

ENERGY & WATER NEXUSEVENT

SEPTEMBER 9TH, 2022 9:00 AM - 12:00 PM ZOOM WEBINAR



Welcome to the 2022 Energy & Water Nexus Event

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On behalf of the Bay Planning Coalition (BPC), I welcome you to our 9th annual Energy & Water Nexus Workshop event. Without the support of our members and sponsors, this event would not be taking place. Cameron Carr of BPC with the assistance of Grace Bouton and Sophie Douglas from BPC were instrumental putting this exciting program together.

As California continues to face a persistent drought that has environmental, social, and economic impacts on us all, BPC has organized this year's event to provide an update on energy and water resources and discuss a future with reduced resource accessibility. Ironically while in this drought, recent news has talked about mega floods due to climate change. So, it appears we are in for a wild ride of uncertainty.

For decades, California has been an example of environmentalism. Seeking to reduce our negative impacts on the natural environment and to increase our resilience in the face of climate change, the State's 2022-23 budget reflects this proactive approach. With \$2.8 billion to support drought responses, \$1.2 billion for forest resilience, \$3.7 billion for climate adaptation, and \$8.1 billion for energy reliability & relief; the State will continue planning and responding to drought conditions. These funds will ensure our communities are better equipped to address the changing environment. BPC will continue to support increased federal and state funding to deal with these challenges.

For nearly 40 years, Bay Planning Coalition has been working to support the harmony of the environmental and economic health of the San Francisco Bay region. As the region plans and implements much-needed adaptation projects to ensure resilient energy & water resources, our coalition is committed to modernizing infrastructure to support the region, and to assure economic growth.

If this is your first BPC event, we hope you will join us at future events throughout the year. If your organization is a member, I encourage you to participate in our committee meetings and connect with BPC staff for more information to maximize your membership. If your organization is not a member, our coalition offers unique engagement opportunities and networking potential with the region's industry leaders. Please <u>contact the BPC team</u> to learn more about the benefits of membership.

Thank you for attending this year's Energy & Water Nexus Event.

All the Best,

John A. Coleman Chief Executive Officer

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Event Sponsors

BPC would like to thank our 2022 Nexus Event sponsors. We appreciate your continued support as we continue working to ensure the economic and environmental success of the San Francisco Bay.



About Our Organization



Bay Planning Coalition is a leader in building consensus on the critical issues facing the San Francisco Bay and surrounding region. We provide expert facilitation to advance fair and reasonable regulation, and we advocate on behalf of our members on a wide range of policy issues related to climate resilience, transportation, air quality, regulatory compliance, and land use planning.

2030 Vision:

Be the most effective coalition that drives visionary leadership and advocacy for San Francisco Bay stakeholders, vigorously shaping a future for a sustainable, thriving economy, environment, and quality of life.

BPC Staff:



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Ann Spaulding AQPI Program Manager ann@bayplanningcoalition.org

Event Schedule

9:00 am	Opening Remarks Melanie Richardson, Valley Water; and Co-Chair, BPC Energy & Water Committee Laura Kennedy, Woodard & Curran; and President, BPC Board of Directors
9:10 am	Overview of State Resources Karla Nemeth, California Department of Water Resources (DWR) Nancy Vogel, California Natural Resources Agency
9:35 am	California's Energy Resources Elliot Mainzer, California ISO Leuwam Tesfai, California Public Utilities Commission (CPUC)
10:00 am	State Water Resource Control Board Perspective Dorene D'Adamo, California State Water Resource Control Board (SWRCB)
10:15 am	Panel 1: Alternative Water Sources for Drought Resilience Heather Cooley, Pacific Institute Glenn Farrel, Cal Desal <u>Moderator</u> : John Coleman, Bay Planning Coalition
10:55 am	Panel 2: General Managers on Resource Management Rick Callender, Valley Water Clifford Chan, East Bay Municipal Utility District (EBMUD) Ben Horenstein, Marin Municipal Water District Grant Davis, Sonoma Water <u>Moderator:</u> Ane Deister, HDR Engineering
11:55 am	Water Project: Delta Conveyance Tunnel Dave Eggerton, Association of California Water Agencies (ACWA)
12:10 pm	Closing Remarks John Coleman, Bay Planning Coalition

Event Participants



Melanie Richardson Valley Water

Assistant Chief Executive Officer BPC Energy & Water Committee Co-Chair

Appointed by the Board on July 14, 2020, Ms. Richardson oversees all Valley Water operations including the Water Utility Enterprise and Watersheds business areas.

Ms. Richardson has worked at Valley Water since 1990 and has held the positions of Assistant Operating Officer of Water Supply, Deputy Administrative Officer of Corporate Business Services, Deputy Operating Officer of Watersheds Design and Construction, and most recently Chief Operating Officer of Watersheds. As COO of Watersheds, she provided management oversight for flood protection, environmental stewardship and dam safety capital projects.

Ms. Richardson has a B.S. in Petroleum Engineering from Montana State University and is a registered Civil Engineer in California. She has also completed the Executive Leadership Program from UC Berkeley Extension.

Ms. Richardson currently serves on the Board of Directors for the National Association of Flood Storm Management Agencies (NAFSMA) and is a board member of Bay Planning Coalition. She previously served as Chair of the City of San Jose Parks and Recreation Commission and was past President of the WaterReuse Northern California Chapter.



Laura Kennedy Woodard & Curran

Principal, Business Development Leader President, BPC Board of Directors

Laura Kennedy is a Principal, Business Development Leader in the San Francisco office of Woodard & Curran, an integrated science, engineering, design-build, and operations firm focused on water and the environment. Laura has served on the Board of Directors for the Bay Planning Coalition (BPC) since 2013 and is President for BPC. She is a member of several BPC committees and received the BPC Outstanding Member Award in 2015.

Laura's area of expertise is in human health and ecological risk assessments and risk management. She also has experience managing environmental investigation, remediation and regulatory permitting and compliance projects. Laura has a bachelor's degree in chemistry from Dartmouth College and a master's degree in toxicology from Massachusetts Institute of Technology. She is a third-generation Bay Area native and lives in Belmont with her husband and two sons.



Karla Nemeth California Department of Water Resources

Director

Karla Nemeth was appointed Director of the California Department of Water Resources by Governor Edmund G. Brown Jr. on January 10, 2018 and was reappointed by Governor Gavin Newsom on June 28, 2019. Nemeth oversees the Department and it's 4,000 employees whose mission it is to manage and protect California's water resources. In cooperation with other agencies, DWR manages California's water resources to benefit the state's people, and to protect, restore, and enhance the natural and human environments. Nemeth focuses on preparing the Department and state to adapt to more extreme weather as a result of climate change – investing in aging and green infrastructure, better management of groundwater supplies, and various programs to improve local water resilience. Nemeth is committed to ensuring a workplace that reflects the values of diversity, equity and inclusion and one that provides programs and services that meet the needs of California's diverse population. Prior to joining DWR, Nemeth worked at the California Natural Resources Agency as Governor Brown's deputy secretary and senior advisor for water policy since 2014. She was the Bay Delta Conservation Plan project manager from 2009 to 2014.

Prior to her work in natural resources management, Nemeth lived, worked and traveled extensively in eastern Europe promoting the development of democratic institutions. In 2010 Nemeth traveled to the Philippines as an election monitor. She is passionate about good government and serving the public.

Nemeth received a bachelor's degree in political science and Latin American studies from the University of California at San Diego, and a master's degree in public administration from the University of Washington.

Nemeth grew up in San Diego, California where she learned to love baseball, the Pacific Ocean, and the eastern Sierra.



Nancy Vogel California Natural Resources Agency

Deputy Secretary for Water

Nancy Vogel joined the Natural Resources Agency as director of the Governor's Water Portfolio Program in May 2019. She helped prepare and now coordinates implementation of the Administration's Water Resilience Portfolio and assists with other water policy priorities. Before her appointment, Nancy had been director of communications at the Resources Legacy Fund since 2017. She was deputy secretary for communications at the California Natural Resources Agency from 2015 to 2017 and assistant director for communications at the Department of Water Resources from 2012 to 2015. Nancy was a principal consultant for the Senate Office of Oversight and Outcomes from 2008 to 2012. She was a staff writer for the Los Angeles Times from 2000 to 2008 and for the Sacramento Bee from 1991 to 2000. Nancy served as a member of the Klamath River Renewal Corporation Board of Directors in 2018. She earned a Bachelor of Science degree in Conservation and Resource Studies and a Master of Arts degree in journalism, both from the University of California, Berkeley.



Elliot Mainzer California Independent System Operator

President and Chief Executive Officer

Elliot Mainzer is the President and Chief Executive Officer of the California Independent System Operator (ISO). The ISO is responsible for managing the flow of electricity that serves 80 percent of California and a small portion of Nevada. The ISO also runs a real-time energy market for utilities in eight western US states and conducts reliability coordinator services for most balancing authorities in the West. Mr. Mainzer is committed to using leading-edge policies and new technologies to accelerate California's drive towards the reliable decarbonization of its electric power grid. He started in his new role at the ISO on September 30, 2020 following a successful 18-year career at the Bonneville Power Administration (BPA) where he was at the forefront of transformational changes in the western electricity market.

While serving as BPA's administrator and CEO from 2013-2020, Mr. Mainzer effectively navigated the agency through a period of tremendous industry change and economic headwinds by improving the agency's long-term cost competitiveness and financial resiliency, modernizing assets and system operations, and positioning BPA as a more responsive and agile business partner.

In recent years, Mr. Mainzer has co-chaired the Western Electric Industry Leaders Group to support greater western market and policy coordination on such topics as resource adequacy, transmission development, and carbon accounting. He has also served as the Chair of the U.S. Entity for the Columbia River Treaty with Canada and on the boards of the Electric Power Research Institute, and the Utility Wind Integration Group. A native of San Francisco, Mr. Mainzer has an undergraduate degree in geography from U.C. Berkeley, and master's degrees in Business Administration and Environmental Studies from Yale University. Mainzer and his wife Margaret have twin boys. He is also an amateur jazz saxophonist and dedicated student of jazz theory and history.



Leuwam Tesfa California Public Utilities Commission

Deputy Executive Director for Energy & Climate Policy

Leuwam Tesfai was named the CPUC's Deputy Executive Director for Energy and Climate Policy, effective July 1, 2022. She previously served as Commissioner Genevieve Shiroma's Chief of Staff and Legal Advisor, a position she held since 2019 when appointed by Governor Gavin Newsom. She has worked at the CPUC since 2011 in several roles including as an Advisor to former Commissioner Liane M. Randolph and in the CPUC's Legal, Energy and Administrative Law Judge Divisions. Leuwam's private sector experience includes renewable energy markets, siting and permitting generation facilities, and commercialization of clean energy technologies. She is a graduate of Emory University and the University of San Francisco School of Law



Dorene D'Adamo California State Water Resources Control Board

Vice Chair

Dorene D'Adamo was appointed to the State Water Resources Control Board in 2013 and reappointed by Governor Newsom in 2022. She serves as Vice-Chair and also as the member with experience in the field of water supply and water quality relating to irrigated agriculture. Ms. D'Adamo is on the Board of the California Partnership for the San Joaquin Valley and previously served on the Valley Coalition for UC Merced's Medical School and on the Governor's Drought Task Force. She was a member of the California Air Resources Board from 1999-2013 under the Brown, Schwarzenegger and Davis Administrations, where she was instrumental in the board's air quality and climate change programs and regulations.

Ms. D'Adamo served in various capacities for Members of Congress from the San Joaquin Valley over a 20-year period, working primarily on environmental, water and agricultural legislative policy.

Ms. D'Adamo earned a Bachelor of Arts degree from the University of California at Davis and a Juris Doctor from the University of the Pacific, McGeorge School of Law.



Heather Cooley
Pacific Institute

Director of Research

Heather Cooley joined the Pacific Institute in 2004 and currently serves as Director of Research. In this role, she oversees Pacific Institute research on Water Efficiency and Reuse; Nature-Based Solutions, and Water and Climate Equity. Prior to joining the Pacific Institute, she worked at Lawrence Berkeley Laboratory studying climate and land use change and carbon cycling.

Heather received a B.S. in Molecular Environmental Biology and a Master's degree in Energy and Resources from the University of California, Berkeley. She has served on the California Commercial, Industrial, and Institutional Task Force, the California Urban Stakeholder Committee, and the California Urban Water Conservation Council's Board of Directors.



Glenn Farrel Cal Desal

Executive Director

Glenn Farrel is a thirty-year veteran of state public policy and politics, with over twenty-five of those years as a registered lobbyist actively advocating on water, resources, environmental, and local government policy issues within the California Legislature, state regulatory agencies, and the Administration.

Glenn's career in California water policy has spanned a wide range of perspectives and interests, including leadership roles in advocating on both urban and agricultural water issues for major water suppliers throughout the state. Most recently, Glenn was employed as Director of Government Relations with the San Diego County Water Authority and managed and executed the Water Authority's state and federal legislative and government affairs programs in Sacramento and Washington, D.C. Prior to joining the San Diego County Water Authority, Glenn was a lobbyist for the East Bay Municipal Utility District – one of the largest retail water suppliers in the state – and served as the Government Affairs Manager for the Friant Water Authority, one of the major agricultural water suppliers in California. Glenn's work on behalf of urban and agricultural water suppliers over the past 25 years involved building coalitions and designing strategies that brought successful outcomes in milestone water, resources, and local government policy issues, including opposition to a statewide water tax, protection of special district reserve funds and property tax revenues, "Show Me The Water" land use and water supply reliability planning legislation, and helping to shape California's water use efficiency statutory landscape.

Glenn holds bachelor's degrees in political science and public administration from California State University, Chico, and a master's degree in public policy from California State University, East Bay.



Rick Callender Valley Water Chief Executive Officer

Rick Callender is the Chief Executive Officer of Valley Water. Appointed CEO by the Board on May 26, 2020, Mr. Callender oversees an integrated water resources system that includes the supply of clean, safe water; flood protection; and environmental stewardship of waterways for Santa Clara County's 1.9 million residents. Mr. Callender has worked for Valley Water since 1996, serving most recently as the Chief of External Affairs. As the CEA, he led Valley Water's efforts in strategic external communications to the media, community, and the public. Mr. Callender also oversaw all government relations efforts on local, regional, state, and federal levels, as well as public policies that directly affect Valley Water.Prior to joining the district, Mr. Callender worked as a Special Assistant to former City of San Jose Mayor Susan Hammer, as a Field Campaign Organizer for the California Democratic Party, as a Congressional Fellow for the United States House of Representatives, Subcommittee on Energy, and as a Congressional Fellow to Congressman Ronald V. Dellums. He also served as president of the San Jose-Silicon Valley NAACP from 2000 to 2008.



Clifford Chan East Bay Municipal Utility District

General Manager

Clifford C. Chan was appointed to serve as the 11th General Manager of the East Bay Municipal Utility District on June 9, 2020. In his role, he oversees delivery of high quality drinking water to 1.4 million residents and businesses in 20 cities and 15 unincorporated communities in Alameda and Contra Costa Counties, as well as wastewater treatment for 740,000 of those same customers. As General Manager, he balances the continued demands of maintaining critical infrastructure and financial stability with innovation in sustainability and long-term water and wastewater planning. Chan is a 23-year employee of EBMUD with degrees in civil and geotechnical engineering from the University of California, Berkeley.

He joined EBMUD in 1997 as a Junior Engineer. In February 2018, Chan was appointed to lead EBMUD's Operations and Maintenance Department, which accounts for roughly half of EBMUD's 2,000 water and wastewater employees.

Previously he served as manager of maintenance and construction and manager of water treatment and distribution.

Chan made EBMUD history as the first Asian American to hold the position of general manager. He takes the helm as EBMUD prepares to celebrate its 100th anniversary in May 2023.



Ben Horenstein Marin Municipal Water District

General Manager

As the General Manager of Marin Municipal Water District (MMWD), Horenstein oversees the Marin Water system, which currently serves over 190,300 people. Horenstein's resume reflects more than 30 years of water industry experience throughout California. He most recently worked for the city of Santa Rosa as the director of water. Prior to his position in Santa Rosa, Horenstein had served as the director of Waste Water and Recycling Department at East Bay Municipal Utility District and with the city of Los Angeles working for the Bureau of Sanitation.

Horenstein earned a Bachelor of Science in Environmental Engineering from the University of Florida and pursued graduate work in Environmental Studies at Loyola Marymount University in Los Angeles and at Vermont Law School. He is a registered Professional Engineer in California and is a certified Grade IV Water and Grade V Wastewater Operator.



Grant Davis Sonoma Water

General Manager

As General Manager of Sonoma Water, Grant Davis is responsible for Sonoma Water's core functions of providing drinking water to 600,000 residents in portions of Sonoma and Marin counties and wastewater management for eight zones and districts throughout Sonoma County. Mr. Davis and his team also maintain nearly 100 miles of streams and detention basins for flood protection and manage a nationally recognized Russian River Watershed Restoration Program for the benefit of three federally listed fish species. Since 2015, Sonoma Water has implemented a renewable energy portfolio that resulted in a carbon free water supply and distribution system. Sonoma Water has also been a leader in the development of several successful federal and state initiatives, such as the North Coast Resource Partnership, San Francisco Bay Area Integrated Regional Water Management Program, North Bay Water Reuse Authority and Pacific Coastal Salmon Restoration Fund.

Prior to joining Sonoma Water in 2007, Mr. Davis was Executive Director of The Bay Institute, a science-based nonprofit, dedicated to protecting the San Francisco Bay-Delta Watershed and improving water management in California. His experience also includes working for three members of Congress, a State Senator and an Assemblywoman. Mr. Davis has served as Director of the California Department of Water Resources under Governor Brown. He is past President of WateReuse, California and is currently a member of the University of California's President's Advisory Commission, for the Division of Agriculture and Natural Resources. Mr. Davis also serves as a member of the Integrated Climate Adaptation and Resiliency Program Technical Advisory Committee for the Governor's Office of Planning and Research.

Mr. Davis received his Bachelor's Degree in political science from the University of California at Berkeley.



Dave Eggerton Association of California Water Agencies

Executive Director

Dave Eggerton is executive director of the Association of California Water Agencies (ACWA), a statewide association whose more than 450 local public water agency members are responsible for about 90% of the water delivered in California. Prior to joining ACWA, he served as general manager of the Calaveras County Water District, deputy general counsel for the El Dorado Irrigation District, and as general manager of the El Dorado County Water Agency.

He received bachelor's degrees in English and political science from Texas A&M University in 1995 and a law degree from the University of California, Davis School of Law in 2000. He is a 2006 graduate of the Water Education Foundation's Water Leader Program.



Ana Deister HDR Engineering

Consultant Treasurer, BPC Board of Directors

Ane D. Deister is executive director of the Urban Water Institute and a consultant for HDR Engineering. She has more than 30 years of experience in the water resources and environmental management business, with more than 25 years in executive leadership appointments.

She was vice president of Parsons Corporation and vice president of Cardno ENTRIX where she was a member of the water resources leadership team and a key member of the implementation team of Reach 2B of the San Joaquin River Restoration Project.

Previously, she served as the restoration administrator for the San Joaquin River Restoration Project and as vice president at Brown and Caldwell.

During her career, she also served as general manager of El Dorado Irrigation District (EID). She was a member of the California Water Commission from 2002 through 2005. She has been a member of several committees including the California Water Plan Advisory Committee and the board of trustees of the Water Resource Sustainability Division of the American Water Works Association.

She holds a master's degree in environmental engineering and systems ecology from the University of Florida. She also holds both a master's and bachelor's degree in biology from the University of South Florida.



John Coleman Bay Planning Coalition

Chief Executive Officer, Bay Planning Coalition

John Coleman is the Chief Executive Officer of the Bay Planning Coalition, a non-profit, public benefit, membership corporation, to advocate for the balanced regulation and use of Bay-Delta resources to ensure that commerce, recreation and the environment thrive in the region. Coleman was elected in 1990 and since re-elected to the Board of Directors of the East Bay Municipal Utility District (EBMUD).

Coleman was elected to serve as the President of the Association of California Water Agencies (ACWA) in December 2013. He currently serves in the following capacities: Board Member of the Marine Exchange of the San Francisco Bay Region; member of the Freeport Regional Water Authority (FRWA); Chair of the Upper Mokelumne River Watershed Authority (UMRWA); Board Member of the East Bay Leadership Council; member of the San Francisco Bay Restoration Authority Advisory Committee; member of the East Bay Economic Development Alliance Legislative Committee, and Board Member of DERWA, the joint powers authority for recycled water service provided by EBMUD and the Dublin-San Ramon Services District.

Energy Resources

Click a graph below to view the source document

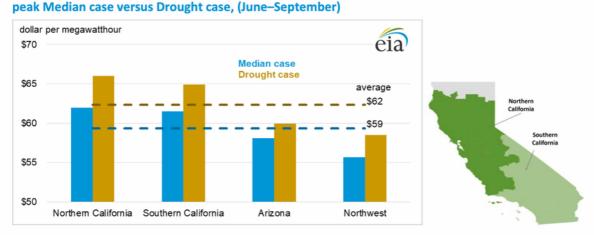


Independent Statistics & Analysis U.S. Energy Information Administration

Drought Effects on California Electricity Generation and Western Power Markets

Figure 10. Forecast impact on summer 2022 wholesale electricity price by power market region, on-

U.S. Department of Energy: Independent Statistics & Analysis



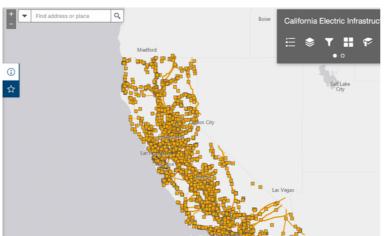
Data source: U.S. Energy Information Administration, Short-Term Integrated Forecasting System

EIA's Short-Term Energy Outlook (STEO) forecasts for California hydroelectric generation currently rely on a simple econometric model that assumes monthly generation in the future will mimic average historical patterns. Because of the potential significant effects of changing water availability, in this Supplement to STEO we evaluate an alternative approach to modeling hydropower that explicitly includes hydrological variables and more precisely accounts for the impact of variable hydro conditions on forecasts for the California region.



CALIFORNIA ENERGY COMMISSION

California's Electric Infrastructure



California Energy Commission

Transitioning to 100% clean California, the California Energy Commission has many GIS and cartographic maps to assist with resource adequacy, transmission planning, and resilient communities.

Click here to view the maps

Click the map to view the State's Electric Infrastructure

Water Resources

Click a graph below to view the source document



The Future of California's Water-Energy-Climate Nexus

Pacific Institute: Analysis and Recommendations

7.1 Reducing Water, Energy, and GHG Emissions Associated with End-Uses

- Expand urban water conservation and efficiency efforts.
- Accelerate water heater electrification.
- Maintain groundwater levels and
- expand flexible, high- efficiency groundwater pumps.

7.2 Reducing Water, Energy, and GHG Emissions Associated with the Provision of Water and Wastewater Services

- Provide financial incentives and regulatory pathways for water suppliers to reduce the energy- and GHG-intensity of water systems.
- Formalize coordination between water and energy regulatory agencies about forecasted energy demand changes

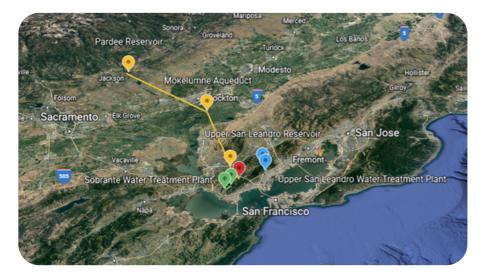
7.3 Water and Energy Data Reporting and Planning

- Expand and standardize water data reporting and energy usage tracking.
- Addressing California's Water-Energy Nexus

Figure 1 Stages of the Water Cycle with Embedded Energy

Managed								
water cycle stages with embedded energy:	Supply Extraction/ Generation	2 Conveyance	• 3 Treatment	→ <mark>④</mark> Distribution	End-Use	W astewater Collection	Wastewater Treatment	
		Energy embedd	ed in water supp	lies	Energy embedded in water demands			
Water categories in each stage of managed water cycle:	 Groundwater Incremental recycled water treatment (of treated wastewater) Captured Stormwater 	 Surface Water deliveries State Water Project, Central Valley Project, Colorado River Aqueduct, & other federal deliveries Local Imports Recycled water conveyance 	 Conventional Drinking Water Treatment Groundwater Treatment Seawater and brackish desalination 	 Urban distribution Agricultural distribution 	 Residential indoor, residential outdoor Commercial, institutional, industrial Large Landscapes Agricultural irrigation 	• Urban wastewater collection	 Secondary wastewater treatment 	

How does the Bay source its Drinking Water?



Maintaining our region's water supply is no easy feat. Check out the interactive map of EBMUD's water supply by clicking the image.

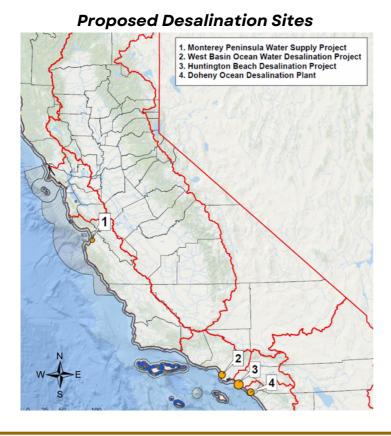
Alternative Water Sources Information

Click an image below to view the source document



Ocean Plan Requirements for Seawater Desalination Facilities

State Water Resources Control Board



Existing Desalination Facilities

Currently, there are 12 existing desalination facilities throughout California. The existing desalination facilities were issued an NPDES permit, building permits and other governmental approvals necessary, prior to January 28, 2016.

- 1. Moss Landing Power Plant
- 2. Marina Coast Water District Desalination Plant
- 3. Sand City Desalination Plant
- 4. Monterey Bay Aquarium
- 5. Morro Bay Desalination Plant
- 6. Morro Bay Power Plant
- 7. Diablo Canyon Nuclear Power Plant
- 8. Gaviota Oil Heating Facility
- 9. Charles E. Meyer Desalination Facility
- 10.Pebbly Beach Desalination Plant
- 11. San Nicolas Island Desalination Plant
- 12. Carlsbad Desalination Plant



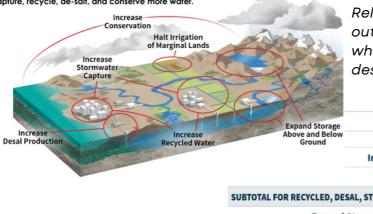
Office of Governor GAVIN NEWSOM

California's Water Supply Strategy

Office of Governor Gavin Newsom

Closing the evaporative gap

To offset increased evaporation tied to warmer average temperatures, California must capture, recycle, de-salt, and conserve more water.



Released in August 2022, Governor Newsom outlines the State's water supply plans, which relies on significant increases in desalination and water reuse.

The second secon					
		2030		2040	
Expand Storage	Increase Recycled Water	.8 MAF		1.8 MAF	About 7 MAF
Above and Below Ground	Increase Desal Production	28,000 AF	About 5 MAF	84,000 AF	
	Increase Stormwater Capture	.25 MAF		.5 MAF	
	Increase Conservation	.5 MAF		.5 MAF	
SUBTOTAL FOR RECYCLED, DE	1.6 MAF	JMAP	2.9 MAF		
Expand	3.7 MAF		4 MAF		
	4.8 MAF		6.9 MAF		

Alternative Water Sources Information

Click a graph below to view the source document

PUBLIC POLICY PPIC INSTITUTE OF CALIFORNIA

Alternative Water Supplies in California

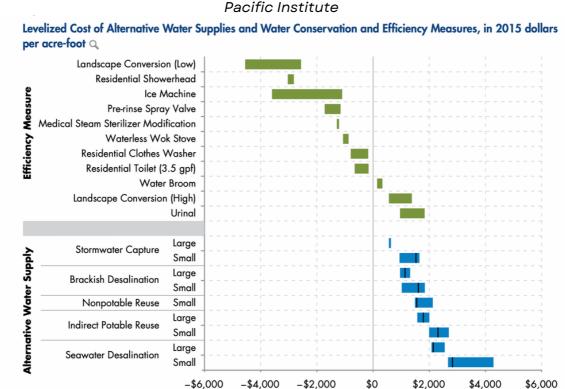
Public Policy Institute of California



Alternative supplies are a small but important part of the state's water portfolio. Alternative water sources—recycled wastewater, urban stormwater, and desalinated seawater and brackish water—now provide 2-3% of the state's urban and farm water supply, and they are growing rapidly. Recycled water use has more than doubled since the late 1980s to 700,000 acre-feet annually. Desalination capacity grew more than fourfold since 2006 to nearly 200,000 acre-feet in 2016.

PACIFIC INSTITUTE

The Cost of Alternative Water Supply and Efficiency Options in California



-\$4,000 -\$2,000

\$4,000 \$6,000

State Agency Resources

Below are links to more information on the programs and projects mentioned by event speakers.

California Department of Water Resources (DWR)



- State Water Project
- Website Homepage

California Natural Resources Agency



- <u>CA Water Supply Strategy</u>
- <u>Website Homepage</u>

California ISO



- 2022-2026 Strategic Plan
- Understanding the ISO

California Public Utilities Commission



- Integrated Resource Plan
- <u>Website Homepage</u>

California State Water Resources Control Board (SWRCB)



- <u>Water Conservation</u>
- Desalination
- Direct Potable Reuse
- <u>Water Resilience Portfolio (2020 & 2021</u> <u>Progress report)</u>

Regional Utility Agency Information

Below are links to more information on the programs and projects mentioned by event speakers.

Valley Water



East Bay Municipal Utility District

EAST BAY MUNICIPAL UTILITY DISTRICT

Marin Municipal Water District



Sonoma Water



- Anderson Dam Seismic Retrofit
 Project
- Website Homepage
- <u>Water Supply Management</u>
 <u>Program 2040</u>
- Website Homepage
- <u>Marin Water Explores</u>
 <u>Desalination</u>
- <u>Website Homepage</u>

- Carbon Free Water
- Website Homepage

AQPI Project - Providing Increased Radar Accuracy

The San Francisco Bay Area Advanced Quantitative Precipitation Information (AQPI) System was funded in 2016 by a grant from the California Department of Water Resources (DWR) Integrated Regional Water Management Program (IRWM) awarded to Sonoma Water and participating Bay Area agencies.



Click above to learn more

The Bay Planning Coalition is a proud member of the AQPI Team.

Get Involved: Membership



About:

Bay Planning Coalition (BPC) is a membership-based organization and funded by annual membership dues and event sponsorships. As a 501(c)4 public benefit non-profit, we understand that our work is possible due to the support of members.

Membership for BPC provides you and your organization a voice in the issues that impact your work. BPC meets with regulators, state and federal agencies, nonprofit organizations, and businesses regularly to discuss air and water quality, Bay fill, endangered species, habitat restoration, dredging and dredged material disposal, permit jurisdiction over construction projects, and many other issues that affect the economic and environmental interests in the Bay Area.



Benefits:

Networking – BPC is a collection of the business and environmental leaders in the Bay Area. BPC events, like the Annual Decision Makers Conference, gather experts in a number of industries that is relevant to your ongoing work. Our members benefit from meeting and building relationships with their peers. BPC helps connect members with regulators to explore solutions to conflicts over the use of the Bay and contiguous shoreline.

Advocacy – BPC is an advocate for the issues that impact your organization. BPC works on a local, state, and federal level to represent the economic and environmental needs of the region. We attend and frequently speak at the hearings and committee meetings to advocate for rational and sensible solutions to permitting, environmental, and economic issues.

Education – BPC provides a number of member services including conferences, briefings, and workshops. We help our members stay up-to-date on rules and regulations, breaking news on issues and bay projects, permit assistance, advocacy, and strategic responses to proposed regulations and legislation.

How to Join:

Contact BPC Staff, and visit our website for more information on our organization.

How to Contact:

Phone: (510) 768-8310 Email: bpcstaff@bayplanningcoalition.org

Get Involved: Committees





Air Quality Committee

- Influence the development of pragmatic air quality regulations that build resilience and support continued economic growth in the Bay Area.
- Advocate for funding to support emission reduction investments at Bay Area ports and refineries.
- Support for practical, consistent, and predictable regulation of clean energy projects, especially those that provide incremental improvements promptly.



Dredging & Beneficial Reuse Committee

- Influence the development of pragmatic air quality regulations that build resilience and support continued economic growth in the Bay Area.
- Advocate for funding to support emission reduction investments at Bay Area ports and refineries.
- Support for practical, consistent, and predictable regulation of clean energy projects, especially those that provide incremental improvements promptly.



Energy & Water Committee

- Educate BPC members and the public on the critical economic impacts of drought, water security, and energy supply issues, and the nexus thereof, facing the Bay Area and its economic reach.
- To the extent that is reasonable (and providing no conflict exists), participate in regional collaboration efforts related to water project regulatory issues.
- Advocate for new policy and regulatory solutions to ensure resilient supply of both water and energy.

Government Affairs Committee

- Support legislation that advances economic growth and environmental protects in the San Francisco Bay Area region.
- Utilize BPC's advocacy potential to promote positive outcomes for policies of concern.
- Develop a strong committee membership of varying interests to provide wellinformed information.



Sustainable Waterfronts Committee

- Advocate for new funding and incentivize regional collaboration to plan, fund, and implement climate adaptation projects in the Bay Area.
- Improve the transparency and efficiency of permitting of shoreline projects.
- Influence the development of regional planning processes to advocate for the regional coordination of climate adaptation and resilient transportation projects.



Resilient Transportation Committee

- Promote the expansion of water transit services and terminals.
- Support transit-oriented development at ferry terminals.
- Strengthen the resilience of transportation infrastructure to support the movement of people and goods

Commitment

• Our committees meet at a minimum of once per quarter. Due to the active nature of our members, most committees meet more frequently

Our Upcoming Meetings & Events



Members-only Committee Meetings:

Air Quality Committee Meeting

September 20th | 2:00pm - 3:30pm | Virtual (Register Here)

Topic: social, economic, and health implications of wildfires Featuring Guest Speakers:

- Jeff Bellisario, Executive Director, Bay Area Council Economic Institute
- Dr. Mary Prunicki, Director of Air Pollution and Health Research, Stanford University
- State Senator Steve Glazer, District 7, California State Senate

Joint Government Affairs & Sustainable Waterfronts Committee Meeting

October 12th | 1:00pm - 2:00pm | Virtual BPC is finalizing the details of this meeting. Please register to receive more information.

Government Affairs Committee Meeting

November 29th | 9:30am - 10:30am | Virtual

Receive Updates:

We encourage members to attend and participate in our upcoming committee meetings! Click below to receive committee updates.

Committee Sign-Up

If you are not a member and would like to learn more about the benefits of BPC membership, please contact our staff listed below.

New Member Interest

Events:

Dredging & Beneficial Reuse Workshop

October 18th | 9:00am - 2:00pm | Hybrid (For more information & to register)

Bay Planning Coalition's Annual Dredging Workshop offers a space for productive dialogue on the region's dredging issues. The workshop will feature key regulatory agency speakers and industry leaders to provide updates and discuss the future plans for dredging practices.

10th Annual CEQA Update

November 7th | 9:00am - 12:00pm | TBD MCLE Credit offered. BPC is finalizing this year's topics, more information to follow.

Featured Events: 2022 Fall Summit



Friday, September 30th | 9:00am - 12:15pm | Zoom Webinar

Join us on Friday, September 30th for our Spring Summit Follow-Up Event to discuss actions and updates since our event in May. We are looking forward to having many of our panelists return to continue the conversation. Stay tuned for more updates.

Confirmed Panelists:

- Moderator: Allison Brooks, Executive Director, Bay Area Regional Collaborative
- Brad Benson, Waterfront Resilience Program Director, Port of San Francisco
- Amy Hutzel, Executive Director, California Coastal Conservancy
- Roger Leventhal, Senior Engineer, Marin County Public Works, CHARG
- Len Materman, Chief Executive Officer, OneShoreline
- Mark Northcross, Principal, NHA Advisors
- Violet Saena, Founder & Executive Director, Climate Resilient Communities
- Dilip Trivedi, Coastal Engineer and Vice President, Moffatt & Nichol
- Sloane Viola, ICARP Program Manager, Governor's Office of Planning &
- Research
- Amy Worth, Chair, Bay Area Regional Collaborative

Pricing:

If you are a member of BPC and did not receive a prior email with the registration code, please email sophie@bayplanningcoalition.org.



Featured Events: Welcome Reception

BPC Welcoming Reception for the SF Regional Water Board's New Executive Director, Eileen White



Thursday, October 6th | 4:30pm - 6:30pm | Lake Chalet, Oakland

Join us on October 6th for a chance to welcome and meet with Eileen White, the new Executive Officer of the San Francisco Bay Regional Water Quality Control Board. The intimate gathering with be held at **Lake Chalet Seafood Bar and Grill in Oakland from 4:30 pm to 6:30 pm**. The event has limited space so register for the event below. *If you are a member of BPC, please email sophie@bayplanningcoalition.org for the discount code*.

More on Eileen White:

White is known throughout the region for her years of leadership at the East Bay Municipal Utility District in both wastewater and drinking water, areas of critical importance to us all. In addition to her decades of experience at East Bay MUD, White has served on the board of the Bay Area Clean Water Agencies and serves as the chair for the National Association of Clean Water Agencies' Climate Change and Resilience Committee as well as an active member of the San Francisco Bay Estuary institute. White received her Bachelor of Science degree in civil engineering from the University of California, Berkeley.



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