely upon or with which they have histories of cultural beneficial uses and present-day intentions to maintain or re-establish such beneficial uses. There are multiple Tribes that have traditional territory in more than one IRWM region, and many overlap IRWM funding areas. Tribes should not be forced to choose only one IRWM to participate in, especially given project development can only occur within multiple designated IRWM region with DWR's approval, and because each diverse ecosystem within a Tribe's traditional territory is distinct and provides an important resource for the People.

In follow-up interviews and meetings, the question related to Tribal involvement in IRWM programs prompted conversations about changes in the IRWM PSP for Proposition 1 for IRWM Grant Solicitation, including removal of barriers to Tribes in receiving IRWM funds. Several areas of concern that continued to be identified related to each Tribe's participation in IRWM governance structures. This included additional discussion related to local agencies/governments removal of the *limited waiver of sovereign immunity* in order to receive funds through the IRWM program and other state funded programs. DWR representatives stated that they removed this requirement from the PSP and hoped it would be an example to regional agencies to do so as well. Tribes continue to express the need for a *Statewide Tribal Round Table of Regions and meaningful Tribal engagement within the existing Round Table of Regions*. Tribes also suggested the creation of templates that can be shared across IRWM regions especially useful where Tribes' territories overlap multiple IRWMs.

The first question within this section asked respondents if they were familiar with the San Francisco Bay Area Integrated Regional Water Management (SF Bay Area IRWM) and of the respondents 10.7% said yes, 69.6% said no and 3.6% of respondents said they wanted additional information. This was a close-ended question with the ability to provide additional information.

The final question asked of respondents was to identify challenges or barriers to participation in SF Bay Area IRWM that staff have experienced. This is a multiple-choice question with the ability to provide additional information. Of the total

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respondents, 5.4% said they have no difficulties for participation, 12.5% said time commitment for participation is too high, 7.1% said meeting times were not compatible with their staff, community member, or council/board schedules, 12.5% said there was a lack of in-house skill necessary to develop and submit a project for IRWM funding, 10.8% of respondents said they have a lack of staff to perform grant administration, even if grant funds were available, 12.5% said that it was too difficult to understand IRWM and 25% of respondents said other which requires follow-up interviews.

Of the narrative responses one respondent noted that they participated in the program due to the current available DACTI Program funding, otherwise the time commitment would be too great.

The majority of Tribal participants indicated they need training to do the work of the DACTIP because there are few comments within their assessment. Respondents wanted more detailed information on what DACTI trainings will be offered and how they will be provided.

IV. Follow-Up

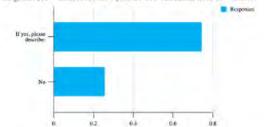
The following are planned activities based on the identified needs

Tribes did indicate they are interested in geospatial technology and mapping, but did not give details on the level of training needed. There is a variety of skill sets among users: some are able to use GPS technology to gather data and generate maps documenting historical features; others conduct data entry. The goal is to attend free online training courses offered by the BIA Geospatial Division Branch, or if needed hire SFEI or other trainer(s) for followup classes.

Tribes that indicated a need for grant writing and/or administrative support, stating that there is a lack of staff time available to complete proposals. Other comments identified a need for funding to support Tribal needs for planning and to support the development of successful grant applications. One participant stated, "grant writing is not the issue, it is finding grants." This respondent requested a grant resource list. Other participants expressed a need for specific trainings and support for IRWM proposal development.

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Is the Tribe/Tribal Community in need of financial assistance such as grants, low-interest loans? (Please use comment field to what...



Graph 5: This graph represents the need Tribes have related to Financial Assistance support and Capacity Building, 74% of respondents identified this as a concern.

Additional Tribal comments were related to a need for training to support water quality sampling to support compliance concerns.

CIEA is working with the Tribal Advisory Committee made up of participating Bay Area Tribes to prioritize workshop, training and technical assistance beginning winter 2021.

Continued conversations will be held with Tribes during meetings. Previous conversations alligned with the questions and structure of the Needs Assessment Survey. This allowed for Tribes to discuss and provide answers to the assessment as a group. Recommendations from these meetings are included in the appropriate sections below under Section V. Recommendations and Next Steps, adjacent to related recommendations that address needs identified within the Tribla Needs Assessments and in follow-up interviews.

Needs Assessmen

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In the initial meeting the following question was asked, "why complete another survey that may not result in issues being addressed?" This question is not surprising given the experience of many Tribes and Tribal members that feel they are superficially studied repeatedly, with little benefit from the outcomes of those studies.

During the first *DACTI orientation meeting* held in October, 2018 Tribes expressed concern about the lack of available funding to support meaningful participation in the program, as well as a lack of funding for technical assistance. Tribes requested that funding be set aside specifically for Tribes to participate. This is being provided through the DACTI program through CIEA. With the funding secured, CIEA convened participating Tribal partners of the Bay Area in a Tribal Advisory Committee, which provides a space for inter-Tribal dialogue and review and approval of project process and outcomes The Needs Assessment was the first step to identifying what should be offered and be asked among each of the Tribes.

CIEA was then asked "how the survey(s) will benefit Tribes and Tribal members, in addition to types of resources offered through the DACTI Program?"

For the presentation, we were advised to use qualifying statements, to minimize the promise of assistance that might not be available. Tribal participants expressed general discouragement by use of the word "may" as directed to include in the outreach presentation (Needs Assessment May Result in Potential Technical Assistance & Capacity Building). This created challenges and prompted extensive explanations, as Tribes requested a description and detailed information as to the nature of benefits that could be received if they participated in the DACTI or related IRWM programs. It is important to know what is available and to ensure that Tribes themselves guide how funds will be spent so that the program best meets the needs of Bay Area Tribes.

In follow-up interviews and meetings, participating Tribes identified CIEA as the organization they preferred to conduct initial follow-up questions after completion of the Needs Assessment. Tribes indicated that once the needs assessments and follow-up interviews are completed a federal or state agency that is approved by the Tribes, would provide technical assistance for the Tribal organizations and Tribes. After Tribes choose who they trust and hire they will work hands in hand with the Tribes to do onsite evaluations and recommendations for workplan activities to develop a potential project.

When Tribes were asked how to they would like to advise the results of the needs assessment, program, and maintain their voice in services being provided, participants suggested a convening of Tribes throughout the region would be most beneficial. There was consensus that a formal group discussion would insure that the assessment is not

misinterpreted and will allow Tribes to collectively decide what could be provided to them throughout the life of the program. There was a general consensus that Tribes are willing and feel they are best positioned to interpret the results of their *Tribal Needs Assessment* for their *People* and to collectively identify solutions that will work best for their individual Tribe. To provide for this opportunity, the Tribal Needs Assessment report will be provided to participating SF Bay Area Tribes for review and next steps towards development.

DACTI Program and Technical Assistance Programs Eligibility

During meetings and interviews Tribes asked the following questions regarding eligibility for participation in the DACTI program:

- 1. Is their Tribe eligible to receive support through the DACTI program?
- What funds can the DACTI program provide to augment other funding sources and/or elevate capacity for Tribes to receive support?
- 3. Do we need to be federally recognized Tribes to participate?

According to Proposition 1 IRWM Guidelines, "Disadvantaged Community Involvement Program is designed to ensure the involvement of disadvantaged communities (DACs), commonically distressed areas (EDAs), or underrepresented communities (collectively referred to as DACs) in IRWM planning efforts." Furthermore, it is up to each DAC funding area program to define "Underrepresented Communities", and to choose what activities their program will support for which communities. Tribal participants agreed that in general most Tribes could be described as "underrepresented" in watershed management, visibly, politically, and in regional and state representation. Tribes in the SF Bay Area repeatedly reiterated that the DACs program should consider all Tribes as eligible in the DACs program as underrepresented

Early on in the planning process, Tribal participants agreed that the DACTI program, should prioritize support and technical assistance to Tribes who are not state or federally recognized, or to small communities ineligible to receive funds as a public water system. This perspective is aligned well with the overall purpose of the DACTI program as Tribes originally envisioned: the focus being to support those in need, and to supplement what state and federal programs cannot fund.

According to the granting guidelines there is no eligibility requirement for communities to be certified as a public water system. The size or number of hookups that a water system has should not determine eligibility for Tribes and/or DACs to receive support through the program

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Federally-recognized Tribes with water and wastewater systems are generally regulated by the USEPA and receive assistance through either the BIA or IHS. However, since the passage of Proposition 1 Tribes have been encouraged by these federal agencies to seek state funding to augment federal programs. Occasionally, Tribes have opted to connect to existing non-Tribal systems if their location allows for it and in these cases, agreements are made to allow for the provider to deliver services on Federal trust land. Non-federally-recognized Tribes do not own land held in trust by the federal government and are therefore not provided the same assistance as federally-recognized Tribes. In particular this is a challenge in the Bay Area.

There are some technical assistance and training programs already offered by the federal USEPA, Cal EPA, SWRCB, IHS Sanitation Deficiency Service (SDS) program, RCAC and Cal Rural. These programs can assist Tribes, however during interviews, meetings, and during the needs assessments, we found that not all Tribes are eligible to receive services because of limits of the provider from the associated state or federal funding sources. For example, to receive support from some of these programs the water system must pose a public health issue, must serve over 10 families, or Tribes are met with a compliance requirement barrier.

Governance Structure Participation and inclusion in the IRWM Plan Update

There are decades-long issues with Tribes being unrepresented in decision making bodies. Participating Tribes in some IRWMs do not want to fall under a Coordinating Committee IRWM umbrella without Tribal representation in the Coordinating Committee. Providing designated space for Tribal participation in would ensure that there is meaningful representation by Tribal leadership to advocate for their membership when projects are being considered. The best way to move forward is to encourage and include Tribal representatives at the highest levels of decision-making bodies.

There are examples of successful Tribal participation in governance structures that allow for a process to select a Tribal representative and a dsignated alternate. We discussed these at our monthly SF Bay Area TAC meetings in March 2020. Following these conversations, the Coordinating Committee has allocated two to three seats to specifically be shared among the Tribae and Tribal partners of the Bay Area.

In follow-up interviews and meetings, the question related to Tribal involvement in IRWM programs prompted conversations about changes in the IRWM PSP for Proposition 1 for IRWM grant solicitation including removal of barriers to Tribes in receiving IRWM funds.

The number of recommendations that DWR integrated into this PSP was encouraging. Several continued areas were identified to assist Tribes in participation in IRWM governances structures. In a Tribal Round Table of Regions, as well as an associated working eroup and/or

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participation of Tribes in the existing Round Table of Regions directly. Specifically, recommendations include stronger encouragement to RWMGs by local agencies to remove limited waivers of sovereign immunity in grant requirements, and the creation of templates that can be shared across IRWM regions.

Tribal Oversight of the SF BAY AREA DAC Program including Tribal Advisory Committee

Tribes have expressed dissatisfaction with the program name "Disadvantaged Communities" (DACs). Because it carries a negative connotation and doesn't reflect the condition of Tribes. Tribes asked that we call the Tribal program the Disadvantaged Communities and Tribal Involvement Program, or DACTI program. Adding the word "Tribes," best captures the unique political status of Tribes, who are not just stakeholders. Tribal governments have responsibilities to their Tribal citizenship, and state and federal agencies have responsibilities to Tribes as acknowledged in the US Constitution, in multiple legal statutes, and by Executive Orders. At the request of Tribal participants, we began calling the DACI program, the DACTI program, in order to respect the special status of Bay Area Tribes and Tribal participants.

SF Bay Area Tribes continue to express agreement that a funding area wide Tribal Advisory Committee (TAC), is the best way to guide the Tribal DACTI program. The TAC serves to both encourage Tribes to participate in the DAC program, and in their own regional IRWMs. For the Bay Area the funding area and the IRWM region are aligned. This is advantageous as there is consensus that it is beneficial to share solutions with a greater number of Tribes at the funding area level other than solely participating with Tribes in their own IRWM region.

San Francisco Bay Area Tribes continue to express agreement that a funding area wide Tribal Advisory Committee (TAC), is the best way to guide the Tribal DACTI program. The TAC serves to both encourage Tribes to participate in the DACTI program, and in their own regional IRWM's that their Traditional territories may share.

As of June 2019, there were 5 Tribes in the SF Bay Area interested in joining a funding area wide San Francisco Bay Area TAC to support this DACTI Program. Starting December 2020, CIEA met with the TAC about 7 times, which consists of 4 Tribal partners;none of whom had been in the same room at once, who agreed to collaborate to the benefit of this program, and to ensure that Tribes in the region benefit from the remaining years the program will be in place and to benefit from needed technical assistance, workshops and training, developing adequate needs assessments, governance structure guidelines, and any other documents or tools created to benefit the Tribes of the SF Bay Area.

V. Recommendations and Next Steps

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The following recommendations and next steps are in the order of the above materials with requested trainings listed together.

Note: Those bolded have been identified as top priorities for recommendations

- Recognize the DACI, or DACTI, program as unique and acknowledge it's potential
 for filling service gaps for which many Tribes are unable to find support. Tribes
 recommend that both federally recognized and federally unrecognized Tribes are
 supported through the DACTI program, and that federally unrecognized Tribes be
 specifically considered for assistance since other federal options are generally not
 afforded to them.
- 2. Encourage communication between water providers and the Tribes they service. Provide contact information for regional water providers on that Tribes can reach out to address needs, potentially develop collaborative projects, and to find out about water quality of the water Tribes are receiving. Obtain and share with Tribes the results of the needs assessments from water purveyors in each IRWM region. Ask water purveyors if they know which Tribes they serve and when was the last time they contacted and/or met with those Tribes.
- For water source resiliency there is a need for Tribes to secure secondary and/or alternative sources of water from different water sources or aquifers to ensure continuity of water sources for their territories to maintain cultural practices and subsistence.
- 4. Identify a bulk storage tank purchase solution because this need is shared by many Tribes in the SF Bay Area region. This need is for both potable and non-potable water sources. In some cases, Tribes need these tanks to be separate so that fire suppression sources are protected.
- Follow up with Tribes who have documented failing infrastructure, document specific needs, including the scope of upgrades, and identify an appropriate funding source.
- Ensure access to water/fire hydrants in emergencies, recommend that Tribal staff and/or leadership are trained as regional fire responders with the appropriate fire hydrant wrench(es), access, and are link into a network of water tender "tankers" that are stored for use in the local area.
- SF Bay Area Tribes requested CIEA as the organization they would prefer to conduct initial follow-up questions after the completion of a Needs Assessment.
- We recommend that follow-up interviews are completed before the end of the first quarter of 2021 of the DACTI Program. This includes calls with all Tribes who indicated challenges that were of Extreme and or of Strong concern.
- Convene the TAC/ to review this needs assessment, and provide recommendations for selection criteria and distribution of technical assistance support in the Project

- Development. Each Tribal Partner will be given an opportunity to determine how remaining Tribal Technical Assistance and Capacity Building funds will be spent.
- 10. Once the needs assessment and follow-up interviews are completed contractor(s) of the Tribes' choosing could provide phone or onsite evaluations and recommendations for workplan activities.
- The Tribes and CIEA will leverage other funding mechanisms through the DACTI program.
- 12. Encourage groundwater recharge, including upland meadow restoration and reintroduction of species that sequester water such as beaver and hardwood native species of trees, explore overuse and need to protect against water diversions and to institute regional conservation from source to receiving waters
- Identify and distribute options and examples of natural filtration systems and look in IRVMM Plans to see if these are eligible for IRWM funding through implementation grants.
- 14. For Tribes with limited or no options to restore or identify potable water we recommend convening an interagency innovative solution task force made up of IHS, EPA, BIA, SWRCB, Bureau of Reclamation and other DWR programs to seek innovative new solutions.
- 15. Provide printed or digital instructional information and/or schedule regional trainings on natural filtration systems and distribute region wide
- 16. For operations and maintenance needs we can offer training closer to the Tribes, more focused for Tribal needs, hold regional meetings to initiate shared regional operations and maintenance staff solutions.
- 17. Support installation of emergency storage tanks, generators for water pumps and look into solar powered systems and electrical storage.
- 18. Coordinate with IHS, RCAC and Ca Rural for those that need tank inspections.
- Provide primers and information about water reuse, recycling, rainwater capture and/or provide trainings, technical assistance or support for a pilot or IRWM implementation project submission.
- 20. Provide Tribes with information on how to engage with their regional GSA under the Surface Groundwater Management Act program – contact DWR (Anecita Agustinez) for these materials and distribute.
- 21. Identify sources for groundwater data (more will be available through GSAs), request counties document old or abandoned wells for lead and groundwater toxicity water.
- 22. Research or develop a primer on the legal aspects of water related to groundwater rights and changing water rules.
- 23. Work with USEPA, SWRCB and DWR to complete a list of programs and grants that Tribes could apply for – DWR's Tribal Policy Advisor and CIEA have started this already, we need to compile our lists and complete this task.

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- 24. Complete list of Tribally vetted contractors to provide Technical Assistance and confirm with each Tribe to receive assistance which contractors they prefer before scheduling the support.
- 25. Coordinate meetings with Tribes interested in sharing a water operator(s) as part of TAC meetings or separate.

Training Recommendations

For Tribes seeking trainings we recommended that the CIEA and the wider SF Bay DACTI program provide a list of courses we could offer based on identified regional needs and have Tribes choose from them. Before hiring contractors, or before scheduling technical assistance, trainings or workshops Tribes will need to approve trainers by consensus where possible through the TAC.

It is the goal of the TAC to confirm that the activities of technical assistance for the DACTI program truly meet that needs of Tribes and Tribal communities. We could schedule trainings around the largest number of interested participants, provide travel for those located outside the region, and due to Covid-19 restrictions attempt to schedule trainings online beginning at the end of the first quarter of 2021.

To increase Tribal participation, we recommend Tribes host trainings and coordinate training dates to minimize conflict with other mandatory meetings. We recommend providing trainings as webinars when possible, but Tribes indicated there is value to in person conversations where participants can share experiences and identify opportunities to share

The following trainings, technical assistance and workshops were identified through the needs assessment, follow-up interviews and/or in meetings with Tribes:

*Note: Those bolded have been identified as top priorities for recommendations

- Hazardous Waste Operation and Emergency Response (HAZWOPER) training: coordinate with Tribes to be sure the training contains the elements respondents are looking for.
 These can be tailored.
- Program Planning and Management, both IRWM related and generally: could perhaps invite any who may want to apply to attend Round 1 recipient trainings to see how the process works ahead of time.
- 3. Geospatial trainings can range from very detailed map creation to how to use existing

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- data/programs. We do need to gather more information and bring courses that were well received to be repeated near those that need this.
- 4. Grant writing trainings templates of successful grants both generally and specifically for IRWM proposals, and lists of grants that Tribes could apply for. CIEA, DWR, Department of Toxic Substances Control (DTSC), EPA, and SWRCB have each been gathering these lists; we propose combining them and linking these in a web hub. Funding to do this could come from multiple sources and SF Bay Area DACTI program can link to that site.
- Provide trainings in: water quality sampling, for board governance structuring, visualization software, nonprofit background and information training, obtain tools for monitoring such as plankton and microplastic monitoring
- 6. Tribes would like create an infrastructure with cultural competence and develop a background working with Tribal communities.
- 7. Schedule water operators' trainings closer to Tribes and coordinate with Tribes ahead of time for potential shared operators especially for small systems, while there are organizations and agencies that can provide this, staff persons are stretched and as part of capacity-building Tribes would prefer their own operators.
- Provide Tribes with a template letter working with SWRCB and Intertribal Council of Arizona so Tribes can advocate that free certified water operator training can be applied in Cultiform.
- Contract with multiple Engineering and design providers, match with list of Tribal needs and coordinate with existing programs of IHS, EPA, SWRCB, Ca Rural, RCAC etc. and Tribe to receive support, which could be in the form of training(s) or service.
- 10. Provide resources to identify what compliance is needed for different types of small water systems. Information may be different for Tribes because or status of recognition, number of individuals they serve, type of system, jurisdiction and what agency oversees their compliance. Provide this in a primer and/or training and offer CEQA, NEPA and hybrid support.
- 11. Provide financial management support where needed and trainings for those to be able to conduct their own training at the organizational/Tribal and project levels.
- Provide rate structure training for water systems.
- 13. Provide water quality and fish tissue sampling and testing procedures (CIEA can provide this information as we have sampling program previously coordinated fish and game, OEHHA and the California Department of Public Health – Environmental Health and Hazard Investigations Branch (CDPH-EHIB).
- 14. Review all needs, conduct follow-up interviews and identify a suite of trainings and trainers for the TAC to confirm. Identify collectively which trainings should be held jointly with other TAC members, with the wider DACI/DACTI program or which are specific to the Tribal Partners to identify which DACI/DACTI program financial source trainings should be

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- held from
- 15. Work with each Tribal partner to identify IRWM Implementation projects, identify any project partners, which consultants (engineers, water specialists, etc.) are needed for each project and seek initial quotes for project budgeting, o command assist where needed in project proposal development
- 16. Include staff time into all proposals for paperwork and reporting.

Recommendations to increase Tribal participation in IRWM programs

Note: Those bolded have been identified as top priorities for recommendations

- 1. Dedicate a Tribal Engagement Coordinator or dedicate staff to update Tribal contact lists so that Tribas receive meeting invitations, project solicitations and up to date information that enables them to participate in the IRWM Program. In the SF Bay DACTI Tribal Contact List multiple staff and Tribal council persons are included whenever possible including the Tribal Environmental or Natural Resources Director, Tribal Administrator, Member(s) of the Tribal Council, and Tribal Historic Preservation Officers, or others as identified by the Triba.
- We recognize there is a cost associated with outreach and Tribal engagement, therefore
 the SF Bay CCC, Roundtable or Regions and the SF Bay TAC itself should recommend to
 the state that there be future IRWM funding and that it includes support for Tribal
 engagement funds specifically.
- 3. Tribes expressed the importance for the IRWM Coordinating Committee to understand that Tribes have unique political designations as sovereign governments. Federal, state and local governments have constituencies and responsibilities to protect those interests. Tribes are Nations with governing bodies and therefore, have similar roles and responsibilities with the added challenge of maintaining cultural continuance of their People.
- 4. Coordinating Committees should include language in their IRWM Plan and related scoring criteria to incentivize funding projects from Tribes, and encourage projects that support cultural beneficial uses, access to water and Traditional Ecological Knowledge. This can be in the scoring criteria for project selection and could be supported by intentionally involving Tribes as project partners.
- Project proponents should be required to provide a letter of support from the Tribe(s)
 listed whenever they state that their project will benefit Tribes. This is especially
 important when a project proposal can receive increased project ranking if it benefits
 Tribes or DACs.
- 6. Future IRWM rounds should provide incentives for interregional IRWM collaboration. In

- many cases, it would be beneficial to collaborate and share resources, and to work with adjacent IRWM funding regions to apply in both regions for overlapping projects. IRWM funding regions could choose to collaborate with neighboring IRWM funding regions to co-fund projects where the project footprint or benefit overlaps with other adjacent IRWM funding regions to result in broader watershed-wide solution-oriented projects.
- Tribes recommend DACI program names be changed to DACTI to be more inclusive and
 respectful of the unique political status of California Tribes. Tribes continue to remind us at
 DACTI meetings that Tribes are governments and not stakeholders.
- Tribes feel that Coordinating Committees can increase Tribal participation in IRWM by sending invitations/save-the-dates early by email from three weeks to one month at minimum, or secure dates for regularly scheduled meetings. Follow-up to be sure that each Tribe has received such information.
- Utilize the "SF Bay Area Tribal Contact List" to outreach to Tribes in each IRWM region directly. California Indian Environmental Alliance, www.cieaweb.org
- 10. Tribes expressed that to participate in their local IRWM travel stipends or support may be needed for those Tribes with limited resources and had hoped that the DACTI program could support this effort while it is operational.
- 11. We recommend that Tribes are included in the decision-making bodies, in the SF Bay in the Coordinating Committee, and Project Selection Committee for the IRWM Program and that there are seats established for Tribal participation in the Coordinating Committee of the SF Bay Area IRWM, and in any workgroups or project selection committees.
- 12. There should be a clear path to navigate the process for Tribes to participate in IRWMs as active voting members of IRWM Coordinating Committees and IRWM workgroups. In outreach materials the IRWM should document membership requirements.
- 13. Tribes must be included in all cases where regional governments are included in IRWM decision-making structures.
- 14. The SF Bay Coordinating Committee should work with Tribes in their region to develop a system which allows each Tribal decision-making body participant to have an alternate, and establish meetings dates coordinated with existing mandatory scheduled events.
- 15. Tribes should be encouraged to participate in all of the IRWMs that overlap with their Tribal traditional territories, or homelands.
- 16. The Coordinating Committee should link their website to the DWR Water Management Tool so that Tribes can see which IRWMs they should be a part of. For many Tribes their Traditional territories overlap more than one IRWM so interregional funding is important, and as it is now most IRWM regions do not score higher points for interregional projects.
- 17. To prepare for upcoming IRWM Implementation Project submissions CIEA or subsequent Tribal engagement support staff will follow-up with all SF Bay Tribal proponents who submitted projects previously, as well as with the Coordinating Committees to see what

DACTI Needs Assessment Results, California Indian Environmental Alliance, www.cieaweb.org

- can be understood about the last funding round.
- 18. Tribes would like a pre-review process or clear checklist so the Coordinating Committees can advise project proponents if they are missing any attachments or information.
- 19. Submit IRWM projects for inclusion in the IRWM Plan and work with Coordinating Committees to confirm steps to update the Plan. This is important whenever IRWM regions require that projects are include in their IRWM Plan before funding them.
- 20. Ask each IRWM region if there were Tribal projects that were submitted by either a Tribe or by another entity partnering with a Tribe. Inform how many Tribal projects were approved in their region during Round 1.
- Contact Tribes who did submit and whose projects were not funded to see if they are interested in resubmitting.
- 22. Tribal projects may straddle IRWMs in adjacent funding areas. At one time interregional funds were available through DWR, however these funds did not provide benefits to Tribes as DWR and California Tribes had hoped. This idea should not be discarded.
- 23. That the state includes additional funding for IRWMs in budgets and bond measurements, and that bond authors include support for Tribes in multiple IRWMs. Several Tribes indicated they did not have the resources to participate in their IRWM, and when they have two to four to participate in their capacity issues are compounded.

DACTI Needs Assessment Results, California Indian Environmental Alliance, www.cieaweb.org

Appendix B. Equity and Environmental Justice Efforts in the Bay Area

Project Name	Lead Agency/ Organization	Program Description/Work Involved	Program Link
BCDC EJ Policy Changes	BCDC	Community Outreach, Community engagement, Community workshops/forums, Educate and inform community about the new changes	https://www.bcdc.ca.gov/ ejwg/environmental- justice-advisors.html
Bay Adapt Super Working Group	BCDC	*Work to establish, or to expand upon an existing, robust and meaningful framework for community-driven, equitable climate adaptation planning. *Convene a committee of community-based organizations, public education experts and agency staff to support a multi-level education and capacity-building program that builds the capacity of communities, government officials, and the next generation to prepare for and adapt to climate change impacts.	https://www.bayadapt. org/outreach-and- participation/
Environmental Justice Academy	Nuestra Casa	The Environmental Justice Academy organizes and empowers community residents to take ownership of their advocacy abilities. The goal is to ensure low income and immigrant communities' inclusion in discussions and policies related to climate change. Academies curriculum is adapted to local cultural identities, including Pacific Islander, African American, and Latino/a. A trainer who identifies with each group facilities these meetings.	https://nuestracasa.org/ our-work/middle-school- parent-academy/
Dumbarton Bridge Resiliency Study	МТС	Community outreach, community engagement, community workshops/forums	https://mtc.ca.gov/ planning/transportation/ regional-transportation- studies/dumbarton- bridge-resilience-study
BayCAN (Bay Area Climate Adaptation Network)	BayCAN	 Attend meetings Connect with other agencies Build partnerships with external partners to enhance and refine local practices Focused on understanding and addressing climate change adaptation 	https://www. baycanadapt.org/
ART Project (Adapting to Rising Tides)	BCDC	Primary goal: educate the community on water issues in East Palo Alto and provide that knowledge in an accessible manner	https://www. adaptingtorisingtides. org/
Burlingame Shoreline Park	The SPHERE Institute	"Support SPHERE's proposal that would enable the creation of a new, natural ""living levee"" that would include transitionzone native habitats. This ""living levee"" would provide greater resilience in the face of sea-level rise, restore habitat for multiple types of wildlife, and create the basis for an improved and attractive segment of the Bay Trail. A small non-motorized boat launch area will also provide increased public access for sea kayakers, kiteboarders, and windsurfers using the Bay Water Trail. Improve public access to the water, shoreline restoration, and recreational opportunities along the Bay, such improvements will offer environmental justice opportunities by increasing access for all. *Community engagement*Attention to multi-lingual and welcoming signage*Nature - based solutions to deliver shoreline protection from sea level rise and flooding "	https://www. sfbayrestore.org/ projects/shoreline-park- burlingame-project

Project Name	Lead Agency/ Organization	Program Description/Work Involved	Program Link
Environment and Sustainability Thrive Action Group- Program Committee	Thrive Alliance	The E&S TAG achieved its 2019 goal of 'Building Community' through the leadership team's work to increase meeting attendance and curate educational and engaging meeting content. The TAG's top 2020 goal is 'Community-led Content and Objectives' which requires significantly more attendee involvement. As such, the E&S TAG leadership team is creating a Program Committee to meet quarterly and guide meeting content and community involvement. Convenes community leaders – from business, government, nonprofit, and youth sectors – once a month to discuss real-time resource conservation challenges and solutions through a lens of equity. Meetings help identify areas and actions for attendees to collectively drive change by harnessing the group's wisdom and power. Seven sustainability focus areas are climate, energy, food, land, transit, waste, and water.	https://www. thrivealliance. org/environment- sustainability-2021
Climate Ready SMC Collaborative	San Mateo County Office of Sustainability	The Collaborative will work together to develop a range of tailored and implementable climate preparedness strategies and planning and policy tools. It will also support local climate planning and preparedness pilot projects. The goal is both to bring diverse stakeholders together to learn from each other (including government learning from community expertise) and also to build the capacity and leadership role of traditionally underserved and transit-dependent community members so they can contribute their unique expertise and advocate in their own interests as problems are being defined and solutions are being developed. The project will focus on current and future climate impacts such as extreme heat, extreme rain (flooding), sea level rise as well as fire risk. I hope to ask your advice about ensuring this is as inclusive and beneficial an effort as possible.	https://climatereadysmc. org/
SAFER Bay Project (Urban Flood Protection Grant)	SFCJPA	"Our overall strategy for community engagement on the SAFER Bay Phase 1 Project is to reach a broad assemblage of the affected community, use their input to inform design, costs, sequencing of project elements and temporary construction impacts. We will use a collaborative, transparent and equitable engagement process in bringing diverse community groups to gather community input, inspire buy-in and ownership of proposed solutions and promote a culture of dialogue. The outcome of community engagement is local stakeholders invested in the SAFER Bay Phase 1 Project, with local pride, community ownership and enhanced sense of place."	https://www.sfcjpa.org/ safer-bay-project
Environmental Justice Advisors	Acterra, Institute for Local Government, San Francisco JPA, City of East Palo Alto	EJ Advisors will work with BCDC staff to help the agency best implement its recently adopted Environmental Justice and Social Equity policies. Topics of discussion may include consideration of how potential projects on the Bay shoreline should best engage with CBOs to have "meaningful community engagement," or assessments of "disproportionate adverse impacts" within the scope of BCDC's regulatory authority for Bay Area shoreline communities. More broadly, the EJ Advisors are intended to help BCDC build relationships with community leaders and to bring community leaders' expert insights and perspectives to the agency's EJ-related conversations.	

Project Name	Lead Agency/ Organization	Program Description/Work Involved	Program Link
Bay Adapt Leadership Advisory Group	BCDC	The Bay Adapt Joint Platform iscomprised of a set of guiding principles and priority actions for coordinated Bay Area sea level rise adaptation. The Joint Platformwas collaboratively developed by hundreds of volunteers who care deeply about this issue. Our Leadership Advisory Group, executive leaders from the public, non-profit and private sectors, provided direction and will ultimately need to commit to implementing the Joint Platform. Joint Platformactions are based on a strong foundation of climate science, a commitment to the critical roles that front line communities and local jurisdictions play, and the proactive Bay Area adaptation efforts already proposed and underway. Once implemented, the actions that make up the Joint Platform will guide the region towards common goals, identify how to pay for adaptation, empower communities, cities and counties to become more resilient, and reduce the risk of flooding for residents, ecosystems, the economy, and neighborhoods.	
People Power	People Power	People Power is a nonprofit social enterprise with a mission to create a new equity-centered model for identifying and developing talent to power the movement for social justice. We provide two much-needed services: talent search services for mission-driven organizations and career advising services for emerging leaders. Seeking to bring transparency and joy to the way we connect talented people to meaningful employment, our vision is grounded in the collective wisdom of our broad and diverse intergenerational network. Currently piloting in the San Francisco Bay Area, we welcome partnerships across the United States.	https:// peoplepowerproject.org/ about/
2030 Equitable Climate Action Plan	City of Oakland	The 2030 Equitable Climate Action Plan (ECAP) was adopted by City Council in July 2020. The ECAP is the City's 10-year plan for mitigating and adapting to the climate crisis in ways that improve racial equity across Oakland. The ECAP includes 40 Actions across 7 sectors. More than 2,000 Oaklanders provided insights that were incorporated into the Plan over a two-year development period. For updates on ECAP implementation, visit the City's Sustainability Page, where you'll find all ECAP topics and resources.	https://www.oaklandca. gov/projects/2030ecap
Sobrante Park Resident Action Council			Sobrante Park Resident Action Council - SPRAC - Home Facebook
East Oakland Collective	Social Good Fund (Fiscal Sponsor)	The East Oakland Collective (EOC) is a member-based community organizing group invested in serving the communities of deep East Oakland by working towards racial and economic equity. With programming in civic engagement and leadership, economic empowerment and homeless services and solutions, we help amplify underserved communities from the ground up. We are committed to driving impact in the landscape, politics and economic climate of deep East Oakland.	https://www. eastoaklandcollective. com/

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Project Name	Lead Agency/ Organization	Program Description/Work Involved	Program Link
East Oakland Neighborhoods Initiative	City of Oakland Planning Bureau	The East Oakland Neighborhoods Initiative is a partnership between the City of Oakland Planning Bureau and twelve community-based organizations focused on equity-based planning for Deep East Oakland. Together, we have conducted a year of community outreach to identify the primary concerns, goals, and priorities for East Oakland residents and stakeholders. Our final Community Plan, linked below, contains the major findings from our year of community outreach, as well as recommended next steps. Please take a look! Further down, you can find the Executive Summary of the Final Community Plan, as well as the Spanish Final Community Plan.	https://www.oaklandca. gov/topics/east-oakland- neighborhoods-initiative
Shoreline Leadership Academy	West Oakland Environmental Indicators Project	Educate 15-20 residents of the Oakland flatlands (within a mile of shoreline) about relevant shoreline issues and then train/ support them to develop recommendations and plans for Oakland's shoreline (from Outer Harbor to San Leandro Bay).	https://woeip.org/ featured-work/oakland- shoreline-leadership- academy/
Petaluma Equitable Climate Action Committee (PECAC)	Daily Acts	Encourages BIPOC people to civically engage with the Climate Action Committee by forming a learning cohort, organizing training, and providing a stipend	https://dailyacts.org/ climate-action/
Environmental Health Program	Daily Acts	Advocates for front-line agricultural community and recently took part in a bilingual workshop addressing pesticide safety	https://dailyacts.org/ nbehn/
Sustainable Sonoma	Sonoma Ecology Center	Forum of Community Leaders from a wide range of sectors across Sonoma Valley, finding solutions, and taking action to address our community's biggest challenges.	https://www. sustainablesonoma.net/
Raizes Collective	Raizes Collective	Raizes Collective, based in Santa Rosa, was established June 2015 to empower and mobilize community through the arts, culture and environmental education. Our collective came together to offer artists and teachers of color the resources of space, programming, events, shows and activities to affect social and political change through art and community building. We believe this facilitates healing of the divisions within our diverse communities.	https://www. raizescollective.org/
CURA Project	La Plaza Nuestra Cultura Casa	County funded COVID response program focused on Latinx community	https://www.laplazancc. org/en/cura-project

Appendix C. Capacity Building Needs Matrix

Community/ Partner	Identified Issue	Description of Issue
East Palo Alto/ Nuestra Casa	Drinking Water Quality	 Most believe unsafe drinking water is an issue in East Palo Alto 84% believe their water is Bad/Fair (41.8% & 42.1%) 75% of respondents buy bottled water for cooking and drinking Access to clean water is competing with other priorities (rent, food, etc) Showers burn eyes and skin White residue on cleaned dishes Boil water twice to ensure it is safe Cost of buying bottled water for cooking & drinking is prohibitive Secondary concern - env impact of bottled water use There were some differences in perception between neighbors Issue could be: perception, water source problem, distribution system problem, premise plumbing problem, or combination Renters do not get notices, just landlords
	Limited Access To Outdoor Opportunities	 Lack of environmental educational programs Lack of multilingual signage Don't feel invited or included There is genuine interest but barriers to participation: Timing Frequency
	Flooding	 Flooding is the second most identified issue in East Palo Alto, noted by 36.8% of respondents In listening sessions, many mentioned several areas that were said to be severely flooded in winter
	Contamination and Pollution	27.8% of respondents indicated that industrial contamination is an issue in East Palo Alto
	Illegal Dumping/ Trash	 23.8% of respondents identified litter/trash as an issue in East Palo Alto In listening sessions, many mentioned worries about trash/litter pick up and control, better waste management, including more trash cans, and cleaning trash from storm drains

- · Education on water for community was very desired
- Materials in languages other than English
- Water quality testing
 - With info about what water quality parameters are
 - Transparency of WQ testing very important
 - City/County will have to pass ordinance to address systematically
 - Source, houses, apartments, distribution pipes testing
- · Outreach and Education
- · Pipe retrofitting project?
- Water Provider Grant
 - Funding to expand ability of water providers to do WQ testing and to do that O&E on site
 - Vulnerable first
- Nuestra Casa to participate in DACTIP Tap Water Quality Testing Program
- Josh, Matt S., Michelle, Brian M. to reach out to WQ folks at water providers to let them know about these discussions and to solicit some guidance
 - What we should test for and what role?
- Need for Educational programs
- · Better signage
- More make programs inviting/culturally relevant to residents
- Need for Educational programs
- · Better signage
- More make programs inviting/culturally relevant to residents

Community/ Partner	Identified Issue	Description of Issue
North Richmond/ The Watershed Project	Drinking Water Improvements/ Pipe Upgrades	 Access to clean, safe drinking waterhigh priority Residents left the workshop less concerned about source water but more concerned about potential contamination in building pipes. Residents were excited about the possibility of self-testing their tap water. 34% want to see improvements related to clean drinking water in North Richmond, 16% specifically mentioned pipe inspections or upgrades 70% drink tap water, although 38% mentioned buying bottled water as well Nearly 50% don't trust their tap water, even if they drink it They're not sure where it comes from and how to tell whether it's actually safe 48% have experienced problems with their tap water: discolored water bad taste particles or residue drying of hair or skin when washing
	Habitat Protection And Access To Recreation	 55% of residents use the Wildcat Creek path or North Richmond shoreline for recreation Vast majority use these spaces for walking Other uses: biking, taking kids or pets out, social events 42% of residents said they were concerned about safety on the Wildcat Creek path Flooding Trash/pollution/cleanliness Crime/drugs/needles Homeless encampments Insufficient lighting Overgrown vegetation Some don't recreate at creek/shoreline because they're unaware of it or don't think about it Community members feel there are not enough safe, accessible, outdoor places for recreation. On post surveys, 23% of residents wrote that they hope to see more urban greening, green infrastructure, or parks flooding issues on Wildcat Creek path under Richmond Parkway (non-operational most of the year)
	Sea Level Rise/ Flooding	 98% were "somewhat concerned" or "very concerned" about wastewater and recycled water after learning about WCWD SLR vulnerability 73% have experienced flooding when it rains Difficulty walking or driving, damage to infrastructure (flooding of homes, potholes) Trash/other pollutants in floodwaters 45% said flooding used to be much worse NR is highly susceptible to flooding from sea level rise and is protected by creek levees, tidal marshes, and a pump station. Pump station nearing the end of its expected life cycle. Without this infrastructure homes may flood homeowners in flood zones would need to pay for costly flood insurance Landfill and wastewater treatment plant are at risk of flooding, which could cause severe pollution problems.
	Sewer System Improvements	 58% have experienced problems with the sewer backing up in their home frequency and severity vary widely Not enough sewer-related street flooding to indicate a problem with the system
	Water Conservation And Recycled Water	 More water conservation measures, use recycled wastewater for community irrigation Interest in using some of the recycled water that goes to Chevron for irrigation in the community

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IDEAS to instill confidence in Drinking Water

- Provide more in-person educational resources to community (short/concise, multi-lingual, non-technical)
- · Acknowledge that tap water varies
- Develop flyer of what may be found in tap water (OK or not OK?). Recommend self-installation of filters or aerators
- Use community partners as ambassadors
- · Community tours of source water (Sobrante Treatment plant) to demystify water system
- Test taps at willing community member households to get data points
- The Watershed Project is participating in the DACTIP Tap Water Quality Testing Effort in conjunction with FOSC and ISPSA

NEXT STEPS

- TWP and FOSC will identify individuals in community interested in participating in tap testing
- Questions: what are the WQ concerns, when did they last occur, and how often?
- TWP is participating in the DACTIP Tap Water Quality Testing Program in conjunction with the other organizations working in the EBMUD service area (FOSC and ISPSA)
- Improvements in connectivity (such as a pedestrian/bike bridge over Richmond Parkway) might make local natural spaces more accessible for recreation and improve alternative transportation corridors.
- Address lack of amenities at Wildcat Creek walking and biking path, such as benches, recreational spaces, managed vegetation, and interpretive signage. These amenities might make this path more inviting for recreation.
- Urban trees and gardens can bring nature into the city and make urban spaces more walkable
 - 23% of participants want to see urban greening, green infrastructure, or parks improvements

PROJECTS IDENTIFIED AS TOP PRIORITIES

- Wildcat Creek Trail Improvements Design
- · Green Benefit District
- · Green Street Corridor

- County willing to:
 - Participate in community report back meeting
 - Conduct education and outreach on general flooding at meeting or by flyers
 - Provide sediment basin spoils to local horizontal levee concept
- Community interested in Solutions to sea level rise and flooding (living shorelines or horizontal levee)

PROJECTS IDENTIFIED AS TOP PRIORITIES

- · North Richmond Pump Station Upgrade
- Flood Risk Reduction in the Rheem Creek

•	Improved sewer system	

Community/ Partner	Identified Issue	Description of Issue
San Rafael Canal District/ Multicultural Center of Marin	Drinking Water Quality	Reports of tap water being: Unclear, unusual coloring, chlorine or metallic smell General feeling that tap water is unsafe and of possible public health effects Many homes rely on bottled water (environmental impact)
	Flooding	 Street Flooding in due to stormwater accumulation After heavy rains streets flood limiting access to markets, community centers, schools and homes
	Old Piping	Age of water pipes affect quantity and quality of tap water • Low water pressure occurs for many, especially at certain times when many in building are using water at same time • At times residents experience a lack of hot water
	Trash	 Trash floating in neighborhood after heavy rains Trash observed clogging drains and degrading neighborhoods
Dillon Beach Village/ Marin County Community Development Agency	Water Supply	 wells by creek (investor owned) vulnerable to contamination Dillon Beach Village community at one point wanted to buy water systems as public utility, but it was not for sale communities open to tap testing
	Wastewater	 Individual private septic systems Old, bottomless, no leech field area No community wastewater system

Matt S: maybe opportunities for project funding from State Drinking Water Fund (\$100M) to supplement IRWM Matt: pipe replacement and pump station projects need further study/process

MCM will participate in DACTIP Tap Water Quality Testing Program

- City of San Rafael says it needs more pump stations at low points
 - What are available funding sources for fixes?
 - ► CA Prop 1, \$6.5M for DACs
 - Natural Resources Agency Urban (Flooding?)
- · Matt: pipe replacement and pump station projects need further study/process
- MCM working with MMWD on pipe replacement project

Matt: pipe replacement and pump station projects need further study/process

- Community Desires/Next Steps:
 - Winter Surface flow water quality testing (3 streets, 1-2 storm events) for human waste (fecal coliform) exceedances due to failing septic systems
 - Surface runoff
 - Local creek
 - Beach
 - Feasibility study for community wastewater collection alternatives: upgrade individual septics v smaller shared system(s).
 - Look at options, cost, regulatory compliance, land needs, etc...
 - Woodacre community did this at cost of approx. \$75K
 - May look for Climate Resiliency funding if rising GW elevations will be death knell of existing septic systems

Community/ Partner	Identified Issue	Description of Issue
Pt. Reyes Station/ Marin County Community Development Agency	Water Supply	 North Marin Water District Well water from Lagunitas Creek North Marin Water District (Pt. Reyes Sta) offered to do testing at the tap government mistrust (Existing Community Plan, Coastal Plan, and development constraints all have led to more community acceptance) worry of gentrification, lack of affordable housing, need public bathrooms and water fountains but infrastructure expensive
	Wastewater	 Individual private septic systems GW rise (along with sea level rise) threatens saltwater intrusion & flooding of septic systems Point Reyes Playground has only restroom (and port-a-potties) for public use Lack of water disposal options create hardships for local businesses (tourist dependent) Restaurants use single use plastic products, no dishwashing Wastewater is biggest concern Issue one - tourism Tourism can't be accommodated well due to lack of public facilities The community wants to do something sustainable County land would be used for this PRIORITY CONSERVATION GRANT?!?! Issue two - residents Issues with septic systems for a VERY long time Concern solutions will lead to undesired new dev. Things to look at Groundwater vs leech field levels Water quality testing of surface runoff Dig new monitoring wells for testing Previous study by N. Marin Water District for community wastewater system that was rejected by community. US Coast Guard used to pump waste of residents and trucked to disposal facility

- · Pt Reyes Station community seeking:
 - consultant services for ground water table elevation determination via auguring new monitoring wells (8+/- locations)
 - Surface flow water quality monitoring/testing for human waste due to potential septic overflow
 - ▶ \$5K or more???
 - EHS inspection of monitoring wells
 - Wastewater Feasibility Report for:
 - New community system
 - Connection with Oceana Marin wastewater facility
 - No project option
 - Concerns:
 - Resolution of issues may spur unwanted new development
 - Environmental sustainability is a priority open to new technology
 - · Capacity for auxiliary residential development constrained by wastewater disposal issues & permits
 - may look for Climate Resiliency funding if rising GW elevations will be death knell of existing septic systems

Community/ Partner	Identified Issue	Description of Issue
Antioch, Bay Point, and Pittsburg/ Contra Costa Resource Conservation District	Trash + Flooding	Trash and polluted stormwater (trash in waterways, creeks, and streets; trash prevention and removal; preventing pollution and treating polluted stormwater; sewer water mixing in storms) • 67% of respondents identified litter in streets (40% would address this first) • 7% of respondents identified flooding (2% would address this first)
	Infrastructure/ Pipes	 Antioch participants also mentioned a sewage smell Drinking water and old pipes in homes (healthy, safe drinking water; taste and smell of tap water; concern over hard water, spots on dishes, odor, taste, and bubbles; old pipes in homes and buildings 47% of respondents identified old infrastructure/pipes (21% would address this first)
	Water Quality	 40% of respondents identified water tastes bad (21% would address this first) 28% of respondents identified uncertainty of drinking H20 supply (10.5% would address this first) 28% of respondents identified unsafe drinking water (21% would address this first) 21% of respondents identified contaminated fish (3.5% would address this first)
	Water Conservation Programs and Resources	Water conservation programs and resources (resources for residents; free recycled water; water conservation; reducing water waste; reducing overuse of water and managing water supplies affordable domestic water, especially during droughts Largest perceived barriers to addressing water related issues: getting people to care/awareness; trash/litter; money; maintenance
Fruitvale district of Oakland/ Friends of Sausal Creek	Trash	 Primary concern: trash in the streets and storm drains Many individuals made connections between increase in homeless populations and illegal dumping Individuals suggested street trash was related to low security in the community ("broken windows theory")
	Drinking Water Quality	 Secondary concern: safety of drinking water in homes Various misperceptions regarding water source and rates of contamination Some individuals were not aware of separation of responsibility for water delivery systems (tubing) versus water supply (utilities)
	Green Space/ Access To Recreation	Many surveyed felt that there was a lack of safe play space for children and fami8lies and that there was not enough access to outdoor recreation

- · Host wrap-up meetings in Antioch, Bay Point, and Pittsburg
- · Add specifics to understanding of DAC priorities
- Collaborate with the community to develop projects
- CCRCD is participating in the Tap Water Quality Testing Program

Potential projects and locations in Bay Point

- Sites identified in Contra Costa County's Green Infrastructure Plan for Bay Point: Bel Air Elementary School, Ambrose Community Center, and Anuta Park.
- Restoration of the seasonal creek behind Riverview Middle School
- Restoration of seasonally flooded lowlands along the train tracks in Bay Point
- Trail improvements at Bayshore Regional Shoreline and Driftwood Drive, Bay Point
- Reducing illegal dumping on Port Chicago Highway and Willow Pass Road, Bay Point/Pittsburg

Potential projects and locations in Pittsburg

- Stormwater and wastewater infrastructure improvements at El Pueblo Housing Development
- Restoration of Kirker Creek and its tributaries at publicly accessible sites.
- · Reducing illegal dumping on the Pittsburg/Antioch Highway

Potential projects and locations in Antioch

- · Reducing litter and the impact of encampments at the Antioch waterfront and downtown Antioch neighborhoods.
- Trash capture and stormwater conveyance above East Antioch Creek's outlet to the San Joaquin River near Fulton Shipyard Road.
- Potential solutions: Educational workshops for community members in the Fruitvale district regarding water issues and water rights
- Proposed responses:
 - Public education
 - Community task force development
- In progress: Public education
 - EBMUD
 - Community workshops to address the following
 - Perception of water quality
 - Trust is local utility administrators
 - Information access and barriers
- FOSC is participating in the DACTIP Tap Water Quality Testing Program in conjunction with ISPSA and TWP
- · Considerations:
 - How do we encourage community members to engage?
 - What role do we as an outreach partner play in this public education campaign?
 - How do we assess the needs of and provide information for unsheltered residents?

Identified Issue	Description of Issue
Water Quality	Deep East Oakland has higher poverty rate and lower life expectancy than the city of Oakland
	Concerns over drinking water mixing with polluted water
	Drinking water concerns include taste, cloudy appearance, smell, and cost
Illegal Dumping	Trash/litter/illegal dumping ends up in waterways eventually
	Third most identified issue through the needs assessment process
Infrastructure	Concern about lack of investment in deep east Oakland compared with other parts of Oakland
Flooding	 Fewer drainage lines in neighborhoods; flooding during rainy season. Flooding disrupts pedestrian access to sidewalks Flooding was identified as one of the biggest issues raised in the needs assessment
Homelessness Green Space	Transient communities often shelter themselves near creeks and waterways throughout East Oakland. These living conditions are often unsafe given the unknown contaminants in the water. This community also seems to highly lack access to quality drinking water and sanitary services. Lack of park space was the most identified issue in the needs assessment process.
	Water Quality Illegal Dumping Infrastructure Flooding Homelessness

Near term:

- Water quality testing: in collaboration with EBMUD, build resident capacity and skill level to assist with local water
 quality testing at the source and in the neighborhood. Integrate with Communities for a Better Environment's air quality
 monitoring efforts.
- Stewardship, Programming, and Safety: Partner with a community development corporation to develop neighborhoodbased stewardship programs to address illegal dumping, and maintaining the San Leandro Creek Greenway.
- Transient Community Taskforce: Partner with EOC and other entities that serve the transient community to empower and pay transient residents to further this engagement with their peers. Temporarily respond to their water and sanitation needs as we collaborate to co-develop a transitional housing program targeting the transient community that lives along the San Leandro Creek.
- ISPSA is participating in the DACTIP Tap Water Quality Testing Program in conjunction with FOSC and TWP

Short term:

- Ground Water Observation and Experiment: Work with Professor Kristina Hill at UC Berkeley to conduct a groundwater
 experiment or analysis to identify well locations and track vulnerable areas. Further investigate how the airborne
 contaminants from groundwater will impact the neighborhood. Align with local Safe Routes to School projects to include
 groundwater retention.
- Assess Drainage Lines: Collaborate with the Oakland Department of Transportation and Public Works to review our
 drainage infrastructure and to identify nodes where there are no adequate drainage lines.
- East Oakland Flood Watch Initiative: Fund and formalize the East Oakland Flood Watch Initiative to organically attract residents to report flooding in their neighborhood, in collaboration with an appropriate agency

Long term:

- Access to Outdoor Recreation: Create programming that increases access to the MLK shoreline to use temporary rental equipment such as kayaks, jet skiing, fishing poles, etc for both youth and adults.
- Food Sovereignty: Collaborate with Planting Justice and the East Oakland Grocery Cooperative to further explore water needs of local urban farms to ensure quality and healthy food is grown and sold in the neighborhood.
- Affordable Homeownership & Right of Refusal: Partner with East Bay Real Estate Cooperative to further community
 outreach in Sobrante Park, Brookfield, and North Stonehurst homeowners for commitments to a right of refusal to
 a community land trust or cooperative. Outreach to gain more insight about ADU needs and willingness to explore
 cooperative ownership models.

Community/ Partner	Identified Issue	Description of Issue
Bay View Hunter's Point, San Francisco/ Greenaction for Health and Environmental Justice	Drinking Water Quality	 Concerns over drinking water quality 1/5 of residents rated their drinking water as bad and almost another fifth rated theirs as poor
	Water/Sea-Level Rise	 Concerns about/awareness of Water/SLR SLR and storm surges could cause flooding of many of the hazardous and radioactive waste contamination sites and homes, transportation, infrastructure, and utilities along the SF bay waterfront. Toxic materials and waste beneath the surface could be dredged up and exacerbate public health risks in the area
	Illegal Dumping/ Groundwater Rise	 Concerns about illegal dumping and groundwater ruse 63% of respondents are concerned about flooding/sea level rise (SLR) vulnerability. 55% of respondents are concerned about illegal dumping
	Contamination and Pollution	64% of respondents are concerned about industrial/hazardous contamination
	Subsistence Fishing	Subsistence fishing concerns

- Working with community and government partners (including SF Recreation & Parks, SF Department of the Environment, and SF Health Department) on creating and posting multilingual subsistence fishing health advisory signs along the San Francisco Bay waterfront in Bayview Hunters Point, Treasure Island, and throughout the SF Bay region where subsistence fishing is an issue.
- Engaging with stakeholders on rising sea level rise issues facing BVHP.
- Finishing the third subsistence fishing survey and conducting a feasibility study to assist in project development concepts.
- Addressing unsafe water and affordability, including conducting a major water quality testing program in partnership
 with SFPUC and other agencies in San Francisco focus priority would be on older homes, public housing, public/private
 housing, and other concerned residents.
- Greenaction is not participating in the DACTIP Tap Water Quality Testing Program, but First Generations will be on behalf of the Bayview Hunter's Point Community
- Implementing a multi-stakeholder project to address rampant and chronic illegal dumping in Bayview Hunters Point, including working with government and community partners to post signs warning against illegal dumping in problem areas and outreach about the dangers, stepping up monitoring of illegal dumping, and outreach on how to report violations through IVAN and directly to appropriate agencies.
- Working with government partners to assess what a water conservation educational and implementation effort in southeast San Francisco would entail.
- · Conducting ongoing water quality monitoring near known contamination sites in Bayview Hunters Point and Treasure Island.
- Continuing to educate the community and work with the BVHP Environmental Justice Task Force and stakeholders on all these water related issues.
- As part of their work to identify project implementation ideas, Greenaction initiated a new coalition to bring together
 groups to work together and engage government agencies to address the threat posed by rising sea levels and groundwater
 to shoreline contamination sites. The mission statement for the group is: The San Francisco Bay Shoreline Contamination
 Cleanup Coalition mobilizes for the safe, comprehensive, and immediate cleanup of all toxic and radioactive contamination
 near the SF Bay shoreline, where sea level rise due to climate change will spread the contamination. Climate and
 environmental justice is our highest priority.
- Potential partners include: San Francisco Public Utilities Commission (SFPUC), San Francisco Department of the Environment, San Francisco Board of Supervisors, San Francisco Recreation and Parks Department, Bayview Hunters Point Environmental Justice Response Task Force, and community groups

Community/ Partner	Identified Issue	Description of Issue
Marin City, Marin City Climate Resilience and Health Justice	Infrastructure	82% concerned about aging pipes
	Water Quality	78% drink bottled water 68% worried about water quality
	Water Supply	81% experience stress or anxiety about lack of water
	Health	 Health concerns from water and flooding 77% worried about mold/mildew (66% worried about housing; 61% power outage and mudslides; 58% worried about respiratory allergies & diseases; 51% worried about refrigerated medicines going bad with power loss)
	Green Space	Marin City does not have a community green space to gather and recreate at.
	Flooding	 Flooding was listed as the top concern 60% listed flooding as the most important environmental issue that Marin City is faced with Marin City experiences chronic flooding that has twice completely shut down southbound traffic on Highway 101. During these flood events, there is no way in or out of Marin City, endangering residents that need to access healthcare outside of the city
	Pollution and Contamination	 Residents have expressed concern about current and historic sources of pollution and toxic environmental living conditions in Marin City that many believe are related to serious health consequences in the community. Prior to the Gateway Shopping Center there was both a dry cleaner and gas station located on the property Residents are concerned water contamination resulting from flooding and sea level rise. Community members must wade through floodwaters to access necessary services.

- Work collaboratively with Marin City Community Services District to fully develop the Disaster Preparedness Council to ensure readiness for floods, earthquakes, fire and other disasters.
- Marin City will participate in the DACTIP Tap Water Quality Testing Program
- Conduct groundwater testing.
- Advocate for a more comprehensive flood study to, among other things, look at and assess water management challenges in Marin City. For context, flooding is particularly threatening to Marin City because egress and ingress to Marin City can be blocked by floodwaters. Specific ideas for the comprehensive flood study to explore and assess include:
 - Potentially creating and using a Donohue Drain to divert excess stormwater take water straight down Donohue and out/ under the freeway to the Bay
 - Bringing in pumps as needed for flooding before more permanent solutions are implemented
 - Elevating the sidewalk coming out of Marin City, with a particular emphasis on ensuring that all children have a safe route to schools, between Marin City and Sausalito
 - Take another look at flow of water coming down into Marin City from the watershed
 - Increasing size of stormwater and sewage pipes from 2 to 4 ft
 - Repairing floodgate(s) and all malfunctioning flap gates immediately
 - Removing accumulated sediment from the Marin City drainage pond to increase water capacity for flood retention
 - Assess public health impacts of flooding (including mold and mildew from repeated exposure, particularly in the Bowl)
 - The 2017 Marin City Drainage Study documented the problem of 12 acres of metals/pollutants coming down the 101 HWY
 into the drainage pond from water runoff, but did not offer any measures to mitigate these impacts; this must be built into
 a future study.
- Recommend a task force to address infrastructure issues related to old pipes in Marin City, including sanitation and sewage,
 drainage systems, and water supply. This task force of governmental and other partners should assess and prioritize the
 replacement of aging and/or missing infrastructure. This should also include a study to evaluate what effects old lead pipes are
 having. For context, the 2017 Marin City Drainage Study showed rusted, cracked, and missing pipes. Recently, several major
 pipes have burst.
- Pursue a program to educate community members about how to detect sewage leaks themselves and make sure their systems are wrapped up; who to call when they see a problem
- Conduct a comprehensive hazard assessment, which will include testing soil to identify any ground pollution (cracked or
 rusted pipes; runoff from 101, etc) and bringing in a group to assess the unassessed Superfund site on Phillips Drive and assess
 other sites. While there is only one Superfund site identified in Marin City, community members and oral history from original
 residents indicate that there may be other contaminated sites from WWII-era dumping that need to be investigated. For
 example, a dump site on top of a hill by the old water tank flows into a major creek bed. A lot of trees and bushes have grown
 over the area, and Shore Up Marin City needs funding to have professionals pull out the brush, document the containers, and
 conduct soil testing. Other potential pollution sources should be identified and assessed, including an old gas station, an old
 dry cleaner, old dumping areas for MarinShip and other groups.
- Require CalTrans to divert & filter runoff pollutants from the freeway coming into the Marin City drainage pond and main community drainage ditch which flows right into the community.
- Advocate for defensible barriers to decrease asthma and respiratory diseases from breathing hazardous chemicals regarding freeway vehicle exhaust/unhealthy air emissions
- Turn the drainage pond into a multi-benefit site for recreation, flood mitigation, and wetland habitat. Shore Up Marin City would like to work with Marin City Community Services District to develop a new park next to the pond with the following provisions:
- Soil & sediment testing of flood retention pond, and toxic sediment removal
- Developing educational programs around pond/water system and habitat + water system
- Assess and address public health impacts related to all of these next steps and project development ideas. Community
 members are specifically concerned about the potential mixture of sewage and fresh waters, tap water quality impacts, air
 quality impacts, pollution in flood waters (they sometimes have to wade through) and other public health impacts of flooding
 (flooding contributes to housing getting mold and mildew which adds to asthma and respiratory diseases), concern about not
 being able to get to doctors when there's flooding, health impacts from pipes, and pollution from Highway 101.

Community/ Partner	Identified Issue	Description of Issue
South Vallejo/ All Positives	Drinking Water Quality	 Drinking water was identified by community members as brownish/discolored and foul smelling.
Possible		Drinking water quality was identified as a top priority
		Access to green/open space
		Subsistence fishing- toxic fish
		Public Health
		 Community members report being met generally with flippant, rude, and/or unsupportive responses to specific concerns and inquiries they have brought to their water and health agencies about tap water quality
		Some residents report feeling negative health effects they connect to poor water quality
		Many residents purchase bottled water
	Pollution and Contamination	Pollution and contamination from the nearby refineries were identified as a top priority
		Subsistence fishers identified contamination as a top priority
		There have been many known refinery mishaps including oil spills and malfunctions that have caused toxic gas expulsions that have sent residents to the hospital
		Many report rotten egg and heavy oil odors in the air regularly throughout the day
	Green Space/Open	Residents are in danger of losing access to waterfront and tidelands
	Space	Community members identified efforts by non-profits and city/elected officials that would cut off South Vallejo's access to the waterfront and tidelands
	Public Health	An overarching theme across conversations with community members was the connection between water-related issues and personal health
		 Residents have described developing sores or abcesses from using the water. Others have chronic headaches or experience asthma issues. Some even report loss of consciousness
		Residents expressed concern about the effects of the water and air quality on the most vulnerable populations: the elderly or disabled populations. Residents also expressed concern about their animals
Tennyson	Water	Desire to use less water in order to reduce bills
Corridor of Hayward/City of	Conservation	Lack of knowledge about nearby water assets
Hayward	Illegal Dumping/	Concern about illegal dumping and pollution in nearby water assets
	Trash	Concerns about tagging in culverts
		Concerns about pollution, litter, and plastic going into the ocean
	Sea Level Rise	Concerns about sea level rise
	Green Space/Open	Desire for community gardens and increased access to food
	Space	Desire for celebration of Hayward's water access
		Desire for depaying and more Green Spaces/beautification
		 Respondents identified community gardens and access to food as priorities, as well as de-paving and more green space, beautification, and celebrating Hayward's water access

- · APP will participate in the DACTIP Tap Water Quality Testing Program
- Other additional efforts that would benefit South Vallejo
- Actual Grant Writing Workshop that Supports Communities Write Grants on the Spot
- · Community Map/Ground Truthing
- Don't Trust the Yearly Water Report -- information on water in Vallejo
- Youtube Commentary on Community Water Comparing to Flint, Camden and Puerto Rico
- Low Income Housing Projects/HUD Fear Retaliation
- Train-the-trainer Community Advocates to engage in BAIRWMP CC meetings serving as DAC reps.
- Additional community surveys
- Identified Alternative Water Cleaning Methods
- · Reliable water testing
- Ground Truthing To Identify Emissions Affecting Community Health and Tap Water Quality

City of Hayward will use findings to develop future policy and programs in the future

Community/ Partner	Identified Issue	Description of Issue
East San Jose/ META	Drinking Water	Vietnamese speaking residents reported that 67.7% of respondents bought water for drinking. The main concern for residents was unsafe drinking water, followed by industrial contamination, and cost of water
		Over 50% of English speaking respondents rated their drinking water as "fair". Top three issues were cost of water, safety of drinking water, and infrastructure/pipes.
		• 62.6% of Spanish speaking residents rated their water as "acceptable". 52.6% bought water for drinking and cooking. Safety of water, old infrastructure/pipes and trash were main concerns.
		Focus group participants felt that their tap water quality was not good. It was the main concern to come out of the focus groups.
		Many residents in the community are renters and the majority do not work in San Jose despite living there.
		Focus group participants would like to know whether there is lead or other constituents that might be harmful to their health in the water.
	Industrial Contamination	Vietnamese speaking residents were concerned about industrial contamination. Was also a main concern to come up in focus groups
	Infrastructure/ Pipes	English and Spanish-speaking residents were concerned about old infrastructure/ pipes. Was also a main concern in focus groups.
Petaluma and The Springs/	Drinking Water	60% of respondents in Petaluma and 48% of respondents in The Springs said they only drink bottled or filtered water.
Sonoma Ecology Center & Daily Acts		Many respondents specifically identified smell, which they interpreted to be chlorine, as a drinking water quality issue.
	Stormwater	67% of respondents identified street flooding, 32% sidewalk flooding, 23% erosion, and 14% sewage-manhole overflows. Sanitary sewer overflow (SSO) observations are corroborated by State Water Resources Control Board documentation.
	Illegal Dumping/ Trash	The primary trash and dumping issues reported were trash and small litter, large illegally dumped items, and homeless camp waste, all of which have impacts on water quality.
	Community Improvements	Respondents mentioned a desire for community improvement projects, including creek or trail cleanups to remove garbage accumulation, more playgrounds and more trails to improve pedestrian and bicycle circulation, as well as rain barrels, public landscaping, and other improvements.
People Experiencing Homelessness,	Housing	Lack of housing is the root of barriers to water access
Downtown Streets Teams	Water Access	Many respondents reported that they relied on informal networks for access to water for drinking, sanitation, and hygiene
and Voices Youth Programs		Maintenance and security of facilities were frequently cited as areas of improvement in survey responses
		Overall availability of water access could be improved. More facilities, longer windows of operation, and free/reduced cost for use were mentioned in survey responses
		Vital to ensure services are coordinated and well-publicized so people know they exist and where/when to access
	1	

- META will participate in the DACTIP Tap Water Quality Testing Effort
- META suggested culturally-sensitive outreach to inform community members of water issues in East San Jose

- Conduct outreach to Petaluma and The Springs communities about water quality (an expanded 'Take it from the Tap' campaign in Spanish)
- Offer water quality testing through the DACTI Program Tap Water Quality Testing Effort and offer portable water filters
- Pursue the development of water bottle fill stations from the local water supply
- Partner with Sonoma Water on stormwater projects, including assessing potential stormwater detention properties, conducting landowner outreach, and completing a feasibility assessment to identify opportunities in the hills to retain stormwater onsite to mitigate downstream flooding in The Springs from Sonoma Creek
- Encourage Sonoma Water to conduct a comprehensive investigation of conditions contributing to downstream SSOs from Sonoma Development Center to The Springs
- Conduct on-the-ground wet-weather site assessments and field data collection (photos with timestamps) to assess Sonoma
 Development Center stormwater and major creeks and flooding areas between Sonoma Development Center and Verano
 Avenue (approx.. 4.5 miles) which could help identify opportunities to prevent stormwater from getting into the sewer system
- · Organize cleanup events and an outreach campaign about proper garbage disposal, recycling, and community development.
- Work with the City of Petaluma and southern Sonoma partners to improve their communities through co-developing projects
 and pursuing funding to address issues identified in the needs assessment process, including: creek or trail cleanups,
 stormwater management projects, park cleanups and restoration projects to address erosion and other issues, outdoor
 education and recreation programs, sewage infrastructure improvements
- Encourage municipalities to consult with people experiencing homelessness when developing policies and programs intended to help or address homelessness
- Municipalities should follow up in their communities directly with people experiencing homelessness on how access can be improved and where these services can be located
- Look to add questions to point-in-time counts to best gather more information to inform service provision and facility development
- Explore ways that existing funding streams not earmarked for people experiencing homelessness can be tapped into to provide necessary services for people experiencing homelessness. (I.e. water quality funding for restrooms, showers, and clothes washing)

Appendix D. Funding Opportunities - Federal Funding

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Water Quality/	Drinking Water			
404 Hazard Mitigation Grant Program (HMGP)	This opportunity provides funding for communities to implement mitigation activities to reduce risk to life and property from natural hazards. In CA, natural hazards include wildfire, earthquake, drought, extreme weather, flooding, and other impacts of climate change. HMGP funding can also support the development of Local Hazard Mitigation Plans (LHMP) and project scoping activities.	FEMA; CalOES	Grant	
Cumulative Health Impacts at the Intersection of Climate Change, Environmental Justice, and Vulnerable Populations/ Lifestages: Community- Based Research for Solutions	This solicitation provides the opportunity for the submission of applications for projects that may involve human subjects research. Human subjects research supported by the EPA is governed by EPA Regulation 40 CFR Part 26 (Protection of Human Subjects). This includes the Common Rule at subpart A and prohibitions and additional protections for pregnant women and fetuses, nursing women, and children at subparts B, C, and D. Research meeting the regulatory definition of intentional exposure research found in subpart B is prohibited by that subpart in pregnant women, nursing women, and children. Research meeting the regulatory definition of observational research found in subparts C and D is subject to the additional protections found in those subparts for pregnant women and fetuses (subpart C) and children (subpart D). All applications must include a Human Subjects Research Statement (HSRS, as described in Section IV.C.6.c of this solicitation), and if the project involves human subjects research, it will be subject to an additional level of review prior to funding decisions being made as described in Sections V.D and V.F of this solicitation.	U.S. EPA	Grant	\$8.1M, requests for amounts over \$1.35, including direct and indirect costs, will not be considered
Environmental Water Resources Projects	Eligible projects may include, but are not limited to: Water conservation and efficiency projects that result in quantifiable and sustained water savings and benefits to ecological values. Water management or infrastructure improvements to mitigate drought-related impacts to ecological values. Watershed management or restoration projects benefiting ecological values that have a nexus to water resources or water resources management	USBR	Grant	Up to \$2M, 25% funding match depending on project requirements



Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
Feb 15, 2022	HMA@caloes. ca.gov	Recovery 404 Hazard Mitigation Grant Program (ca.gov)			
November 16, 2021	Intaek Hahn hahn.intaek@epa. gov	Cumulative Health Impacts at the Intersection of Climate Change, Environmental Justice, and Vulnerable Populations/ Lifestages: Community- Based Research for Solutions Request for Applications (RFA) U.S. EPA			
December 9, 2021	Matthew Reichert bor-sha-fafoa@ usbr.gov	WaterSMART Environmental Water Resources Projects Bureau of Reclamation (usbr.gov)			

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Water Quality/	Drinking Water			
Environmental Justice Collaborative Problem- Solving (EJCPS) Cooperative Agreement Program	The purpose of the EJCPS Program is for EPA to provide financial assistance to support community-based organizations to collaborate and partner with other stakeholders (e.g., local businesses and industry, local government, medical service providers, academia, etc.) to develop solutions that will significantly address environmental and/or public health issue(s) at the local level. The program's objective is to support projects that demonstrate the utility of the Environmental Justice Collaborative Problem-Solving Model. Because this program requires substantial involvement and interaction between the applicant and EPA, these awards will be made in the form of cooperative agreements.	U.S. EPA	Grant	\$3200000; ~\$160,000 per agreement
Water Infrastructure Improvements for the Nation Act (WIIN) Grant: Assistance for Small and	The principal objective of the Grant Program is to support drinking water projects and activities in underserved, small and disadvantaged communities that are unable to finance projects to comply with drinking water regulations under the SDWA. Additionally, the grant funding provides assistance to communities to manage drinking water concerns through household water quality testing, including testing for unregulated water contaminants. Projects and activities eligible for assistance can include infrastructure projects; technical, managerial, and financial capacity building activities; and activities necessary for a state to respond to a contaminant.	U.S. EPA	Grant	\$42.8 million, \$3.7 million alloted for California

Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
Spring 2022 (potential)	Jacob Burney burney.jacob@epa. gov (202) 564-2907	The Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program U.S. EPA			All
Letters of Interest due July 23, 2021	WIINDrinking WaterGrants @epa.gov	https://www.epa. gov/dwcapacity/wiin- grant-assistance-small- and-disadvantaged- communities-drinking- water-grant		Small, Underserved, and Disadvantaged Communities Program Grantees U.S. EPA	All

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Water Infrastructure Improvements for the Nation Act (WIIN) Grant: Assistance forTribal Communities		U.S. EPA	Grant	\$274,000 for Region 9, including Navajo Nation
Water Quality/	Drinking Water			
Emergency Community Water Assistance Grants	Assits rural communities that have experienced a significant decline in the quantity or quality of water directly caused by an emergency incident; emergencies include drought, earthquake, flood, landslide, etc. but would need to certify that the project was a direct result of an emergency	USDA	Grant	Water transmission line grants up to \$150,000 to construct waterline extensions, repair breaks or leaks in existing water distribution lines, and address related maintenance necessary to replenish the water supply; Water source grants up to \$500,000 are to construct a water source, intake or treatment facility

Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
September 30, 2020 is final due date for participating state's final application package; June 30, 2021 for state application	Emmanuelle Rapicavoli rapicavoli. emmanuelle@epa. gov (415) 972-3969	https://www.epa. gov/dwcapacity/wiin- grant-assistance-small- and-disadvantaged- communities-drinking- water-grant			CIEA
Eligible in the event of an emergency that threatens the availability of safe, reliable drinking water. Rural areas and towns with populations of 10,000 or less, Tribal lands in rural areas, and Colonias	General Inquiries: CA.Info@usda.gov California Water and Environmental Programs Director: Daniel Cardona (760) 397-5949 ext. 107	Emergency Community Water Assistance Grants Rural Development (usda.gov)			

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Reduction in Lead Exposure Via Drinking Water	The U.S. Environmental Protection Agency (EPA) is soliciting applications from eligible applicants as described in Section III.A to reduce lead in drinking water in disadvantaged communities through infrastructure and/or treatment improvements or facility remediation in schools and child care facilities. The goal of these projects is to address conditions that contribute to increased concentrations of lead in drinking water. The lead reduction projects should proceed to implementation upon award. The proposed projects support the Agency's Strategic Plan for Fiscal Year (FY) 2018 – 2022, Goal 1: A Cleaner, Healthier Environment: Deliver a cleaner, safer, and healthier environment for all Americans and future generations by carrying out the Agency's core mission, Objective 1.2: Provide for Clean and Safe Water. The EPA's Strategic Plan is available at https://www.epa.gov/planandbudget/strategicplan.html. All applications must be for projects that support the goals and objectives identified above. National Priority Areas identified in this announcement are for: (1) Reduction of Lead Exposure in the Nation's Drinking Water Systems through Infrastructure and Treatment Improvements and (2) Reduction of Children's Exposure to Lead in Drinking Water at Schools and Child Care 2	U.S. EPA	Grant	\$39.9 million, award ceiling \$17,100,000
San Francisco Bay Water Quality Improvement Fund	The SFBWQIF priorities are to support projects that enhance aquatic habitat, restore impaired waters, and reduce polluted run-off. Consistent with program priorities, projects are tracked in three categories: restoring wetlands, restoring water quality, and greening development (e.g. Low Impact Development).	U.S. EPA	Grant	\$5.9 million; \$200,000- \$2 million awards (4-6 awards anticipated)
Water Quality/	Drinking Water			
WaterSMART Water and Energy Efficieny Projects	Through WaterSMART Water and Energy Efficiency Grants (formerly Challenge Grants) Reclamation provides 50/50 cost share funding to irrigation and water districts, tribes, states and other entities with water or power delivery authority. Projects conserve and use water more efficiently; increase the production of hydropower; mitigate conflict risk in areas at a high risk of future water conflict; and accomplish other benefits that contribute to water supply reliability in the western United States. Projects are selected through a competitive process and the focus is on projects that can be completed within two or three years.	USBR	Grant	Max award for current funding round \$500,000 for projects that can be completed in 2 years; \$2M for projects that can be completed within 3 years. 50% min cost share requirement

Awaiting date for new cycle/round	Near term funding (due in next 3 months)
Not certain there will be another round of funding	Projected funding

Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
May 20, 2020	Brianna Knoppow WIINDrinking WaterGrants @epa.gov	https://www.grants. gov/web/grants/ view-opportunity. html?oppId=324680			
April 20, 2020	Luisa Valiela valiela.luisa@epa. gov (415) 972-3400 Erica Yelensky yelensky.erica@ epa.gov (415) 972-3021	https://www.epa. gov/sfbay-delta/san- francisco-bay-water- quality-improvement- fund			
November 3, 2021	Josh German jgerman@usbr.gov (303) 445-2839	WaterSMART Water and Energy Efficiency Grants Bureau of Reclamation (<u>usbr.gov</u>)			CCRCD, APP

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
WaterSMART: Small- Scale Water Efficiency Projects	Through Small-Scale Water Efficiency Projects, Reclamation provides assistance to states, tribes, irrigation districts, water districts, and other entities with water or power delivery authority to undertake small-scale water efficiency projects that have been prioritized through planning efforts led by the applicant. These projects conserve and use water more efficiently; mitigate conflict risk in areas at a high risk of future water conflict; and accomplish other benefits that contribute to water supply reliability in the western United States. For further information on WaterSMART Grants, please see www. usbr.gov/watersmart/index.html.	USBR	Grant	\$3M total, \$75,000 award ceiling
Water and Waste Disposal Loan & Grant Program	Acquisition, construction, or improvement of drinking water sourcing, treatment, storage, and distribution, sewer, solid waste, and storm water collection, transmission, treatment, disposal, and other activities.	USDA	Grant & Loan	Approximately \$33 million in loan funding and \$10 million in grant funding was available to California applicants in 2019. Award amounts are determined on tier eligibility based on the median household income of the area to be served.
SEARCH Grant Program	Program helps very small, financially distressed rural communities (2,500 or less) with predevelopment feasibility studies, design, and technical assistance or proposed water and waste disposal projects	USDA Rural Development	Grant	\$30,000 max grant
Stormwater/Flo	oodina			



Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
Project selections announced August 31, 2021	Robin Graber rgraber@usbr.gov (303) 445-2764	WaterSMART Small- Scale Water Efficiency Projects Bureau of Reclamation (usbr.gov)			All
Rolling	Main Phone Number: (530) 792-5800 USDA Rural Development Attn: Water Programs 430 G St, Agency 4169 Davis, CA 95616 Esther De La Cruz Esther.DeLaCruz@ ca.usda.gov (831) 975-7736	https://www.rd.usda. gov/programs-services/ water-waste-disposal- loan-grant-program/ca			MCCDA; SEC/DA, Nuestra Casa, CCRCD
Rolling	Pete Yribarren pete.yribarren@ ca.usda.gov (905) 863-9928	SEARCH - Special Evaluation Assistance for Rural Communities and Households Rural Development (usda. gov)			

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Community Development Block Grants (CDBG)	The Community Development Block Grant (CDBG) Entitlement Program provides annual grants on a formula basis to entitled cities and counties to develop viable urban communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for lowand moderate-income persons. The program is authorized under Title 1 of the Housing and Community Development Act of 1974, Public Law 93-383, as amended; 42 U.S.C. 5301 et seq.	U.S. HUD	Grant	
Community Development Block Grants (CDBG)- Drought Related Lateral Program	Assist HUD non-entitlement area cities and counties to connect water systems to residences without drinking water.	U.S. HUD	Grant	

Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
Rolling	Kimberly Y. Nash kimberly.y.nash@ hud.gov (415) 489-6572	https://www. hudexchange. info/programs/ cdbg-entitlement/ cdbg-entitlement- program-eligibility- requirements/			
	Stoyan Elitzin (916) 263-1622 stoyan.elitzin@ hcd.ca.gov	https://hcd.ca.gov/ grants-funding/active- funding/cdbg/cdbg- drlp.shtml			SUMC, MCM, MCCDA, SEC/DA

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Flood Mitigation Assistance	Need a FEMA approved local hazard mitigation plan	FEMA; CalOES	Grant	\$160 million, up to \$4 million for project scoping, up to \$70 million for Community Flood Mitigation Projects
Building Resilience Infrastructure and Commuities (BRIC)	Building Resilient Infrastructure and Communities (BRIC) will support states, local communities, tribes and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a new FEMA pre-disaster hazard mitigation program that replaces the existing Pre-Disaster Mitigation (PDM) program.	FEMA; CalOES	Grant	\$33.6 million (up to \$600,000 per applicant) for state allocation, \$446.4 million available for national competition for mitigation projects
Habitat Restor	ation			
North American Wetlands Conservation Act	Conserve wetlands and wetlands-dependent fish and wildlife. Land acquisition, enhancement, and restoration activities	U.S. Fish and Wildlife	Grant	
North American Wetlands Conservation Act- Smalll Grants Program	Conserve wetlands and wetlands-dependent fish and wildlife. Land acquisition, enhancement, and restoration activities	U.S. Fish and Wildlife	Grant	Up to \$100,000 award



Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
Sep 30, 2021	HMA@caloes. ca.gov	https://www.fema. gov/grants/mitigation/ floods			SUMC, MCM, Greenaction, First Generations, ISPSA, Nuestra Casa, TWP
Jan 27, 2021	HMA@caloes. ca.gov	https://www.fema. gov/grants/mitigation/ building-resilient- infrastructure- communities			SUMC, MCM, Greenaction, ISPSA, APP, First Generations, Nuestra Casa, TWP
February 25, 2022 US Standard Grants Cycle 1, July 8, 2022 US Standard Grants Cycle 2	Stacy Sanchez stacy_sanchez@ fws.gov (703) 358-2017	U.S. Fish & Wildlife Service - Migratory Bird Program Conserving America's Birds (<u>fws.</u> gov)		DBHC/Grant Summary Query (fws.gov)	
October 14, 2021 for U.S. Small Grants	Stacy Sanchez stacy_sanchez@ fws.gov (703) 358-2017	U.S. Fish & Wildlife Service - Migratory Bird Program Conserving America's Birds (fws. gov)		DBHC/Grant Summary Query (fws.gov)	FOSC, CCRCD, SEC/ DA, SUMC

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
National Coastal Wetlands Conservation Program	The National Coastal Wetlands Conservation Grant Program annually provides grants of up to \$1 million to coastal and Great Lakes states, as well as U.S. territories to protect, restore and enhance coastal wetland ecosystems and associated uplands. The grants are funded by taxes or import duties collected from the sale of recreational fishing equipment, boats, electric motors, and motorboat and small engine fuels under the authority of the Dingell-Johnson Sport Fish Restoration Act of 1950.	U.S. Fish and Wildlife	Grant	\$17,000,000 available, \$125,000- \$1,000,000 award
Habitat Restor	ation			
National Estuary Program Coastal Watersheds Grant	The National Estuary Program (NEP) Coastal Watersheds Grant (CWG) Program is a nationally competitive grants program designed to support projects that address urgent and challenging issues threatening the well-being of coastal and estuarine areas within determined estuaries of national significance. Restore America's Estuaries (RAE) will be administering the NEP CWG Program in cooperation with the U.S. Environmental Protection Agency (EPA) as a pass-through entity with funding provided under Cooperative Agreement 83967501. Grants awarded under this Request for Proposals (RFP) will be "subawards" for the purposes of 2 CFR 200. RAE will establish and manage the subawards in compliance with 2 CFR 200.331 and the terms of EPA Cooperative Agreement 83967501. The goals of the CWG Program are to: • Address urgent and challenging issues that threaten the ecological and economic well-being of coastal areas and estuaries; • Achieve on-the-ground or tangible quantifiable improvements in coastal and estuarine habitats conditions and the health of living resources; • Apply new or innovative approaches, practices, methods, or techniques for preventing, treating, and removing pollution entering estuaries; 2 • Establish or improve sustainable local capacity to protect and restore coastal watersheds and their living resources; and • Support and expand promising approaches for watershed resilience and adaptation. This program offers an opportunity to make meaningful, on-the-ground change via thoughtful, strategic decisions regarding projects. In addition, the program will encourage partnerships in order to build stronger, more resilient communities, particularly with respect to climate change, seal level rise, and related issues. This grant program funds projects within the 28 NEP watershed geographic areas and selected adjacent areas.	Restore America's Estuaries; U.S. EPA	Grant	\$1 million available annually, \$75,000- \$250,000

Awaiting date for new cycle/round	Near term funding (due in next 3 months)
Not certain there will be another round of funding	Projected funding

Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
June 25, 2021	Lawrence Riley lawrence_riley@ fws.gov (916) 978-6182	https://www.fws.gov/ coastal/CoastalGrants/		2022 National Coastal Wetlands Conservation Grant Program Awards (fws. gov)	FOSC, CCRCD, SEC/ DA, SUMC
May 27, 2022	Suzanne Simon ssimon@estuaries. org	https://estuaries. org/initiatives/ watershedgrants/	https://calendly.com/nepcwg_infosession		FOSC, CCRCD, SEC/ DA, SUMC

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Wetlands Program Development Grants	Projects that promote the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys and studies relating to the causes, effects, extent, prevention, reduction and elimination of water pollution.	U.S. EPA	Grant	\$75,000-\$220,000
Habitat Restor	ation			
California Plant Conversation and Restoration Management	The Plant Conservation and Restoration Management Program was created in response to large-scale wildfires in the Western U.S. Because of a lack of native seed, in 2001 Congress directed the Bureau of Land Management (BLM) to establish a native plant material program and recommended that federal and non-federal partners coordinate efforts through the Plant Conservation Alliance established in 1994 (House Report 106-914). The Plant Conservation Program provides leadership in identifying, maintaining, and restoring Western native plant communities on public lands. The California BLM has opportunities to work with partner organizations to accomplish goals of the BLM Plant Conservation & Restoration Program Private institutions of higher education State governments Special district governments Nonprofits having a 501(c)(3) status with the IRS, other than institutions of higher education Native American tribal governments (Federally recognized) Public and State controlled institutions of higher education Nonprofits that do not have a 501(c)(3) status with the IRS, other than institutions of higher education County governments. Individuals and For-Profit Organizations are ineligible to apply for awards under this NOFO.	Bureau of Land Management	Grant	\$2M, \$500,000 ceiling

Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
Ongoing applications	Sarvy Mahdavi mahdavi.sarvy@ epa.gov (213) 244-1830	https://www.epa.gov/ wetlands/wetland- program-development- grants-and-epa- wetlands-grant- coordinators#about			SUMC
May 3, 2021	Megan Bryant mebryant@blm.gov	View Opportunity GRANTS.GOV			CIEA

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Acres for America	Acres for America is the National Fish and Wildlife Foundation's (NFWF) premier land conservation program, and was established to provide urgently needed funding for projects that conserve important large-scale habitats for fish, wildlife, and plants through voluntary land acquisitions and perpetual conservation easements. Pre-Proposal Due Date: May 5, 2022 by 11:59 PM Eastern Time Preferential consideration will be given to proposals that can demonstrate their ability to achieve more than one of the following program priorities: Conserve critical habitats for birds, fish, plants and wildlife, Connect existing protected lands to unify wild places and protect critical migration routes, Provide access for people to enjoy the outdoors, Ensure the future of local economies that depend on forestry, ranching, wildlife and recreation	National Fish and Wildlife Foundation, Walmart	Grant	\$3M, \$250,000- \$500,000 awards
Sea Level Rise				
National Coastal Resilience Fund	The National Coastal Resilience Fund restores, increases and strengthens natural infrastructure to protect coastal communities while also enhancing habitats for fish and wildlife. Established in 2018, the National Coastal Resilience Fund invests in conservation projects that restore or expand natural features such as coastal marshes and wetlands, dune and beach systems, oyster and coral reefs, forests, coastal rivers and floodplains, and barrier islands that minimize the impacts of storms and other naturally occurring events on nearby communities.	National Fish and Wildlife Foundation	Grant	\$34M, approx \$250,000 to \$5M per proposal
Homelessness/	/Housing			
Emergency Solutions Grant		U.S. HUD		
Community Development Block Grants (CDBG)	ESG funds may be used for five program components: street outreach, emergency shelter, homelessness prevention, rapid re-housing assistance, and HMIS; as well as administrative activities (up to 7.5% of a recipient's allocation can be used for administrative activities).	U.S. HUD	Grant	
Wastewater/Se	eptic Systems			

Awaiting date for new cycle/round

Near term funding (due in next 3 months)

Projected funding

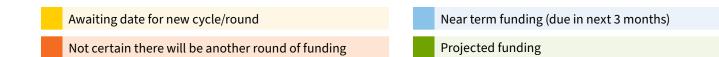
Deadline	Contact	Eligibility Information	Webinar/ Presentation Slides	Past Funded Projects	Potential OPs
May 5, 2022	Izzy Comella Isabel.comella@ nfwf.org Western Region office: Jonathan Birdsong jonathan. birdsong@nfwf.org	Acres for America 2022 Request for Pre- Proposals NFWF			
Pre-proposal due 4/21/2022	Femke Freiberg femke.freiberg@ nfwf.org	https://www.nfwf.org/ programs/national- coastal-resilience-fund/ national-coastal- resilience-fund-2022- request-proposals	https://attendee. gotowebinar.com/ recording/6666 383401729491471	NFWFncrf 20211117GS final.pdf	TWP, SUMC, Greenaction, First Generations
		https://www. hudexchange.info/ programs/esg/esg- requirements/			
Rolling	Kimberly Y. Nash kimberly.y.nash@ hud.gov (415) 489-6572	https://www. hudexchange. info/programs/ cdbg-entitlement/ cdbg-entitlement- program-eligibility- requirements/			

Appendix D. Funding Opportunities - State Funding

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Near Term				
Impact Projects	The Impact Projects grant program intends to support collaborative projects that center local artists and forms of arts and cultural expression in responding to issues facing California at this time, including the pervasive social, political, and economic inequalities experienced by those communities most vulnerable to, and adversely affected by, the COVID19 pandemic.	CA Arts Council	Grant	\$4,156,514 (\$18,000 max award)
Urban Greening Program	The Urban Greening Program, funded by the General Fund, is a grant program designed to promote a comprehensive, long-term approach to addressing climate change to improve the environment. Specifically, the program funds urban greening and urban forestry projects that reduce GHG emissions and provide multiple additional benefits.	CA Natural Resources Agency	Grant	\$47.5M
Urban and Multibenefit Drought Relief Program	Funding for drought relief projects. Eligible projects include: hauled water, insallation of temporary community water tanks, emergency water interties, new wells or rehabiltation of existing wells, contruction or installation of permanent connection to adjacent water systems, fish and wildlife rescue/protection, or drought resiliency planning. \$50M set aside for Underrepresented Communities and Tribes included in the Prop 1 IRWM Disadvantaged Communities Involvment Program for drought relief projects	California Department of Water Resources	Grant	\$190M, \$2M minimum award
Coastal Stories Grant Program	Fund projects that plan, develop, and implement storytelling installations or materials (such as murals, signage, monuments, or guides) that represent communities and voices that have been historically excluded in the storytelling of California's coast and publicly accessible lands. These communities may include but are not limited to BIPOC people, people with disabilities, immigrant communities, low-income communities, and other historically excluded communities.	State Coastal Conservancy	Grant	\$1M, grants likely up to \$200,000
General Funding	3			
Environmental Justice Small Grants Program	The California Environmental Protection Agency (CalEPA) Environmental Justice (EJ) Small Grants Program offers funding opportunities authorized by California Code of Regulations Title 27, Division 1, Chapter 3, Article 1 to assist eligible non-profit community organizations and federally-recognized Tribal governments address environmental justice issues in areas disproportionately affected by environmental pollution and hazards. The EJ Small Grants are awarded on a competitive basis.	Cal EPA	Grant	Max: \$50,000
Awaiting da	te for new cycle/round Ne	ear term funding (du	ue in next 3 mon	ths)
Not certain	there will be another round of funding Pr	ojected funding		

Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
March 9, 2022	Organizations with budgets including total operating revenues of less than \$250,000: Josy Miller, josy. miller@arts.ca.gov, (916) 322-6385; Organizations with budgets including total operating revenues of more than \$250,000: J. Andrea Porras, andrea.porras@arts. ca.gov, (916) 826-2218	ImpactProjects 2021 Guidelines FINAL.pdf (ca.gov)		
March 28, 2022	urbangreening@resources. ca.gov, (916) 653-2812	https://resources.ca.gov/grants/ urban-greening		
Second phase open through January 14, 2022	urbandrought@water.ca.gov	2021 Urban and Multibenefit Drought Relief Funding (ca.gov)		
January 31, 2022	coastalstories@scc.ca.gov	Coastal Stories Grant Program – California State Coastal Conservancy		
August 13, 2021	Leticia Syslo EnvJustice@calepa.ca.gov (916) 323-2514	Environmental Justice Small Grants and Funding Opportunities CalEPA		Nuestra Casa; ISPSA; Greenaction; TWP; FOSC, SEC/ DA, First Generations, APP, MCM, SUMC, META, DST, VOICES

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Water Quality/D	Prinking Water			
Drinking Water State Revolving Fund	Projects that return public water systems to compliance with drinking water standards, consolidation, water meters, treatment projects, replacement of aging infrastructure	California State Water Resources Control Board	Loan	\$30-40 million in grants, \$40 million in low-interest loans, annually
Small Community Drinking Water Funding Program	Planning/design and construction of drinking water infrastructure projects including: treatment systems, distribution systems, interconnecrtions, consolidations, pipeline extensions, water sources, water meters, and water storages. Populations under 10,000 with less than 80% of MHI	California State Water Resources Control Board Office of Sustainable Water Solutions	Loan	
Safe and Affordable Funding for Equity and Resilience (SAFER) Program	The priority uses of the SADW Fund include: 1) addressing any emergency or urgent funding needs, where other emergency funds are not available and a critical water shortage or outage could occur without support from the Fund; 2) addressing community water systems (CWSs) and school water systems out of compliance with primary health standards, focusing on small Disadvantaged Communities (DACs); 3) accelerating consolidations for systems out of compliance, at-risk systems, as well as state smalls and domestic wells, focusing on small DACs; 4) providing interim solutions and initiating planning efforts for long-term solutions for state smalls and domestic wells with source water above a primary maximum contaminant level (MCL).	California State Water Resources Control Board	Grants and Loans	\$130 million annually, beginning FY 2020/21
Community Facilities Direct Loan and Grant Program	The purchase, construction, and/or improvements to public water facilities	Rural Development	Loans and Grants	\$41.8 million in direct loans, \$12.65 million in grants; awards average \$40-50k
Infrastructure State Revolving Fund (ISRF) Program	Local streets, highways, drainage, water, sewer, waste, transit, parks, and other public utilities and facilities.	California Infrastructure and Economic Developement Bank	Loans and Grants	\$50,000- \$25 million



Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
Rolling	https://www.waterboards. ca.gov/water_issues/ programs/grants_loans/srf/ docs/dwsrf_contacts.pdf	https://www.waterboards.ca.gov/drinking_water/services/funding/dwsrf_basics.html		All
Rolling	DFA-OFWS@waterboards. ca.gov (916) 327-9978	https://www.waterboards. ca.gov/water_issues/programs/ grants_loans/sustainable_water_ solutions/scdw.html		MCCDA (DBV or Pt Reyes Station), SEC/DA
Ongoing	DFA-OFWS@waterboards. ca.gov (916) 327-9979	https://www.waterboards. ca.gov/water_issues/programs/ grants_loans/sustainable_water_ solutions/safer.html		Nuestra Casa, SUMC, SEC/DA, MCCDA, APP, CCRCD
Open ongoing	Pete Yribarren California Community Programs Director (805) 863-9928 Esther De La Cruz (831) 975-7736	https://www.rd.usda.gov/ programs-services/community- facilities-direct-loan-grant- program		SEC/DA; MCCDA
Applications accepted continuously, IBank will do preliminary review and invite applications within 2-3 weeks; once invited to apply and application is submitted about 90 days to approve	Lina Benedict Loan Origination Manager Lina.Benedict@ibank.ca.gov	www.ibank.ca.gov		All

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Water Quality/[Orinking Water			
2022 Clean Water Act Section 319 Nonpoint Source Pollution Grant	The program primarily funds implementation projects, but occasionally offers grants for planning projects. Examples of projects include livestock fencing to reduce sediment and nutrient discharges, agricultural best management practices to reduce pesticide and nutrient discharges, dredging contaminated sediment from pesticide-impaired waters, habitat restoration such as installation of large woody debris and riparian revegetation, and rural road inventories and repairs to reduce sedimentation and erosion. Most awards go to projects that improve impaired waters, but a small amount of funding goes to projects that protect high-quality waters, or that address a nonpoint source pollution problem created by wildfire.	California State Water Resources Control Board	Grant	\$4.5M, \$250K-\$800K
Urgent Drinking Water Funding	Provide funding for projects including but not limited to: interim alternate water supplies, such as bottled or hauled water and emergency improvements or repairs to existing water systems	California State Water Resources Control Board	Grant	usually up to \$500,000
Site Cleanup Subaccount Program	Projects that remediate the harm or threat of harm to human health, safety, or the environment caused by existing threatened surface water or groundwater contamination. Need to be declared a Responsible Party and unable to pay for cleanup.	California State Water Resources Control Board	Grant	\$19.5 M
Clean Water State Revolving Fund	Construction of publicly-owned treatment facilities such as wastewater treatment, local sewers, sewer interceptors, water reclamation and distribution, stormwater treatment, combined sewers, or landfill leachate treatment. Implementation of nonpoint source pollution in agriculture, forestry, urban areas, marinas, hydromodfication, and wetlands.	California State Water Resources Control Board	Loans and Grants	\$586M



Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
December 17, 2021	Jodi Ponturer Jodi.Pontureri@ waterboards.ca.gov or phone at (916) 341- 5306.	https://www.waterboards. ca.gov/water_issues/programs/ nps/319grants.html		SUMC, Greenaction, First Generations, Nuestra Casa
Apply as needed	DFA-CAA@waterboards. ca.gov	https://www.waterboards.ca.gov/ water_issues/programs/grants_ loans/caa/urgent_water_needs. html		Nuestra Casa, DST, Voices, APP, First Generations, Greenaction
Apply if deemed a Responsible Party without ability to pay for cleanup	Kathryn Dominic (916) 449-5591 kathryn.dominic@ waterboards.ca.gov	Financial Assistance Funding - Grants and Loans California State Water Resources Control Board		
Applications rolling basis		Financial Assistance Funding - Grants and Loans California State Water Resources Control Board		All

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Prop 68 Groundwater Treatment and Remediation Grant Program	After completing two solicitations, approximately \$28 million remains uncommitted. To utilize these remaining funds to help meet the significant needs of DACs, the State Water Board adopted a resolution on August 20, 2020, making these funds available for DAC drinking water projects that treat groundwater for direct potable use, without necessarily remediating the aquifer. The Prop 68 GW Guidelines are waived for these projects. DAC Drinking Water projects do not need to apply directly to the Prop 68 GW Program. These projects are funded consistent with existing drinking water funding processes (see the Office of Sustainable Water Solutions webpage for more info). Division of Financial Assistance staff will consult internally to direct Prop 68 GW funds to identified eligible projects. Additionally, the State Water Board is working on an effort to fund operations and maintenance for drinking water systems that are treating contaminated groundwater. Entities such as public agencies, public water systems, or nonprofits, that are interested in receiving a grant to run a local or regional program that provides operations and maintenance funding to multiple water systems should review this Request for Letters of Interest (letters due July 12, 2021).	California State Water Resources Control Board	Grant	
Small Community Drought Relief Program	for interim or immediate relief in response to conditions arising from a drought scenario to address immediate impacts on human health and safety and on fish and wildlife resources and to provide water to persons or communities that lose or are threatened with the loss or contamination of water supplies. Eligible projects shall be in couties included in Governor Newsom's state of emergency proclamations for 2021. Any county or jurisdiction included in a future proclamation will also qualift for funding.	California Department of Water Resources	Grant	\$192M
Stormwater/Flo	oding			
Recovery 404 Hazard Mitigation Grant Program	Available whenever there is a federally delcared disaster. Projects reduce risks from future damage	California Office of Emergency Services; US DHS; US FEMA	Grant	
Coastal Watershed Flood Risk Reduction Program	fund projects located in Areas that intersect CA Coast & SF Bay; focus on multi-benefit risk reduction; Address flood risk and public safety; Enhance coastal ecosystem, including fishing and Wildlife Habitat Enhancement; Promote Natural Resources Stewardship & Public Access Corridors	California Department of Water Resources-	Grant	\$27 million available



Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
Preliminary Award List posted 8/23/2021	Meghan Tosney Meghan.Tosney@ waterboards.ca.gov	Prop 68 Groundwater Treatment and Remediation Grant Program L California State Water Resources Control Board		
Applications will be processed as they are received until funds are exhausted or until December 29, 2023	SmallCommunityDrought@water.ca.gov (559) 230-3309	https://water.ca.gov/Water-Basics/ Drought/Small-Community- Drought-Relief		
NOIs can be submitted at any time	HMA@caloes.ca.gov	https://caloes.ca.gov/cal-oes-divisions/recovery/public-assistance/404-hazard-mitigation-grant-program		SEC/DA
\$23.9M awarded in July 2021	Ke Zhong Ke.Zhong@water.ca.gov Sami Nall Sami.Nall@water.ca.gov	https://water.ca.gov/coastal-FRR		MCM, SUMC, Greenaction, TWP

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Floodplain Management, Protection, and Risk Awareness Grant Program	increased focus on DACS/SDACS & multi-benefit projects; purpose to protect pepole and property in CA's alluvial fan, coastal and Riverine floodplains; stormwater, muslide, & other flash flood related protections	DWR-Office of Floodplain Management	Grant	~\$25 million
Stormwater/Flo	oding		,	
State Water Efficiency and Enhancement Program (SWEEP)	The State Water Efficiency and Enhancement Program (SWEEP) provides financial assistance in the form of grants to implement irrigation systems that reduce greenhouse gases and save water on California agricultural operations. CDFA has selected 835 projects to be awarded covering over 137,000 acres. \$81.1 million has been awarded to date, with more than \$52.8 million in matching funds contributed by awardees.	California Department of Food and Agriculture	Grant	\$43-45M
Delta Flood Emergency Response Program	Improve local flood emergency response in the Delta region of California and increase public safety. Eligible applicants are California Public agencies within the legal Delta including primary and secondary zones	California Department of Water Resources	Grant	\$5M
Habitat Restora	tion			
Environmental Enhancement Fund	The objective of this grant program is to award grants to nonprofit organizations, cities, counties, cities and counties, districts, state agencies, and departments; and, to the extent permitted by federal law, to federal agencies to support environmental enhancement projects located within or immediately adjacent to waters of the state.	Department of Fish and Wildlife	Grant	\$750,000
Environmental Enhancement and Mitigation	Eligible projects must fit one of the categories: Urban Forestry, Resource Lands, or Mitigation Projects Beyond the Scope of the Lead Agency. Projects must also directly or indirectly mitigate the environmental impacts of the modification of an existing Transportation Facility or construction of a new Transportation Facility	California Natural Resources Agency	Grant	\$6.7M; \$500K maximum
Stream Flow Enhancement Program	Projects that enhance stream flow in streams that support anadromous fish, special status species, or provide resilience to climate change.	Wildlife Conservation Board	Grant	\$50 million
Proposition 1 Delta Water Quality and Ecosystem Restoration Grant Program	To fund multi-benefit ecosystem and watershed protection and restoration projects that benefit the Delta.	Department of Fish and Wildlife	Grant	\$7M

Awaiting date for new cycle/round	Near term funding (due in next 3 months)
Not certain there will be another round of funding	Projected funding

- W				
Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
Concept proposals due October 27, 2021; Full Proposal due February 9, 2022	mehdi.mizani@water.ca.gov	https://www.grants.ca.gov/ grants/floodplain-management- protection-and-risk-awareness- program-2/		SEC/DA, MCM, SUMC, TWP, ISPSA, CCRCD, FOSC
January 18, 2022	cdfa.sweeptech@cdfa.gov	CDFA - OEFI - State Water Efficiency & Enhancement Program (ca.gov)		
Round 3: March 23, 2022	Kristin Richmond Kristin.Richmond@water. ca.gov	Flood Emergency Response Projects Grants (ca.gov)		
March 30, 2022	Daniel Orr daniel.orr@wildlife.ca.gov (916) 599-1381	https://wildlife.ca.gov/OSPR/ Science/Environmental- Enhancement-Fund/About		
June 3, 2022	bondsandgrants@ resources.ca.gov	Environmental Enhancement and Mitigation Grant Program (ca.gov)		ISPSA, SUMC, Nuestra Casa
Concept Proposals were due October 18, 2021, Full Proposals due January 14, 2022	Adam Ballard wcbstreamflow@wildlife. ca.gov (916) 324-7487	Stream Flow Enhancement Program (Proposition 1) (ca.gov)		FOSC, ISPSA, CCRCD, TWP
March 4, 2022	Lauren Barva Lauren.Barva@wildlife. ca.gov (916) 247-8903	Restoration Grants Solicitation Information (ca.gov)		

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Ecosystem Restoration and Water Quality Grant Program	Programmatic priorities are ecosystem protection, restoration, and enhancement; water quality; and water-related agricultural sustainability	Sacramento- San Joaquin Delta Conservancy	Grant	\$2.1 million
Prop 1 Restoration Grant Program	To fund multi-benefit ecosystem and watershed protection and restoration projects.	Department of Fish and Wildlife	Grant	\$31M
Habitat Restora	tion			
Groundwater Grant Program	Planning and implementation projects which prevent and clean up contamination of groundwater that serves (or has served) as a source of drinking water.	California State Water Resources Control Board	Grant	\$607 million remaining for Round 2, including \$63 million for planning grants and \$544 million for implementation grants.
California Riparian Habitat Conservation Program	Projects located in Southern California (below San Luis Obispo) are prioritized, secondary priority for projects in Northern California. Typical projects include: restoration of riparian vegetation and re-establishing floodplain connectivity, removal and control of non-native invasive plant species to restore native riparian vegetation, reconfigure degraded, incised, or undefined streams to restore natural hydrology and encourage reestablishment of native riparian habitat	Wildlife Conservation Board	Grant	\$12M
CalFIRE Urban and Community Forestry Grant Program	CAL FIRE's Urban & Community Forestry Program (UCF) works to expand and improve the management of trees and related vegetation in communities throughout California. The program advances the development of sustainable urban and community forests to improve the quality of life in urban environments which are where Californians live, work, and play. The program administers grants throughout California communities to advance urban forestry efforts.	Department of Forestry and Fire Protection	Grant	\$20M



Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
December 31, 2021	Aaron N. K. Haiman prop1grants@ deltaconservancy.ca.gov (916) 376-4023	http://deltaconservancy.ca.gov/ prop-1/		CCRCD
March 4, 2022	Lauren Barva Lauren.Barva@wildlife. ca.gov (916) 247-8903	https://wildlife.ca.gov/ Conservation/Watersheds/ Restoration-Grants		
Invitation for Full Proposals coming Early 2022	Email: gwquality.funding@ waterboards.ca.gov Subject Line: Prop 1 Groundwater Grant Program Phone: (800) 813-FUND (3863)	https://www.waterboards.ca.gov/ water_issues/programs/grants_ loans/proposition1/groundwater_ sustainability.html		Nuestra Casa, SEC/DA, CCRCD, Greenaction, First Generations, META, ISPSA, FOSC
Accepting proposals on continuous basis	Cara Allen (916) 445-1095 cara.allen@wildlife.ca.gov	https://wcb.ca.gov/Programs/ Riparian		FOSC, ISPSA, TWP, CCRCD, SEC/DA, SUMC
July 14, 2021	John Melvin john.melvin@fire.ca.gov (916) 508-2767	CAL FIRE Urban and Community Forestry 2020-21 Grant Guidelines		

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/	Total Available
Urban Stream Restoration Program	The Urban Streams Restoration Program (USRP), established by Water Code section 7048 which declared that urban creek protection, restoration, and enhancement are best undertaken by local agencies and organizations with assistance from the State. The USRP funds projects and provides technical assistance to restore streams impacted by urban development to a more natural state.	California Department of Water Resources	Etc.) Grant	\$10.78M
Sea Level Rise				
Division of Boating and Waterways Shoreline Erosion Control Program	To study problems of beach erosion and to construct projects to stabilize beaches and shoreline areas either through the strategic placement of sand or via hard structures like seawalls, groins, and rock revetments in concentrated areas to protect vital public infrastructure.	Department of Parks and Recreation	Grant	\$1M
Wastewater/Sar	nitation			
Small Community Clean Water/ Wastewater Funding	funds planning/design and construction of publicly-owned facilities including wastewater treatment plants, sewer collectors and interceptors, combined sewers, septic to sewer conversions, regionalization, landfill leachate treatment, stormwater reduction and treatment, and water reclamation facilities. For DACs or SDACs with population less than 20,000.	California State Water Resources Control Board	Loans and Grants	\$40M
Water Recycling Funding Program		California State Water Resources Control Board	Grant, planning grants available for local public agencies	\$900 million
Homelessness/H	Housing			
Transit Oriented Development Housing Program	Eligible activities are either rental housing development project or an infrastructure project necessary for the development of specified housing developments or to facilitate connections between these developments and the transit station.	California Department of Housing and Community Development (HCD)	Grant	max award of \$15 million
Affordable Housing and Sustainable Communities (AHSC) Program	Funding for affordable housing developments and transportation infrastructure, such as new transit vehicles, sidewalks, and bike lanes; transportation-related amenities such as bus shelters, benches, or shade trees and other programs that encourage residents to walk, bike, and use public transit.	CA Governor's Office of Planning and Research	Grant	\$405 M, max award \$30M, min award \$1M



Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
Expected to open January 2022	RSP@water.ca.gov	Riverine Stewardship Program: Grants (ca.gov)		
Deadline for FY23- 24 is December 15, 2021	Casey Caldwell (916) 327-1787 casey.caldwell@parks. ca.gov	Shoreline Erosion Control & Public Beach Restoration (ca.gov)		TWP, MCCDA, SUMC, MCM, Nuestra Casa, Greenaction, First Generations
Ongoing applications	DFA-OSWS@waterboards. ca.gov (916) 327-9978	https://www.waterboards. ca.gov/water_issues/programs/ grants_loans/sustainable_water_ solutions/		MCCDA (Dillon Beach and Pt Reyes Station), SEC/DA
Rolling	Michael Downey michael.downey@ waterboards.ca.gov (916) 324-8404	https://www.waterboards.ca.gov/ water_issues/programs/grants_ loans/docs/draft_wrfpguidelines. pdf		CCRCD, MCCDA, City of Hayward
Waiting for Round 5	TOD@hcd.ca.gov	https://hcd.ca.gov/transit- oriented-development		ISPSA, Nuestra Casa, SUMC
Jun 8, 2021	ahsc@sgc.ca.gov	https://www.grants.ca.gov/grants/ ahsc-round-6/		ISPSA, Nuestra Casa, SUMC

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
4% Federal Low Income Housing Tax Credits for Affordable Housing	New construction and rehabilitation projects that will remain affordable for a minimum of 30 years (55 years is most competitive) and that are subsidized with federal funding and/or tax-exempt bonds.	California Tax Credit Allocation Committee	Tax Credit	\$124.9 M
Recreation/Com	nmunity Access/Education			
Youth Community Access Grant Program	Funds projects that increase youth accessibility to natural or cultural resources and associated services. Projects must include design features and program elements to promote youth health, safety, well-being, and comfort. Prioritizes projects that are youth-led.	California Natural Resources Agency	Grant	\$5.7 million; Max: \$300,000; Min: \$50,000
Explore the Coast	Projects must involve visiting the coast of California or the shore of the San Francisco Bay. 50% of participants served by the grant must be from communities who face barriers accessing the coast.	California State Coastal Conservancy	Grant	\$20,000-\$40,000 usually, \$50,000 max
Statewide Park Development and Community Revitalization Prorgram (SRP) Prop 68	Funds the creation or expansion/improvement of parks. Acquisition of land, pre-construction (design, permits, etc. and construction costs are eligible. Projects in economically disadvantaged communities with lack of parks are prioritized and can have a cost match waiver	Department of Parks and Recreation	Grant	\$395.3M, \$200,000 to \$8.5M in awards
Coastal Resource and Public Access Program	grants for projects that restore and protect the California coast, increase public access to it, and increase communities resilience to climate change	California State Coastal Conservancy	Grant	\$15M
Land & Water Conservation Fund	Grants provide funding for the acquisition or devleopment of land to create new outdoor recreation opportunities for the health and wellness of Californians.	California Department of Parks and Recreation	Grant	TBD
Rural Recreation and Tourism Program	Acquisition and development of new recreational opportunities and facilities in nonurbanized counties with populations of less than 500,000 people and low population densities per square mile.	California Department of Parks and Recreation	Grant	\$23,125,000; min \$200,000 and max of \$3M
Regional Park Program	Acquisition for new or enhanced public access and use. Development to create or renovate multiuse trails, regional sports complexes, visitor and other support facilities.	California Department of Parks and Recreation	Grant	\$23,125,000; min \$200,000 and max of \$3M



Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
Applications accepted on continous basis				ISPSA
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Spring/Summer 2022	Melissa Jones bondsandgrants@ resources.ca.gov (916) 653-2812	https://resources.ca.gov/grants/ youth/		ISPSA, FOSC, TWP, Nuestra Casa, SUMC, Voices
March 22, 2021	Moira McEnespy moira.mcenespy@scc. ca.gov (510) 286-0317	RFP: Explore the Coast Grant Applications Due March 22, 2021 – California State Coastal Conservancy		MCM, MCCDA, SUMC, TWP, Greenaction, First Generations, FOSC, ISPSA
12/14/2020	SCORP@parks.ca.gov	https://www.parks.ca.gov/?page id=29939		ISPSA, FOSC, TWP, CCRCD, Nuestra Casa, SUMC, MCM
Ongoing applications	Moira McEnespy moira.mcenespy@scc. ca.gov (510) 286-0317	https://scc.ca.gov/grants/		MCM, MCCDA, SUMC, TWP, Greenaction, First Generations, FOSC, ISPSA
February 1, 2022		Land and Water Conservation Fund (ca.gov)		FOSC, ISPSA, CCRCD, TWP, Nuestra Casa, SUMC, MCM, SEC/ DA
January 20, 2022		Rural Recreation and Tourism Program (RRT) (ca.gov)		SEC/DA, CIEA
January 20, 2022		Regional Park Program (ca.gov)		SUMC, TWP, ISPSA, FOSC, CCRCD, Nuestra Casa

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Urban County Per Capita Program	Local park rehabilitation, creation, and improvements	California Department of Parks and Recreation	Grant	\$13,875,000.00
Whale Tail Grants	Focus on reaching communities that have historically received fewer marine education and stewardship opportunities. Eligible projects fall into one or more of the following categories: 1) youth education programs, 2)	Coastal Commission	Grant	\$1.5M, up to \$50,000 awards
Clean California Local Grant Program	The Clean California Local Grant Program, administered by the California Department of Transportation (Caltrans), will provide approximately \$296 million as part of a twoyear program to beautify and improve streets and roads, tribal lands, parks, pathways, and transit centers to restore pride in public spaces. Applicants must be local or regional public agencies, transit agencies, or tribal governments. Nonprofit organizations may be sub-applicants.	Caltrans	Grant	\$296M
Transportation				
Transformative Climate Communities Program	TCC aims to empower communities most impacted by pollution to choose their own goals, strategies, and projects to reduce greenhouse gas emissions and local air pollution in pursuit of data-driven milestones and measurable outcomes. The Program funds development and infrastructure projects at the neighborhood level to achieve major environmental, health, and economic benefits in California's most disadvantaged communities.	Department of Conservation	Grant	\$56.4M
Transformative Climate Communities Technical Assistance and Capacity Building	The Transformative Climate Communities (TCC) Technical Assistance (TA) Program provides both direct application services and capacity building support to TCC applicants to achieve successful applications for projects benefitting disadvantaged and low-income communities that reduce greenhouse gas (GHG) emissions and build climate resilience	California Office of Planning and Research/ Strategic Growth Council	Grant	



Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
December 31, 2021		Per Capita Program		SUMC, TWP, ISPSA, FOSC, CCRCD, Nuestra Casa
November 5, 2021	whaletailgrant@coastal. ca.gov			
February 1, 2022	Linda Phoen Linda.Phoen@dot.ca.gov	Guidelines and Application Documents Caltrans		
Ongoing applications	Virginia Jameson (916) 324-0868 tcc@sgc.ca.gov	Transformative Climate Communities (TCC) - Strategic Growth Council (ca.gov)		ISPSA, Greenaction, Nuestra Casa
January 7, 2022	Blake Deering blake.deering@sgc.ca.gov (916) 322-3714	SGC21104TCC_RFP.pdf (ca.gov)		

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Transformative Climate Communities	The Transformative Climate Communities Program (TCC), established by AB 2722 (Burke, 2016), invests in community-led climate resilience projects in the state's most disadvantaged communities. The program objectives are to reduce greenhouse gas emissions, improve public health and the environment, and support economic opportunity and shared prosperity. TCC's unique, place-based strategy for reducing greenhouse gas emissions is designed to catalyze collective impact through a combination of community-driven climate projects in a single neighborhood. TCC Implementation Grants support an integrated set of projects within a neighborhood project area of approximately five square miles. Projects must reduce greenhouse gas emissions significantly over time, leverage additional funding sources, and provide health, environmental and economic benefits to the community.	Strategic Growth Council	Grant	\$105M
Transformative Climate Communities Planning Grant	The Planning Grants intend to support planning activities to prepare disadvantaged communities for future funding opportunities in programs that align with the TCC Program's objectives. Planning activities should focus on responding to planning issues or priorities that directly benefit low-income and disadvantaged communities. TCC Planning Grants support planning activities to advance community-led goals and projects.	Strategic Growth Council	Grant	\$1.2M
Zero Emission Transit, School, and Shuttle Buses	New zero-emission replacement buses for owners of transit, school and shuttle buses.	California Air Resources Board	Grant	\$130 M
Hazard Mitigati	on			
Better Together Resilient Communities	This grant program will fund projects that build community resilience and capacity to withstand climate-related hazards through collaborative, community-driven approaches. Eligible applicants will be governmental organizations, educational institutions, or certified 501(c)3 nonprofit organizations and must include a local or tribal government within Pacific Gas and Electric Company's (PG&E's) service area as a partner. Applicants must be prepared to provide documentation to demonstrate they meet the Foundation's criteria for charitable giving. You can apply for a Better Together Resilient Communities and a PG&E Resilience Hubs grant in the same grant cycle/year. Applicants must apply to each grant separately. Please note that the success of your proposed PG&E Resilience Hubs project should not be reliant on receiving a Better Together Resilient Communities grant, and vice versa.	PG&E	Grant	\$100,000 awards, \$400,000 available



Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
July 1, 2022	Sarah Newsham tcc@sgc.ca.gov (916) 322-2319	https://sgc.ca.gov/programs/tcc/		
July 1, 2022	Sarah Newsham tcc@sgc.ca.gov (916) 322-2319	https://sgc.ca.gov/programs/tcc/		
Continuous applications, first come first serve basis		VW Mitigation Trust Bus Money (valleyair.org)		SUMC, Nuestra Casa, APP, ISPSA
August 31, 2021	Brenna Mahoney, bmrs@pge.com; (628) 758-2239	PG&E grant program: Resilient Communities (pge.com)		

Name	Description/what it funds	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available		
Resilience Hubs	This grant program will support the development of local "resilience hubs" aimed at providing a physical space or a set of resources that supports community resilience such as access to power, shelter, and information to climate-driven extreme weather events, including wildfires, as well as future Public Safety Power Shutoff (PSPS) events	PG&E	Grant	\$400,000 available, \$25,000-\$100,000 awards		
Wildfire Resilience	The Coastal Conservancy's Wildfire Resilience Program supports local partners to develop and implement projects that improve ecological health of natural lands and reduce the risk of catastrophic fire. The program will fund grants for (1) on-the-ground activities to restore the health and increase resilience of California forests, grasslands, and natural lands to wildfire; and (2) planning and capacity building to increase wildfire resilience in California for projects from Marin County south to Ventura County. Some projects may be eligible for CEQA funding.	California State Coastal Conservancy	Grant	\$10M, \$5M for Bay Area specifically, additional \$7M for capacity building projects in Marin County south to Ventura County, including the East Bay and Salinas Valley		
PrepareCA Hazard Mitigation Grant Program	a new one-time, state-funded initiative ("Prepare California") to help socially vulnerable and high hazard risk communities—which are impacted disproportionately by disasters and experience longer and more challenging economic and structural recoveries—jumpstart their progress toward greater resilience through advanced outreach, technical assistance, and funds to subsidize local mitigation and resilience initiatives.	Cal OES	Grant	\$15M available		
Useful Resource	s					
CASQA Stormwater Grant and Loan Opportunities		https://www. casqa.org/sites/ default/files/ downloads/ grant_and_loan_ opportunities.pdf				
Useful Resource	s					
Core Support		Satterberg Foundation	Grant	Up to \$100,000		
WW measure		East Bay Regional Parks				
Homelessness Funding		https://ahcd. assembly. ca.gov/sites/ ahcd.assembly. ca.gov/files/ Homelessness %20Funding%20 Matrix%202018- 08-27_Final.pdf				
Awaiting da	Awaiting date for new cycle/round Near term funding (due in next 3 months)					
Not certain there will be another round of funding Projected funding						

Deadline/ Program Schedule	Contact	Eligibility Information	Webinars	Potential OPs
August 31, 2021	Brenna Mahoney bmrs@pge.com (628) 758-2239	How to apply for the PG&E Resilience Hubs Grant Program (pge.com)		
Pre application due 1/14/2022	wildfire.resilience@scc. ca.gov	Wildfire Resilience Program – California State Coastal Conservancy		
February 28, 2022	PrepareCAJumpStart@caloes.ca.gov	https://www.caloes.ca.gov/cal- oes-divisions/recovery/disaster- mitigation-technical-support/404- hazard-mitigation-grant-program	PrepareCA	
Re-evaluating grant strategy Sept 2020	Giggles giggles@satterberg. org	http://satterberg.org/our-grants/ core-support-grants		

Appendix D. Funding Opportunities - Local/Regional Funding

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Prop 1- Integrated Regional Water Management		Department of Water Resources	Grant	\$42.25 million; \$6.5 million set aside for DAC projects
Innovation Projects	To identify promising ideas and evaluate their likely impact at scale, The People Lab at UC Berkeley is partnering with the California 100 Initiative to support a set of innovation projects across the State in key policy areas. Each selected project will rigorously test an innovative policy, program, or practice aimed at addressing a pressing challenge faced by Californians. Selected projects will provide 'proof of concept' for bold ideas, demonstrating the possibilities for California's future when we embrace innovative ways of approaching long-standing problems. Each project will be co-designed and carried out as a partnership between a California-based research team and a local or state agency, department, or organization.	The People Lab	Grant	\$100,000- \$500,000 for design and implementation budgets, \$100,000- \$150,000 for research and evaluation
SFBJV Small Projects Funding	The SFBJV has limited funding for projects or programs that help to implement our goals hyperlink to goals page). Proposals may be submitted to any SFBJV staff for projects that support our 5-year strategic plan and annual work plan, address the highest priority monitoring or research needs as identified in the SFBJV Monitoring and Evaluation Plan, or are identified in the JV Implementation Plan (Restoring the Estuary) and its updates. For more detailed information read the project funding guidelines document.	San Francisco Bay Joint Venture	Grant	Up to \$5000
Water Quality/E	Prinking Water			
Clean Water Program	Funding for projects led by community-based groups that enhance and protect the health of local creeks, wetlands, lakes, beaches, and other waterways in Alameda County	Alameda County Flood Control and Water Conservation District	Grant	up to \$5000



Deadline	Contact	Eligibility Information	Webinar/Slides	Potential OPs
Round 2 PSP out now, Bay Area likely to opt for Fall 2022 deadline	MNovotny@sfwater.org; TNokhoudian@sfwater. org	Implementation Grant Program (ca.gov)		All
Now accepting applications on a rolling basis	California 100 Initiative: Call for Innovation Projects Webinar Registration Form (google.com)	Innovation Projects - The People Lab (berkeley.edu)		All
	sscoggin@sfbayjv.org			
2021 cycle coming in spring 2021	Jim Scanlin; jims@ acpwa.org; (510) 670- 6548	https://www. cleanwaterprogram.org/ programs/grants.html		ISPSA, FOSC

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available	
Stormwater/Flooding					

Habitat Restora	tion/Protection			
Measure AA	 The Board will fund projects that qualify as one or more of the following project types: A habitat project that aims to restore, protect, or enhance tidal wetlands, managed ponds, or natural habitats on the shoreline in the San Francisco Bay Area; A flood management project that is part of a habitat project; A public access project that will provide or improve access or recreational amenities that are part of a habitat project. The Authority is particularly interested in supporting projects that address equity and include benefits to economically disadvantaged communities through meaningful community engagement. 	San Francisco Bay Restoration Authority	Grant	~\$25 million annually
Prop 1- Restoration Grant		Department of Fish and Wildlife	Grant	\$33 million
Priority Conservation Area Grant	Funds for projects protecting natural resources, open space, or agricultural land; pedestrian and bicycle facilities; urban greening; or planning activities associated with program goals	Metropolitan Transportation Commission (MTC)/ State Coastal Conservancy	Grant	Amount varies

Awaiting date for new cycle/round

Not certain there will be another round of funding

Projected funding

Projected funding

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October 7, 2021	grants@sfbayrestore.org	Round 5 RFP 2021_0.pdf (sfbayrestore.org)	Nuestra Casa, MCM, SUMC, CCRCD, FOSC, ISPSA, TWP, Greenaction, APP, META, First Generations
February 19, 2021	watershedgrants@ wildlife.ca.gov	Restoration Grants Solicitation Information (ca.gov)	ISPSA, FOSC, TWP, CCRCD, SUMC, SEC/DA, META
Deadline varies, Cycle 3 TBA	PCAGrants@ bayareametro.gov	https://abag.ca.gov/ our-work/land-use/pca- priority-conservation- areas/pca-grant-program	

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Habitat Restora	tion/Protection			
Community Grants Program	 The Authority funds the following types of projects: A habitat project that aims to restore, protect, or enhance tidal wetlands, managed ponds, or natural habitats on the shoreline in the San Francisco Bay Area; A flood management project that is part of a habitat project; A public access project that will provide or improve access or recreational amenities that are part of a habitat project. For the Community Grants Program, we are looking for projects 	San Francisco Bay Restoration Authority	Grant	up to \$100,000
	 that meet the requirements above and do the following: Support community visioning aimed at developing conceptual plans for shoreline habitat projects. Implement small shoreline habitat projects with strong community benefits, e.g., community engagement, education, workforce development, career development, leadership development, and community celebrations. Train community leaders to develop proposals, apply for funds, and implement small shoreline habitat projects in partnership with shoreline landowners, such as planting native plants, removing invasive plants, and cleaning up trash. Empower communities to have a voice in the design and implementation of large shoreline restoration projects by helping them gain knowledge of shoreline issues and build relationships with restoration-focused organizations and agencies. 			
Contra Costa County Fish and Wildlife Committee Propagation Fund	Projects awarded from the Fund must benefit the fish and wildlife resources of the County. The Fish and Wildlife Committee strongly encourages applications related to: improving habitat · scientific research · public education · threatened and endangered species · resolving human/wildlife interaction issues In addition to the above areas of interest, the Fish and Wildlife Committee wishes to fund one or more projects that increase collaboration with law enforcement agencies and community cultural organizations on enforcement issues and education focusing on communities that may be unaware of local fish and game laws. Projects that provide multilingual signage and educational materials are encouraged.	Contra Costa County Fish and Wildlife Committee	Grant	\$1,000-\$21,000
Wildlife Habitat Conservation Mini-Grant Program	The mini-grants program aims to provide seed funding to encourage broader and long-term community engagement in wildlife habitat restoration or watershed stewardship activities in Santa Clara County. Mini-grant funding is designed to support small scale projects or help kick start larger scale projects. Examples of past projects that have received mini-grant funding include: educational excursions to creeks and other waterways for underserved communities; establishing a neighborhood community garden; and conducting community workshops on the appropriate and beneficial use of grey water. Proposed projects must be located in Santa Clara County	Valley Water	Grant	\$5,000, \$200,000 total available

Awaiting date for new cycle/round

Not certain there will be another round of funding

Near term funding (due in next 3 months)

Projected funding

Deadline	Contact	Eligibility Information	Webinar/Slides	Potential OPs
Apply anytime, plan for projects to start at earliest in January 2022	grants@sfbayrestore.org	Community Grants San Francisco Bay Restoration Authority (sfbayrestore. org.)	https://youtu.be/ fjW5HbnjAQE	
January 5, 2022	Maureen Parkes, maureen.parkes@dcd. cccounty.us	Fish & Wildlife Committee (FWC) Contra Costa County, CA Official Website		CCRCD
December 31, 2021	grants@valleywater.org	Safe, Clean Water and Natural Flood Protection Grants & Partnerships Program Santa Clara Valley Water		META

Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
Sea Level Rise				
Prop 68 San Francisco Bay Area Conservancy Program Climate Adaptation Funds	Projects that plan, develop, and implement climate adaptation and resiliency projects	California State Coastal Conservancy	Grant	\$11.5M, \$5.7M available now, remaining coming in the next 3 years
Recreation/Com	nmunity Access/Education			
Midpeninsula Regional Open Space District Fiscal Year 2022 Grantmaking Program	Funding available for organizations and projects that further the understanding and protection of our natural world, build capacity in the conservation field, and facilitate access to the outdoors or augment interpretation and education opportunities for the public.	Midpeninsula Regional Open Space District	Grant	250000, two tiers of funding Tier 1: up to \$25,000 and Tier 2: \$25,001- \$50,000
Transportation				
Bay Area Active Transportation	Sidewalks, bike lanes, trails, safe routes to school programs, and plans for walking and bicycling.	МТС	Grant	\$37M
Housing/Homel	essness			
No Place Like Home Alternative Process County Allocation Program	Deferred payment loans for the development of permanent supportive housing for persons living with a serious mental illness who are chronically homeless, homeless, or at-risk of chronic homelessness. Funds may be used to acquire, design, construct, rehabilitate, or preserve permanent supportive housing, which may include a capitalized operating subsidy reserve.	California Department of Housing and Community Development	Loans	\$14.6 M

Awaiting date for new cycle/round	Near term funding (due in next 3 months)
Not certain there will be another round of funding	Projected funding
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Deadline	Contact	Eligibility Information	Webinar/Slides	Potential OPs
January 1, 2022	Moira McEnespy moira.mcenespy@scc. ca.gov (510) 286-0317	https://scc.ca.gov/ files/2020/11/RFP_Prop68_ SFBayClimate_2020.11.02 Final.pdf		SUMC, MCM, Greenaction, Nuestra Casa, First Generations, MCCDA, TWP, ISPSA
September 1, 2021	grants@openspace.org (650) 625-6507	FY22 Grantmaking Program RFP (1).pdf (openspace.org)		
September 15, 2021	Karl Anderson kanderson@baymetro. gov (415) 778-6645	Active Transportation Program Metropolitan Transportation Commission (ca.gov)		APP, SUMC, FOSC, ISPSA, Nuestra Casa
January 19, 2022		No Place Like Home Program (ca.gov)		ISPSA, DST, Voices
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Name	Description	Agency	Type of Funding (Loan/Grant/ Etc.)	Total Available
SF Bay Joint Venture		http://www. sfbayjv.org/ funding.php		
BACWA		Bay Area Clean Water Agencies		
The Christensen Fund	Funding for Tribes	The Christensen Fund		
Local RCDs (All counties except for SF have an RCD)				
Funding Wizard		https:// fundingwizard. arb.ca.gov/		

Deadline	Contact	Eligibility Information	Webinar/Slides	Potential OPs
		https://bacwa.org/		
		https://www. christensenfund.org/ funding/		

Appendix D. Funding Opportunities - Private Funding

Name	Description	Agency	Type of Funding (Loan/Grant/Etc.)	Total Available
Sustainable Development Program		Rockefeller Brothers Fund	Grant	
Environment Program		Kresge Foundation	Grant	
SF Bay Area Program & Environment Program		The Hewlett Foundation	Grant	
California Watershed Protection Fund		Rose Foundation	Grant	\$7000 to \$25,000
Honda Marine Science Foundation	Funding priority is living shorelines	Honda	Grant	\$400,000; awards are \$25,000 to \$100,000
Five Star and Urban Waters Restoration Grant Program 2020		National Fish and Wildlife Foundation	Grant	\$1.5 million available nationwide
California Resilience Challenge		California Resilience Challenge	Grant	\$100,000 to \$200,000 awards
Resilient Communities 2020		Wells Fargo	Grant	\$1.5 million available, \$200,000 to \$500,000 grants
Clif Bar Family Foundation Small Grants		Clif Bar Family Foundation	Grant	\$7000 avg award

Geographical Range	Deadline	Contact	Eligibility Information	Potential OPs
National	Rolling	communications@rbf. org	https://www.rbf.org/ programs/sustainable- development/ guidelines	
	Subscribe to this email listserv to be notified of grant opportunities			
	Listserv to be notified of grant opportunities			
Projects benefitting San Joaquin River, Russian River, and limited funds for San Francisco Bay and Half Moon Bay	Spring Round: Letters of Inquiry Feb 15	Laura Fernandez Ifernandez@rosefdn. org	http://rosefdn.org/ california-watershed- protection-fund/ eligibility	
Coastal regions of Washington, California, Oregon, and Hawaii	LOI due October 1st		https://www.honda. com/environment/ marine-science- foundation/how-to- apply-for-grant	
	January 30, 2020	Chloe Elberty 202-595-2434 Chloe.Elberty@nfwf. org	https://www.nfwf. org/fivestar/Pages/ fivestar2020rfp.aspx	
California	September 13, 2021	Adrian Covert resilience@ bayareacouncil.org	https://resilientcal. org/wp-content/ uploads/2021/07/ FINAL_CRC2021_RFP. pdf	
	February 18, 2020	Chloe Elberty 202-595-2434 Chloe.Elberty@nfwf. org	https://www.nfwf.org/ programs/resilient- communities-program/ resilient-communities- 2020-request-proposals	
	Feb 1, June 1, October 1 (three rounds)		http://	

Name	Description	Agency	Type of Funding (Loan/Grant/Etc.)	Total Available
Partners for Places		The Funders' Network/Urban Sustainability Directors Network	Grant	\$7000- \$10,000
		Wildlife Conservation Society	Grant	\$2.5 million available; \$50,000- \$250,000 awards
Packard Foundation Grants		Packard Foundation	Grant	\$250-\$2,000
Coca-Cola Foundation Community Grants		The Coca-Cola Foundation	Grant	
Disney Conservation Fund		Disney Conservation Fund	Grant	
Lowell Berry Foundation			Grant	
Wells Fargo Local Grants		Wells Fargo	Grant	
Silicon Valley Community Foundation Grants		Silicon Valley Community Foundation	Grant	
The California Wellness Foundation Grants (Safe, Healthy Neighborhoods)		The California Wellness Foundation	Grant	

Geographical Range	Deadline	Contact	Eligibility Information	Potential OPs
	May 6, decision on grants May 27		https://ws.onehub.com/ files/aedrmxpe	https://ws.onehub.com/ files/21xo3obg
	April 8, 2022	Liz Tully etully@wcs.org (202) 552-7421	Program Information — WCS Climate Adaptation Fund	
unspecified, but seems to focus on Bay Area			https://www.packard. org/grants-and- investments/for- grantseekers/	
National			https://www.coca- colacompany.com/ shared-future/ communities	
Global			https:// thewaltdisneycompany. com/app/ uploads/2020/08/DCF Frequently -Asked Questions 2021.pdf	
Contra Costa and Alamerda Counties	Feb 1, May 1, August 1, and November 1	925.284.4427	http:// lowellberryfoundation. org/application.html	
			https://www.wellsfargo.com/about/corporate-responsibility/community-giving/local/	
Silicon Valley		grants@siliconvalleycf. org 650.450.5400	https://www. siliconvalleycf.org/ grants	
California		grants@calwellness. org (818) 702-1900	https://www. calwellness.org/money/ apply-grant/	

Name	Description	Agency	Type of Funding (Loan/Grant/Etc.)	Total Available
The Joseph and Mercedes McMicking Foundation Grants		The Joseph and Mercedes McMicking Foundation	Grant	
Marin Community Foundation		Marin Community Foundation	Grant	
East Bay Community Foundation		East Bay Community Foundation	Grant	
San Francisco Foundation			Grant	
Captain Planet Foundation Grants	The mission of the Captain Planet Foundation (CPF) is to support hands-on environmental projects for youth in grades K-12. The objective is to encourage innovative activities that empower children around the world to work individually and collectively as environmental stewards. Through ongoing education, they believe that children can play a vital role in preserving our precious natural resources for future generations.	Captain Planet Foundation	Grant	
Sitka Ecosystem Grants	SITKA Ecosystem Grants fund proposed projects that improve the state and function of an ecosystem. All SITKA® Ecosystem Grant (SEG) projects should be of the highest quality and have the potential to advance and transform the confluence of the environmental + social landscape as it relates to wildlife, stewardship and conservation. SEG projects should contribute to achieving environmental goals principally, where by doing so, society at large and the ecosystems we are inextricably bound to benefit. This includes wild, suburban and/or urban ecosystems alike. Potential impacts and success metrics must be qualified and quantified through research and data, grassroots and community efforts, management efforts and outcomes, media and content, and activities that are supported by and or complimentary to the SEG supported project.	Sitka	Grant	\$3,000 - \$20,000
The Campbell Foundation Unsolicited Grants	Projects that address water quality, land-sea connection, or protection of special planes	The Campbell Foundation	Grant	\$25,000 available
Resources				

Geographical Range	Deadline	Contact	Eligibility Information	Potential OPs
Bay Area		Miriam deQuadros	https://www. mcmickingfoundation. org/grant-guidelines	
Marin County			Nonprofit Profile Form Marin Community Foundation (marincf. org	
East Bay			Nonprofits share your work - EBCF	
San Francisco			The San Francisco Foundation (fluxx.io)	
	Jan 31, March 15, and September 30 for monetary support grants. Jan 31, Feb 20, and Septmeber 30 for material support grants		Grants – Captain Planet Foundation	
National	Rolling	grants@sitkagear.com	SITKA Ecosystem Grants To Help Make a Positive Impact on the Environment - SITKA Gear	
	Cycle 1 2022- March 31, 2022	charper@ campbellfoundation. org	How to Apply for a Grant - The Campbell Foundation	

Appendix D. Funding Opportunities - Past Funding

Name	Description	Agency	Type of Funding (Loan/Grant/Etc.)
Special Funding			
CDBG- Corona Virus	CARES Act funding targeted to prevent, prepare for, and respond to coronavirus. Activities include public services related to COVID19 support, facility improvements related to COVID-19 healthcare and homeless housing needs, acquisiton of real property to be used for the treatment or recovery of infectious diseases in response to COVID-19	CA HCD	Grant
Stormwater/Floodin	g		
Storm Water Grant Program (SWGP)- Prop 1 Funding		California State Water Resources Control Board	Grant
Prop 68 Urban Flood Protection Grant Program		California Natural Resources Agency	Grant
Small Community Flood Risk Reduction Program	The Small Communities Flood Risk Reduction Program (SCFRRP) is a cost-share local assistance program with primary goal of reducing flood risk for small communities (with 200 to 10,000 residents), including legacy and disadvantaged communities, protected by the State Plan of Flood Control facilities. Soliciting design/construction proposals, State may award 50% of eligible project costs to eligible small community's local public agency.	California Department of Water Resources-	Grant
Agriculture			
Conservation Innovation Grants	Conservation Innovation Grants (CIG) is a competitive program that supports the development of new tools, approaches, practices, and technologies to further natural resource conservation on private lands. Through creative problem solving and innovation, CIG partners work to address our nation's water quality, air quality, soil health and wildlife habitat challenges, all while improving agricultural operations. Up to \$25 million annually is available for On-Farm Trials. Funding goes directly to partners, which in turn provide technical assistance and incentive payments to producers to implement innovative approaches on their lands. Producers receiving On-Farm Trials payments must be eligible to participate in the Environmental Quality Incentives Program (EQIP).	Natural Resources Conservation Service	Grant
Sea Level Rise			

Total Available	Deadline	Contact	Eligibility Information	Potential OPs
\$18.7 M	February 1, 2021	cdbgnofa@hcd. ca.gov (916) 263-2911	https://www.grants.ca.gov/grants/community-development-block-grant-corona-virus-cdbg-cv1/	
~\$90 million	Implementation Round 2: June 2020	Daman Badyal Damanvir.Badyal@ waterboards.ca.gov (916) 319-9436	https://www.waterboards.ca.gov/water_ issues/programs/grants_loans/swgp/prop1/ index.html	
\$92.5 million total, min award \$200,000, max \$6 million		bondsandgrants@ resources.ca.gov (916) 653-2812	https://resources.ca.gov/CNRALegacyFiles/grants/wp-content/uploads/2020/01/Final-UFP-Guidelines.pdf	ISPS; Marin City; FOSC; NC; CCRCD
TBD	TBD		Small Communities Flood Risk Reduction (ca.gov)	
\$250,000-\$5M	April 23, 2021	mrcscig@wdc.usda. gov	CIG On-Farm Conservation Innovation Trials NRCS (usda.gov)	

Name	Description	Agency	Type of Funding (Loan/Grant/Etc.)
Ocean Protection Council Proposition 1 Grant Program	Four priority issue areas for Prop 1 funding are: marine managed areas, coastal and ocean water quality impacts, fisheries, and climate change adaptation	Ocean Protection Council	Grant
Prop 1 Coastal Environmental Justice Solicitation	This solicitation seeks coastal projects that directly benefit communities entitled to environmental justice (Communities), including: disadvantaged and severely disadvantaged communities (DACs), California Native Tribes and Tribal Governments, and communities that score above 80% on CalEnviroScreen results. Priority will be given to coastal projects in or near Communities that propose restoration, habitat enhancement, and resilience to climate change, including adaptation to sea-level rise, flooding, and shoreline erosion. Additionally, OPC seeks to advance projects that are led by community-based organizations, and that provide Community workforce employment, including employment for students. Projects must be complete by December 2024 (with projects starting in 2022)	Ocean Protection Council	Grant
Recreation/Commu	nity Access		
Urban Greening Program		California Natural Resources Agency	Grant
George HW Bush Vamos A Pescar Education Fund	Support state and local efforts to educate andf engage California's HIspanic communities in metrocentric settings through bilingual, multigenerational, and multigendered programs, classes, and fishing and boating activities. Funds can be used for projects including but not limited to experiential or hands-on fishing education, community activities promoting good fishery stewardship, technical fishing skills development, fishing-related workshops and classes, etc.	Department of Fish and Wildlife	Grant
2020 Measure Q Urban Grant Program	Project categories include environmental stewardship and restoration; parks, trails, and public access; environmental education; or urban agriculture/food systems	Santa Clara Valley Open Space Authority	Grant
Housing			

Total Available	Deadline	Contact	Eligibility Information	Potential OPs
\$250,000 minmum, 5 \$50,000+ small grants available	June 30, 2021	COPCpublic@ resources.ca.gov	OPC Proposition 1 Grant Program – California Ocean Protection Council	TWP, MCCDA, SUMC, MCM, Nuestra Casa, Greenaction, First Generations
\$7.5M available, min \$100,000; max \$5M; OPC strongly encourages project budgets over \$250,000	April 23, 2021	OPC_Prop1grant@resources.ca.gov	Proposition 1 - Round 4 Solicitation (ca.gov)	
\$28.5 million available;		urbangreening@ resources.ca.gov (916) 653-2812	https://resources.ca.gov/-/media/CNRA- Website/Files/grants/GGRF_UG/Urban- Greening-Program-GuidelinesRound- Four_2021.pdf	ISPSA, FOSC, TWP
\$50000, \$5,000- \$20,000 award	December 9, 2020	Peter Tira (916) 215-3858 peter.tira@wildlife. ca.gov	Request for Grant Proposals - Vamos A Pescar Grant Program	Greenaction, APP
Small: \$10,000- \$39,999 (\$200,000 available); Large: \$40,000 to \$250,000 (\$800,000 available); 25% match required	July 1, 2020	Megan Dreger mdreger@ openspaceauthority. org (408) 224-7476	https://www.openspaceauthority.org/ system/user_files/Documents/2020%20 Urban%20Grant%20Program%20 Guidelines_extended.pdf	META, DST, Voices

Name	Description	Agency	Type of Funding (Loan/Grant/Etc.)
California Emergency Solutions and Housing (CESH)		Calfiornia HCD	Grant
Golden State Acquistion Fund			
Home Investment Partnerships Program			
Proposition C	Programs that help people who are experiencing homelessness secure permanent housing, secure short-term shelter, mental health services, support with drug or alcohol addiction, and programs that serve people who have recently become homeless or are at risk of becoming homeless.	TBD	TBD
Transportation			
Local Roadway Safety Plan	assistance to develop local roadway saftety plan	California Department of Transportation	Grant

Total Available	Deadline	Contact	Eligibility Information	Potential OPs
		CESHNOFA@hcd. ca.gov	https://hcd.ca.gov/grants-funding/active-funding/cesh.shtml	ISPSA
			http://www.goldenstate-fund.com/ partners-contacts/	ISPSA
		HOMENOFA@hcd. ca.gov	https://hcd.ca.gov/grants-funding/active-funding/home.shtml	ISPSA
\$492M	TBD			
\$18M	Continuous applications, first come first serve basis		Local Roadway Safety Plan (LRSP) and Systemic Safety Analysis Report Program (SSARP) Caltrans	SUMC, ISPSA

Appendix E. Proposed Projects - East Bay

	Proposed Type of Project/Concept	Location	Project/Concept Description
1	Habitat Restoration and Recycled water and irrigation	Coyote Hills Regional Park	This Land Use Plan Amendment (LUPA) incorporates additional park land uses and management actions into Coyote Hills Regional Park. The purpose of the LUPA, including Land Use Unit Designations and the Park Development Plan, is to detail the planning and management efforts that are needed to restore and enhance existing ecological habitats, provide opportunities for continued agricultural use, and fordevelopment of recreation and public access amenities within the Plan Area. Him-r^n Tribe has a verbal agreement to work togther and is the finalizing stages of what this will look like,
2	San Leandro Creek Greenway	East Oakland, airport area	1.2 mile class 1 trail and related issues - MORE TO COME - additional description at <u>www.browerdellumsinstitute.org</u>
3	East Oakland WQM- drinking & ground	East Oakland neighborhoods	Under development with East Bay partners
4	East Oakland Communications Hub	East Oakland neighborhoods	Multiple Stewardship, Programming, Public Health and Safety linked conversations including housing effects on local water
5	North Richmond Pump Station Upgrade	North Richmond (Getrude & Richmond Pkwy)	Upgrade equipment at the end of its life cycle & protect against sea level rise impacts. This project has been the biggest challenge for The Watershed Project due to staffing transitions/shortages at the City of Richmond and Contra Costa County, yet is one of the highest community priorities and a great fit for IRWM. The Watershed Project is in conversations with the County about how to move this one forward. More info at https://thewatershedproject.org/nr-water/ .
6	Wildcat Creek trail and creek improvements	North Richmond (Wildcat Creek between Rumrill and Wildcat Marsh trail)	1. Improve fish ladder and sediment basin 2. Add amenities to make the trail more of a park-like destination 3. Richmond Parkway overpass. The Watershed Project is a partner on a couple of different grants to retrofit the fish ladder and sediment basin (implementation funding), and the County supervisors and partners are starting to move forward with a funding search for the trail improvements. The Richmond Parkway overpass seems to be the most challenging piece of this project. More info at https://thewatershedproject.org/nr-water/
7	Flood Risk Reduction in the Rheem Creek Watershed	Rollingwood neighborhood	Creek restoration to reduce stormwater flooding, sequester CO2, and connect neighbors to their creek. Has received funding from CNRA! (https://thewatershedproject.org/wp-content/uploads/2021/10/Rheem-Creek-CNRA-press-release.pdf) More info at https://thewatershedproject.org/nr-water/
8	North Richmond Green Street Corridor	North Richmond	Green street improvements along Parr Blvd from Fred Jackson Way to the Bay Trail and along Market Ave between Rumrill Rd and Fred Jackson Way. Fred Jackson Way and Rumrill Rd are already under construction to become green streets, providing bike and pedestrian access between Rumrill and the Bay Trail. The Watershed Project plans to put some of their DACTIP funds toward design consultants for this project. More info at https://thewatershedproject.org/nr-water/

Open to Collaboration	More Information Provided Upon Request, Contact	Outreach Partner	Funding Programs of Interest	Grants Applied to w/ DACTIP Assistance
Yes	Alexandert.ciea@gmail.com	CIEA		
Yes	robinf5713@aol.com	BDISPSA		
Yes	robinf5713@aol.com	BDISPSA		
Yes	robinf5713@aol.com	BDISPSA	SFBRA Community Grants Program, Prepare CA Jumpstart	Community Grants Program (SFBRA), Prepare CA Jumpstart (CalOES)
Yes	anne@thewatershedproject.org	The Watershed Project		
Yes	anne@thewatershedproject.org	The Watershed Project		
Yes	anne@thewatershedproject.org	The Watershed Project		
Yes	anne@thewatershedproject.org	The Watershed Project		

	Proposed Type of Project/Concept	Location	Project/Concept Description
9	Horizontal levee	North Richmond next to West County Wastewater	Construct a horizontal levee segment in front of WCW treatment facility to mitigate sea level rise impacts and serve as proof-of-concept for additional segments along the North Richmond shoreline, protecting additional infrastructure such as the landfill, North Richmond Pump Station, Richmond Parkway, and Chevron refinery. WCW and Mithun have received planning funds for 30% designs for a horizontal levee, and The Watershed Project is currently conducting a community engagement process for participatory design. Will need funds to complete the designs and implement the project sometime after this phase concludes in September 2022. More info at https://thewatershedproject.org/nr-water/
10	Feasibility Study for Potential Accessible Recreation Areas	Fruitvale	Feasibility study of spots in Fruitvale, viability of turning locations into recreation spots. Ideally, would include entire watershed. More realistically to qualify as DAC, would have to be lower watershed. Making recreational areas more accessible. Work in conservation and restoration. Looking into getting a consultant for this.
11	Atmospheric Water Generators	Richmond	Generators in DACs as backup resource for firefighters, water shut offs, etc.
12	Encampment Water Quality Monitoring and WASH Service Provision	Oakland	Train people experiencing homelessness to participate in water quality monitoring near waterways while providing drinking water, laundry service, and showers at regular weekly schedule

Open to Collaboration	More Information Provided Upon Request, Contact	Outreach Partner	Funding Programs of Interest	Grants Applied to w/ DACTIP Assistance
Yes	anne@thewatershedproject.org	The Watershed Project		
Yes	coordinator@sausalcreek.org	Friends of Sausal Creek	P1R2 Implementation?	
		All Positives Possible	Some funds from DACTIP	
		Downtown Streets Teams		California 100 Innovation Projects (People's Lab at UC Berkeley)

Appendix E. Proposed Projects - North Bay

	Proposed Type of Project/Concept	Location	Project/Concept Description
1	Rainwater Capture/ Harvesting in partnership with Sonoma Valley USD	Sonoma County	pilot small scale RWH during this phase to generate support for larger effort with Prop 1 Rd 2
2	Build Small Projects on Private Land for Multibenefits	Sonoma County	Potable water offsets, groundwater recharge, etc. to address downstream flooding
	Water quality testing at Dillon Beach	Dillon Beach Village	Testing at Dillon Beach in summer due to water quality concerns
3	Feasiblity Study for Septic to Sewer Connection	Dillon Beach Village	Feasibility study to see if DBV can connect to sewer system. Depending on decision, MCCDA will move forward with an Environmental Impact Assessment
4	Community Water Stations	San Rafael Canal District	Community gathering points with drinking water available
5	Pipe Replacement in the Canal District	San Rafael Canal District	Working with Matt Sagues from MMWD
6	Tiscornia Marsh restoration partnership	San Rafael Canal District	Audobon has RA palanning grant, potential for community collaboration here
7	Improve pump station(s) in Canal District	San Rafael Canal District	Partner with City to resolve local flooding (SD inlet elevations may be issues)
8	Environmental Youth Leadership and Development Activities and Services	Marin City	Capacity support is needed to build up Marin City Climate Resilience and Health Justice's (MCCRHJ) Environmental Youth Leadership and Development Activities such as their successful Environmental Science Academies, including stipends for students. MCCRHJ is looking into making it possible for participants to get high school credits for these programs. MCCRHJ needs a van for transport for student environmental fieldtrips and instructional staff to teach labs. They also need support services, such as additional eduactional supports, to ensure youth are successful in other summer programs.
9	Additional Tap Water Quality Testing and Follow-up to Address Infrastructure and Health Issues	Marin City	Additional water quality testing and follow-up is needed to pinpoint and address the source of tap water issues. This inlcudes follow-up with community members on the public health impacts and addressing health issues with partners such as the Marin City Health and Wellness Clinic and a specialty medical provider such as a toxicologist or public health expert. MCCRHJ also wants to develop a program to provide water filters to residents and partner with the water district to do concurrent testing and install new drinking water pipes.

Open to Collaboration	More information Provided upon request, Please Contact	Outreach Partner	Funding Programs of Interest	Grants Applied to w/ DACTIP Assistance
		SEC and Daily Acts		
		Daily Acts	DAC Set-Aside from Drouhgt round, also going after P1R2 Implementation Grant	
Yes				
Yes	Climate change (sea level rise, erosion), surface water quality, and sustainability	MCCDA		
Yes		МСМ		
	terriegreen@marincityclimate.org	MCCRHJ		
	terriegreen@marincityclimate.org	MCCRHJ		

	Proposed Type of Project/Concept	Location	Project/Concept Description
10	Habitat Restoration/ Recreation/Flood Mitigation Drainage Pond Project	Marin City	Technical support and funding is needed to implement (an already developed) community-visioned project to transform the drainage pond in Marin City into a habitat restoration space with walking paths, recreational elements and green space for the community, and reinvigorate the pond to provide flood mitigation. A pump station is needed near the pond, and design would include an elevated walkway/levee/brim around the pond for flood storage purposes, as well as deeper water in the pond. Needed elements include water quality testing, sediment testing, sediment removal.
11	Marin City specific Hazard Mitigation and Climate Action Plans	Marin City	Develop a Hazard Mitigation Plan and Climate Action Plan specific to Marin City. Marin City is only briefly mentioned in the County-wide Hazard Mitigation and other Countywide plans.
12	Comprehensive Contaminants Study	Marin City	Investigation is needed into legacy and current contamination and dumping in Marin City, including the public health impacts. This includes bringing in professionals to test flood water, pond water, sediment, soil, and air quality to understand where pollutants are and how they move through Marin City.
13	Drainage System	Marin City	Marin City is in dire need of a drainage system. There is currently only one way that water can exit Marin City, whereas nearby Sausalito has 7 or 8 potential exits. Chronic flooding that has been happening for over 80 years has three times since 2014 shut down the only vehicular entrance and exit to Marin City, forcing community members to wade through contaminated waters to enter or exit Marin City. MCCRHJ is advocating for drain pipes to be put in along Donohue Street to divert water under the underpass and out into the Bay. Marin County has put up many roadblocks to developing an adequate drainage system and addressing flooding issues in Marin City.
14	Air Quality Modeling and Monitoring; community education and training around air quality issues; and planning and implementation of air quality interventions	Marin City	Develop an air quality modeling and monitoring plan to install air quality monitors and educate and train community around air quality issues, including health impacts and preventative and remedial actions, in Marin City. Additionally, planning funding is needed to develop interventions to address air quality issues, such as a green wall. Air quality work includes addressing negative respiratory impacts from freeway and contaminants through providing space for recreation with clean air and educational space and specialty health care services for parents and children, such as green roofs and swimming pools because warm water supports lung health.
15	Technical Consultant/ Expert Support	Marin City	Technical consultants and experts are needed to hold regulators and Marin County accountable, and to support MCCRHJ's community-based participatory science projects. This includes engineers, biologists, environmental toxicologists, environmentalists, public health consultants, and others.
16	University/College Partnerships	Marin City	Connections with local universities and colleges are needed support scientific data collection and development of a holistic action plan and projects to address issues in Marin City.

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Open to Collaboration	More information Provided upon request, Please Contact	Outreach Partner	Funding Programs of Interest	Grants Applied to w/ DACTIP Assistance
	terriegreen@marincityclimate.org	MCCRHJ		
	terriegreen@marincityclimate.org	MCCRHJ	Hazard Mitigation Grant Program	
	terriegreen@marincityclimate.org	MCCRHJ		
	terriegreen@marincityclimate.org	MCCRHJ		
	terriegreen@marincityclimate.org	MCCRHJ		Enhanced Air Quality Monitoring for Communities Program (EPA)
		MCCRHJ		
		MCCRHJ		

	Proposed Type of Project/Concept	Location	Project/Concept Description
17	Biomonitoring Testing Program	Marin City	Develop a community biomonitoring testing program to understand health impacts in the community from pollutant/contaminant exposure, modeled after the program in Bayview Hunters Point in San Francisco.
18	Operations and Materials Support	Marin City	Funding for full-time staff, equipment, larger meeting space, materials, and supplies are needed to support grassroots operations and communication. Specific supplies needed include: equipment such as a computer, lamination machine, printer, ink, projector and educational supplies. This also includes ongoing funding for food and childcare for meetings.
19	Science-Based Road Map	Marin City	A comprehensive report with follow-up actions, inclusive of all environmental stressors Marin City is facing, is needed to prioritize and address the issues Marin City is facing holistically. This report could be based on the model of the West Oakland Environmental Indicators Project's roadmap.
20	Data Interpretation and Storytelling Support	Marin City	Data interpretation is needed to analyze the scientific information MCCRHJ has collected and plans to collect, and a writer/storyteller is needed to tell the ongoing story of Marin City and its challenges, as well as media support
21	Legal Support	Marin City	MCCRHJ needs lawyers to hold regulators accountable for their duties to protect life and public health in Marin City.

Open to Collaboration	More information Provided upon request, Please Contact	Outreach Partner	Funding Programs of Interest	Grants Applied to w/ DACTIP Assistance
		MCCRHJ		

Appendix E. Proposed Projects - South Bay

	Proposed Type of Project/Concept	Location	Project/Concept Description
1	Amah Mutsun	South Santa Clara County	Coyote Valley: \$16 million deals preserve open space and farmland on San Jose's southern edges, San Jose Mercury News, Mar 18, 2021, Watersheds and Streams working wth Muwekma, Amah Mutsun has agreed to the ideaof collberation
2	Muwekma Ohlone	South Santa Clara County	Coyote Valley: \$16 million deals preserve open space and farmland on San Jose's southern edges, San Jose Mercury News, Mar 18, 2021Watersheds and Streams work in potetnail working wth Amah Mutsun, Muwekma has agreed to the ideaof collberation

Open to Collaboration	More information Provided upon request, Please Contact	Outreach Partner	Funding Programs of Interest	Grants Applied to w/ DACTIP Assistance
Yes	Alexandert.ciea@gmail.com			
Yes	Alexandert.ciea@gmail.com			

Appendix E. Proposed Projects - West Bay

	Proposed Type of Project/Concept	Location	Project/Concept Description
1	Creek restoration and habitit restoration	San Mateo county	Association of Ramaytush Ohlone is looking into developing a project on their territory they recently accuired, this will include removial of a posinous ivy out of a creek, removal of invasive species of plants and reintroducing Native species of plants
2	Colma Creek Adaptation Plan	San Francisco County	Association of Ramaytush Ohlone is Speaking with The Colma Creek Adaptation Study – 'Colma Creek Connector' is a continuation of work done by Hassell and San Mateo County for the Resilient by Design Bay Area Challenge which focused on the Colma Creek Watershed over 2017-18.options and feasibility of adaptation along Colma Creek using publicly owned land, in order to:MANAGE FLOODING AND SEALEVEL RISE; RESTORE CREEK ECOLOGIES; INCREASE PUBLIC ACCESS TO THE CREEK; IMPROVE PUBLIC ACCESS BETWEEN COLMA CREEK, THE BAY AND THE BAY TRAIL
3	City of East Palo Alto Levee's	City of Palo Alto	Horizontal levees are a green infrastructure alternative to traditional greyscape solutions (i.e., rip rap) for wave attenuation on the Bayside of flood control levees. Horizontal levees utilize a gently sloping, vegetated ecotone slope to provide multiple benefits beyond wave attenuation including refugia habitat, enhancement of transitional habitat between tidal wetlands and terrestrial uplands, sea level rise adaptation, and treated wastewater polishing. (still defining which Tribe is identifed to work with this group)
4	Community Resilience Education	East Palo Alto	Working with Climate Resilient Communities and rEPAct for disaster preparedness, development of neighborhood and EPA specific Hazard mitigation plans, training neighborhood leaders, and continued resilience/disaster preparedness education
5	EPA Parent Academy Expansion	East Palo Alto	
6	Colma Creek Restoration Project	South SF	
7	Water Quality Monitoring	Bayview Hunters Point	Working with SFEI
8	Fish Monitoring	Bayview Hunters Point	Working with SFEI in hopes of developing project proposal. Measure toxic pollution through fish monitoring as proxy
9	Green Infrastructure Projects		

Open to Collaboration	More information Provided upon request, Please Contact	Outreach Partner	Funding Programs of Interest	Grants Applied to w/ DACTIP Assistance
Yes	Alexandert.ciea@gmail.com			
Yes	Alexandert.ciea@gmail.com			
Yes	Alexandert.ciea@gmail.com			
		Nuestra Casa		Prepare CA Jumpstart (CalOES)
		Nuestra Casa		
	julio@rise-southcity.org	Rise South City	Measure AA	
		Greenaction		
		Greenaction		
		CCRCD		



San Francisco Estuary Partnership

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sfestuary.org

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Disadvantaged Communities and Tribal Involvement Program

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