

San Diego Water Board Practical Vision

A Strategic Plan

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
REGION 9, SAN DIEGO BASIN**

SEPTEMBER 8, 2021

San Diego Water Board Practical Vision

Executive Summary

The San Diego Water Board Vision is to realize healthy waters in the Region through collaborative, outcome-focused efforts that support both human uses and sustainable ecosystems. The Board's Practical Vision is a key tool to achieve that goal and implements efforts consistent with our values of *leadership, stewardship, communication, and transparency*.

The Practical Vision is the roadmap of the Board's roles, expectations, and operations as we face the challenges of:

- Environmental justice and equity
- Climate change
- Clean water availability
- Ever-increasing obligations, costs, and decreasing resources

Our Mission

Guided by our Mission to preserve, enhance, and restore the quality of California's water resources for the protection of the environment, public health, and all beneficial uses, the Board will focus on the following areas to move closer to achieving our Vision:

1. ***Strategize for Healthy Waters*** – Focus on outcomes using key Beneficial Uses and key Areas¹ approach.
2. ***Monitor and Assess*** - Produce information that supports the protection and restoration of water quality resources, communicates resource conditions, and provides information to evaluate success.
3. ***Recover Stream, Wetland, and Riparian Areas*** - Increase wetland area in the Region and regulate projects that alter wetland, stream, and riparian areas considering the affects to Tribal and underserved communities as well as Climate Change mitigation and adaptation.
4. ***Implement Racial Equity and Environmental Justice Measures*** - Work towards equity in environmental protection and provide enhanced engagement with underserved communities during the Board's decision-making process.

¹ [San Diego Water Board Resolution R9-2017-0030, Resolution Supporting Use of the Key Beneficial Uses / Key Areas Concept to Help the San Diego Water Board Focus on What is Most Important](#)

5. **Partner and Consult with Tribal Nations** – Work in consultation with Tribes to designate waterbodies in the San Diego Region for the Culture, Tribal Subsistence, and Subsistence Beneficial Uses and restore and protect water quality for the benefit of present and future generations of Indigenous Americans.
6. **Strategize to Achieve Resilient Local Water Supply** – Protect, restore, and regulate water quality in a manner that contributes to sustainable local water supply and is consistent with protection of other beneficial uses for current and future generations.
7. **Mitigate Climate Change Impacts** - Proactively safeguard beneficial uses against the regional impacts of changing climate conditions.
8. **Provide Effective Community Engagement and Communication** - Engage in outreach to improve communication and transparency, create information sharing opportunities to both listen to and share with our communities, collaborate on development of mutually beneficial solutions to water quality issues, and inform the public about the goals of the Practical Vision.
9. **Create a Supported, Empowered, Energized Organizational Community** - Support a healthy organizational culture at the Water Board that fosters integrity, high morale, communication, productivity, leadership, and growth.
10. **Ensure Effective Mission Support** – Ensure sufficient business resources, information, and expertise to empower the success of the Water Board Mission.

To achieve this Vision, the Water Board must take a leadership role that refocuses and employs traditional authorities relied upon for the last fifty years, while bringing modern tools into the regulatory process. With the addition of the *Implement Racial Equity and Environmental Justice Measures*, *Partner and Consult with Tribal Nations*, and *Mitigate Climate Change Impacts* Chapters, the Water Board’s focus will continue and improve on its shift to an outcomes based regulatory approach that is scientifically based and facilitates community engagement and collaboration. Implementing and achieving the goals of this Practical Vision will be as important to the communities we serve as the goals themselves.

David W. Gibson
Executive Officer



Healthy Waters, People, and Communities

The Practical Vision

The theme of the Practical Vision is ***Healthy Waters, People, and Communities***. Adequate availability of clean water is a universal human right and a critical for sustainable environmental and public health. The State Water Resources Control Board and the San Diego Regional Water Quality Control Board (Water Board) serve as stewards of the public trust in protecting and restoring the waters of the State and their many beneficial uses. Efforts to protect water resources in an efficient and sustainable manner require the judicious use of regulatory authorities and consistent stakeholder engagement.

To restore and maintain water quality and accomplish our Mission, the Water Board must focus on more innovative, outcome focused, and community-based strategies. To make this transition, the Water Board will need to augment its expertise by seeking the very best legal, scientific, and procedural guidance available on the matters it considers. To ensure Water Board actions represent the goals of our communities, they must include new methods of listening based communication and an effort to measure and report our progress to the communities that have empowered us to accomplish our Mission.

This Practical Vision guides the Water Board as it considers the many interests and values of our communities, envisions credible and durable improvements to water quality and environmental health, offers practical solutions to regional issues, and provides the tools necessary to overcome challenges faced on the journey to attain healthy waters.

Progress Through Collaboration

Too often we take natural resources like water, that seem in endless supply, for granted. It is becoming clear that many of society's activities produce negative impacts on the quality and supply of water resources. Long-predicted shortages of water resulting from climate change are already occurring in California and the Colorado River Basin. Because of the growing stresses on the quality of local surface and groundwaters and our finite access to shrinking supplies of local and imported water, protective measures must adapt to meet our future needs. The challenge of managing the stressors that result from the daily activities of millions of residents, visitors, and businesses is daunting and must be met with an adaptive, unified, and outcome focused effort.

Public engagement is critical to the Water Board's success in restoring and protecting water quality. Two major themes of the Practical Vision are communication and learning. We must share our knowledge, resources, and experience to facilitate restoration and smart growth. Just as importantly, we must consider the perspectives of community leaders and experts in the areas of racial and environmental justice and science and engineering and invite new perspectives on long standing problems. In particular, the updated Practical Vision seeks the unique perspective of Indigenous Americans in our efforts to restore and maintain water quality

and protect the Tribal Tradition and Culture and Tribal Subsistence beneficial uses. We must interact with all stakeholders and governments to understand their priorities and share our goal of healthy water for all.

During the first seven years of its implementation, the Practical Vision guided the Water Board in establishing a strategic approach to setting outcomes and establishing priorities that would benefit key beneficial uses and key areas. The Water Board also developed a community outreach program, adopted new biological water quality objectives, set a goal to achieve a meaningful net gain of wetlands, made significant progress in cleaning up toxic sediments and legacy pollution in San Diego Bay, and initiated several regulatory actions to confront the daunting challenges of cross border flows of sewage, solid waste, and trash in the Tijuana River watershed.

During the next seven years, the Water Board will continue to implement the Practical Vision and build on its previous efforts with an added focus on environmental justice, Tribal Nations, and changing climate conditions including acidification, rising sea levels, higher storm surges, as well as extensive drought conditions punctuated by more intense atmospheric rivers and dangerous flooding events. The Water Board will also continue to work to achieve a meaningful net gain of wetlands, control cross border pollution in the Tijuana River, and advance a watershed and outcome based approach to reducing pollution in storm water runoff throughout the region. The Practical Vision will guide these efforts and usher in a new era of community engagement, public resource stewardship, and healthy community environments.



Chapter 1: Strategize for Healthy Waters

Implement an outcome focused key beneficial use and key area approach to prioritize and track efforts to protect and restore the health of waters in the San Diego Region.

The Water Board's very reason for being is to protect and restore the chemical, physical, and biological integrity (i.e., health)² of waters in the San Diego Region. This Practical Vision is in place to ensure Water Board staff, funding, authority, tools, and influence are put to the best possible use. Establishing an outcomes-based approach and setting priorities in an annual operations plan are critical to a transparent approach for prioritizing the Board's work and limited staff resources.



The following projects were either completed over the last seven years or will continue under the updated Practical Vision:

- Adopted Key Beneficial Use and Key Areas Approach³
- Adopted Biological Objectives for Wadeable Rivers and Streams
- Adopted and implemented the Strategy for a Healthy San Diego Bay
- Established a Stay on Course Committee
- Continue to establish long term and short priorities and measurable goals for key beneficial uses in key Areas
- Continue to implement priorities and goals through the Annual Operations Plan
- Monitor progress and reevaluate priorities and goals through the Stay on Course Committee

² Healthy waters are surface and ground waters that fully support use and enjoyment by the people of the state. Such "beneficial uses" of waters in the San Diego Region include water supply (domestic, municipal, industrial, and agricultural), fishing (commercial and sport), and shellfish harvesting, recreation, and support of habitats and ecosystems. Beneficial uses of waters in the San Diego Region are described in the San Diego Water Board Basin Plan and in State Water Resources Control Board water quality control plans that apply to the San Diego Region.

³ San Diego Water Board Resolution R9-2017-0030, *Resolution Supporting Use of The Key Beneficial Uses / Key Areas Concept to Help the San Diego Water Board Focus on What is Most Important.*

San Diego Bay photo credit – U.S. Navy Region Southwest.

Using existing authorities and program resources, the Water Board will enforce the San Diego Region Basin Plan, implement the Strategy for a Healthy San Diego Bay, and incorporate climate change adaption measures into our work products. In addition, the Water Board will continue to implement the Key Beneficial Use and Key Areas Resolution and take the following actions:

- Review information on the sources, conveyance, and impacts of human fecal waste in the San Diego River and update and implement the *Total Maximum Daily Loads for Indicator Bacteria*⁴
- Implement Biological Water Quality Objectives for Wadeable Rivers and Streams through the municipal storm water, commercial agricultural, and wetlands protection programs
- Prioritize enforcement actions in key areas, with emphasis on Environmental Justice considerations
- Develop biological objectives for freshwater algae to protect the Region's waters from harmful algal blooms
- Continue to advance sustainable local water supplies through conservation, expanded recycled water re-use, expanded potable re-use, and ocean and brackish groundwater desalination projects.



⁴ San Diego Water Board Resolution No. R9-2010-0001, *A Resolution Amending the Water Quality Control Plan for The San Diego Basin (9) to Incorporate Revised Total Maximum Daily Loads for Indicator Bacteria, Project I - Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)*.



Chapter 2: Monitor and Assess

Monitoring and assessment programs will produce information that supports efforts to protect and restore the health of San Diego Region waters, communicate the condition of those waters, and provide meaningful information to evaluate the success of those efforts.

The Water Board needs water quality information from monitoring and assessment programs to strategically carry out its Mission of protecting and restoring the health of waters in the San Diego Region. The collection, use, and sharing of that information with our community and partners is consistent with the Practical Vision Values of stewardship, leadership, communication, and transparency. In December 2012, the Water Board endorsed *A Framework for Monitoring and Assessment in the San Diego Region*⁵ and implemented the framework through discharge permit monitoring and reporting programs, enforcement actions, and Surface Water Ambient Monitoring Program (SWAMP) projects. Consistent with the objectives of the framework and the Practical Vision, the following projects or actions will be implemented during the next seven years:

- Monitoring and assessment of harmful algal blooms
- Water quality driven compliance investigations
- Monitoring of enclosed coastal waters
- Assessment of transboundary flows in the Tijuana River valley, estuary, and coastal waters
- San Diego Bay Fish Tissue Study
- Unified San Diego Bay-Wide Monitoring and Assessment Program
- Publication of state of the watershed reports and web-based data visualization tools
- Evaluation of human fecal waste sources in the San Diego River

⁵ San Diego Water Board Resolution No. R9-2012-0069, *Resolution in Support of a Regional Monitoring Framework*.

Chapter 3: Recover Stream, Wetland, and Riparian Areas

Achieve a meaningful net gain of wetlands, efficiently exercise regulatory discretion over proposed projects to dredge, fill or alter wetlands, stream, and riparian areas.

The activities included in this Chapter of the Practical Vision seek to support and encourage wetland restoration to achieve a meaningful net gain of wetlands.



During the first seven years of the Practical Vision efforts focused on outreach, development of informal guidance, protection and restoration of the extent and functionality of existing wetlands and riparian areas, and the Board’s establishment of a goal to achieving a meaningful net gain of wetlands in the region.⁶ Progress in the projects identified in the Resolution include:

- Brown Property Restoration - the County of San Diego funded a hydrology study of the restoration options for the Brown Property and obtained \$1.3 million in funding from the California Department of Fish and Wildlife for planning and design to restore riparian habitat in the Brown Property in the Tijuana River Valley; and
- North Mission Bay Conceptual Wetlands Project - the San Diego Water Board adoption of Administrative Civil Liability Order R9-2020-0150 which included a Supplemental Environmental Project to expand and enhance the Kendall-Frost wetlands and include planning alternatives for north Mission Bay to address sea level rise and potential restoration of intertidal wetlands at the mouth of Rose Creek.

During the next seven years, these efforts will continue and focus on outreach and partnership efforts, climate change adaptation, and Tribal and environmental justice concerns.

Healthy stream, wetland, and riparian systems benefit key beneficial uses. Protection of high-quality habitats and restoration of damaged stream, wetland, riparian, and floodplain areas are essential to protecting water quality and beneficial uses. In addition, ensuring the protection

⁶ Resolution R9-2015-0041, *Resolution to Support Restoration of Aquatic Ecosystems in the San Diego Region*.

and expansion of coastal wetlands is an important climate change adaptation and will provide new habitat areas that can buffer rising sea levels.

Water Board regulation of activities that impact these habitats is critical to the recovery of wetland, stream, and riparian systems since these activities can have severe, long-term effects if not properly regulated and mitigated. The Water Board will continue its efforts to ensure protection of the few remaining areas of wetlands which will be a significant challenge given severely constrained resources and shortened review times pursuant to new federal regulations.

During the next seven years of the Practical Vision, Water Board efforts will include:

- Wetland permitting outreach
- Annual updates on the state of wetlands in the San Diego Region
- Coastal climate change resiliency efforts
- Wetland restoration, assessment, and incentives
- Baseline wetlands conditions assessment
- Updated and streamlined Clean Water Act Water Quality Certifications
- Streamlined permitting process for wetland restoration projects



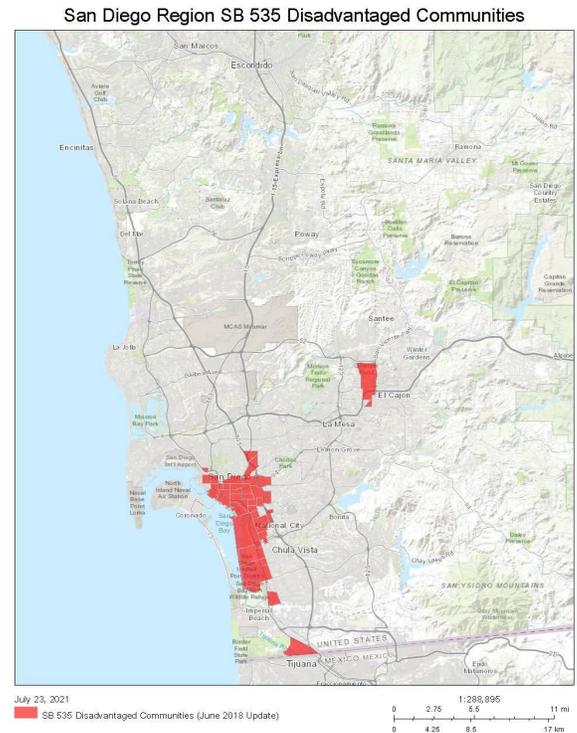
Chapter 4: Implement Racial Equity and Environmental Justice Measures

Work towards equity in environmental protection by addressing past injustices, prioritizing actions in underserved communities, and integrating equity considerations into all aspects of the Water Board’s responsibilities and decision making.

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Achievement of this goal occurs when everyone enjoys: 1) The same degree of protection from environmental and health hazards, and 2) Equal access to the decision-making process to have a healthy environment in which to live, learn, and work.⁷

The Water Board recognizes that environmental justice challenges are often the result of historic segregationist land use planning (i.e. redline zoning) and longstanding social, economic, and environmental policies that concentrate past, present, and potentially future pollution loads and exposure pathways in specific communities. We also recognize that Black, Indigenous, and people of color are overrepresented in the neighborhoods that are the most environmentally degraded and are still experiencing severe health and racial wealth gaps caused by redlining and other land-use practices.

Achieving environmental justice in the region will require the Water Board to incorporate tangible environment justice considerations into our work, proactively solicit input, engagement, and partnership from historically underserved communities. In the San Diego Region, underserved, low-income communities with disproportionate pollution exposure are primarily located in western El Cajon, Chollas, San Ysidro, Barrio Logan, South East San Diego, and western National City and Chula Vista.⁸



⁷ United States Environmental Protect Agency, <https://www.epa.gov/environmentaljustice>.

⁸ San Diego Region SB 535 Disadvantaged Communities. Source: CalEnviroScreen website interactive mapping tool: <https://oehha.ca.gov/calenviroscreen/sb535>

During the first seven years of the Practical Vision, the Water Board focused its environmental justice efforts on outreach. The Water Board also focused exhaustive regulatory attention on pollution and contamination in the Tijuana River Valley and Imperial Beach, remediating contaminated sediments in San Diego Bay, and initiated a review of indoor air quality issues associated with toxic groundwater cleanup sites.

In 2017, the Water Board held a full day, town hall style Environmental Justice Symposium attended by over 200 members of the public. One community concern shared was the long-standing impacts to San Ysidro and Imperial Beach from cross border sewage, industrial wastes, trash, and sediment in the Tijuana River Valley. In response, the Water Board prioritized efforts in the Tijuana River Valley, which resulted in the development of two Total Maximum Daily Loads to regulate cross border flows of waste; initiation of litigation against the United States International Boundary and Water Commission (USIBWC); issuance of an Investigative Order to the USIBWC to monitor cross border flows; and three years of assertive outreach and engagement to solicit agency, legislative, and community support for controlling the pollution in the Tijuana River Valley.

During the next seven years of the Practical Vision, the Water Board will commit resources to communities where past discrimination has created disparity in the availability, quality, protection, and restoration of water resources. The Water Board will exercise its leadership and regulatory authority to provide safe and clean water to all communities for all purposes. The Water Board will work towards an inclusive and equitable decision-making process to help empower communities by increasing public accessibility to the Board, increasing its presence in underserved areas, and expanding our methods of public engagement. The Water Board will achieve these goals by valuing environmental stewardship, transparency, and integrity, while exercising leadership in actions to provide equitable and trustworthy public service.

In the next seven years of Practical Vision implementation, the Water Board will move forward on the progress achieved so far in the Tijuana River Valley and expand engagement with Tribes, disadvantaged communities, and environmental and racial equity justice organizations. The Water Board identified specific projects to achieve restoration of water quality in the Tijuana River and coastal waters impacted by transboundary flows of polluted water.⁹ Through the EPA US-Mexico-Canada Agreement funding provided by Congress in 2020, the Water Board has continued to advocate for these structural diversion and treatment and expanded wastewater treatment solutions in the Tijuana River Valley. The Water Board will periodically convene the Tijuana River Valley Recovery Team for community engagement and project

⁹ Resolution R9-2019-0246 *Joint Resolution between the County of San Diego, City of San Diego, City of Imperial Beach, City of Chula Vista, City of Coronado, City of National City, Port of San Diego, San Diego Regional Water Quality Control Board, California State Lands Commission, and Surfrider Foundation Recommending Project Alternatives and Federal and State Actions to Eliminate Detrimental Transboundary Flows of Wastes in the Tijuana River Valley*

coordination. Efforts elsewhere will include focused engagement, formation of new advisory panels and forums, periodic Water Board town hall meetings, and updates on key issues in the communities. The Water Board will achieve these goals by focusing on the following objectives:

- Improve awareness of, and equitable access to, the Water Board’s decision-making process and decision makers through effective engagement events and workshops with environmental justice communities
- Support State Water Board development of a Racial Equity Resolution, prepare a region-specific Racial Equity Resolution for the San Diego Water Board consideration, and ensure regionwide implementation through the Practical Vision Operations Plan
- Identify equity issues by implementing a process to evaluate Water Board plans, policies, permits, and actions. At a minimum, implement the following:
 - Identify and prioritize legacy areas within communities that have experienced past environmental injustices
 - Provide staff training to ensure meaningful engagement with underserved communities and Tribes
 - Expand employment recruiting efforts to diverse and/or underserved communities
- Identify opportunities for Water Board engagement in racial equity and environmental justice forums, workshops, and meetings to inform our efforts more fully on key issues, internal training needs, priorities for regulatory action, and monitoring and reporting measures.



Chapter 5: Partner and Consult with Tribal Nations



Work in consultation with California Native American Tribes to designate waterbodies in the San Diego Region for the Tribal Tradition and Culture, Tribal Subsistence, and Subsistence Beneficial Uses and restore and protect water quality for the benefit of present and future generations.¹⁰

Since time immemorial, California Native American Tribes have been stewards of the land and water of the San Diego region. The San Diego Region is home to five major tribal regions that include 20 sovereign Native Nations. The entire region is home to the peoples of the Acjachemen (Juaneño), Payómkawichum (Luiseño), Cahuilla, Kuupangaxwicheem (Cupeño), and Kumeyaay (Diegueño/Kamia/Ipai/Tipai) Tribes.¹¹

The Tribes include in the San Diego Region include:

- Juaneño Band of Mission Indians – Acjachemen Nation (Belardes)
- Juaneño Band of Mission Indians – Acjachemen Nation (Romero)
- Barona Band of Mission Indians
- Cahuilla Band of Indians
- Campo Band of Diegueño Mission Indians.
- Ewiiapaayp Band of Kumeyaay Indians
- Inaja-Cosmit Band of Indians
- Jamul Indian Village
- Kwaaymii Laguna Band of Mission Indians
- La Jolla Band of Luiseño Indians
- La Posta Band of Diegueño Mission Indians
- Los Coyotes Band of Cahuilla and Cupeño Indians
- Manzanita Band of the Kumeyaay Nation

¹⁰ Waters within the jurisdiction of the San Diego Regional Water Quality Control Board consist of waters within the Tribes' ancestral homelands that are not within the boundaries of the Sovereign Tribal Nations.

¹¹ Names of San Diego Region Tribes were derived from the State of California Native American Heritage Commission website: <http://nahc.ca.gov/native-americans/> Cultural affiliations are self-reported by Tribes

- Mesa Grande Band of Diegueño Mission Indians
- Pala Band of Mission Indians
- Pauma Band of Luiseño Indians
- Pechanga Band of Luiseño Indians
- Ramona Band of Cahuilla
- Rincon Band of Luiseño Indians
- San Luis Rey Band of Mission Indians
- San Pasqual Band of Diegueño Mission Indians
- Santa Rosa Band of Cahuilla Indians
- Lipay Nation of Santa Ysabel
- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Kumeyaay Indians

California Native American Tribes have managed their ancestral land and waters in a sustainable manner since time immemorial. In their stewardship of the land and water, Native people have directly improved and enhanced the natural ecosystem through traditional burning practices, harvesting of plants and animals, and stream enhancement. Traditional use of the fire cycle harnessed an intrinsic part of the ecosystem and returning to some form of those practices may have significant relevance for climate adaptation.

California Native American Tribes have used, and in some cases continue to use, water to support their cultural, spiritual, ceremonial, and/or traditional rights and these practices are an important part of the San Diego Region. Members of Tribal communities continue to harvest foods, medicines, and craft materials from lands and waters in sovereign lands on and off reservations and within the jurisdiction of the San Diego Water Board. Droughts, floods, or other physical or cultural factors impact both the location and timing of tribal traditions practiced throughout the region. The Basin Plan, however, has not included water quality standards to restore and protect these uses equitably in comparison to other established beneficial uses.

In May 2017, the State Water Resources Control Board adopted Resolution 2017-0027 that established three new beneficial uses definitions for use by the State Water Board and Regional Water Quality Control Boards in designating Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB) and Subsistence Fishing (SUB) beneficial uses for inland waters, enclosed bays, or estuaries in the state. In December 2020, the San Diego Water Board amended the basin Plan to include these new Tribal Beneficial Uses. The next step is to begin the process to designate waters of the state in the Basin Plan for these new beneficial and adopt appropriate water quality objectives to restore and maintain them. Through its authority within its jurisdiction to regulate discharges under the Clean Water Act and Porter-Cologne Water Quality Control Act, the Water Board will consider permit requirements necessary to achieve water quality that will support these new beneficial uses.

Information regarding the cultural practices of California Native American Tribes is highly sensitive. Stated as a guiding principle within the California Water Boards' Tribal Consultation Policy, the Water Boards acknowledge, recognize, and respect the need and importance, and in some circumstances the requirement, for confidentiality regarding places, land, tribal cultural resources, and matters discussed in consultation. Measures can be taken to preserve tribal cultural resources and practices that Tribes require to be protected from public disclosure. Because the Tribal beneficial uses of waters in the region may occur at different locations and times due to physical or cultural reasons, the San Diego Water Board Basin Plan designation of this beneficial use will encompass all the waterbodies of the region. Our intent with this approach is to provide an equitable outcome consistent with the values of the Practical Vision.

The primary projects in this chapter of the Practical Vision include:

- Designate waters of the region for the Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB) beneficial uses
- Identify opportunities for Water Board participation in Tribal forums, workshops, and meetings to more fully inform our efforts to restore and maintain water quality for all uses including Tribal beneficial uses.
- Partner and consult with California Native American Tribes and leverage tribal historic knowledge and experience managing California's water resources on key issues or decisions facing the Water Board on ancestral Tribal lands within its jurisdiction.

Chapter 6: Strategize to Achieve Resilient Local Water Supply

Support a sufficient, diverse, and sustainable local water supply for the San Diego Region that, combined with conservation and water reuse, minimizes dependence on imported water while maintaining and improving water quality.



In order to maintain water quality and help provide sufficient water to meet the demands of the Region, the Water Board must use its authority to help achieve a resilient local water supply and advance water security by using local sources in a manner that improves water quality and reduces greenhouse emissions associated with water transport.

For a sustainable local water supply to exist in the region three efforts must occur: 1) increased conservation efforts to reduce water demand; 2) enhance sustainable, reliable supplies of fresh water through increased potable and non-potable reuse of recycled water; and 3) environmentally responsible use of groundwater and surface water. This Practical Vision describes how the Water Board, in keeping with its Values, will help water and wastewater agencies achieve the goal of a resilient, reliable local water supply. A multi-phase approach is proposed through the following projects:

- Emphasize water conservation through enforcement of landscape and overirrigation runoff prohibitions and support conversion of water intensive uses to more efficient practices
- Efficiently permit indirect potable reuse projects for surface water and groundwater
- Increase non-potable recycled water reuse
- Review and update low impact development requirements
- Review and approve salt and nutrient management plans
- Efficiently permit desalination projects that minimize impacts to aquatic habitats through protective intake and brine discharge measures



Chapter 7: Mitigate Climate Change Impacts

Proactively safeguard beneficial uses from the negative impacts of climate change, with an emphasis on equity and environmental justice.

Climate change is affecting water resources in the San Diego region. It is no longer a question of “what if” or a problem to deal with someday.

Today, hotter temperatures, intensifying wildfires, rising seas, ocean acidification, and changing precipitation patterns are impacting water quality and ecosystems in the San Diego region.¹²



These stressors, and efforts to adapt to them, are evident as we realize an increase in coastal and inland flooding, seawater intrusion, frequency, and intensity of wildfires, shifts in species ranges, and demands on local water supplies. In addition to the environmental effects of climate change, the resulting fires, floods, temperature increases, and drought are threatening public health and safety, our tourism dependent economy, and the way of life enjoyed by millions of residents. In some places, the public may lose recreational access to beaches and other areas inundated and eroded by sea level rise.

To grapple with these changes and demands, the Water Board must rely on the most recent and robust scientific information to incorporate climate change into its efforts to protect human and environmental health and preserve and enhance water quality and beneficial uses for all people, especially those made more vulnerable by racism and other systemic societal actions.

¹² Photo: Imperial Beach flooded in 2020 from rising sea levels and high storm surge. (Source: Scripps Institution of Oceanography, UC San Diego)

Sea level rise projections for the San Diego Region range from 2.5 to 10 feet by the year 2100 and could cause significant environmental and economic impacts.¹³ For example, in Mission Bay, San Diego is poised to lose hundreds of millions of dollars of property and infrastructure as nearly all of Mission Beach and most of the shoreline around Mission Bay would be under water during a typical storm (Figure 1). The impacts and losses would be even more severe during a catastrophic once in a century storm.



Figure 1. Areas of Mission Bay that are likely to flood with 3 feet of sea level rise during a 20-year storm event.

The remnant wetlands in the northeast corner of Mission Bay would be lost as they become submerged from sea level rise and have no available higher elevation land for migration. Flooded infrastructure and lost wetlands are likely to repeat over time along the coast throughout the region.

Through adequate planning there is an opportunity to minimize or mitigate the negative effects of climate change. In some cases, it could be possible to create positive effects, such as increasing wetland area through adaptation or managed retreat to serve as a storm surge buffer and improve water quality. The Water Board has a key role to play in incentivizing and supporting such proactive planning.

Where We Are in 2021

The Water Board has already begun the work to protect water resources amidst a changing climate. The Board first acted in 2018 through adoption of Resolution R9-2018-0051, *Addressing Threats to Beneficial Uses from Climate Change* (Resolution). Since the adoption of the Resolution, Board programs have begun the difficult task of including climate change considerations into their core work products. Additionally, the Water Board has initiated several programs to integrate climate change planning and considerations in its regulatory efforts including:

- Creation of a Climate Science Liaison position
- Adoption of Biological Objectives that included metrics calibrated for climate change-related changes in hydrology and temperature

¹³ Kalansky, Julie, Dan Cayan, Kate Barba, Laura Walsh, Kimberly Brouwer, Dani Boudreau. (University of California, San Diego). 2018. *San Diego Summary Report*. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-009.

- Consideration of climate change and sea level rise projections when the Department of Defense proposes remediation technologies at coastal cleanup sites
- Inclusion of a *Climate Change Action Plan* requirement in new or renewed NPDES permits that identifies projected impacts to wastewater treatment facilities and operations
- Ocean monitoring requirements updates in permits that include plume tracking and other measures to evaluate nearshore hypoxia and acidification impacts to marine life
- Preparation and Adoption of permits for desalination and indirect potable reuse projects to augment local water supply as buffer against droughts due to climate change

While adapting to the effects of climate change may seem a daunting task, facing the challenges of climate change creates an opportunity for the Water Board to work with agencies, organizations, and the public to improve resiliency, protect beneficial uses, protect and assist vulnerable disadvantaged and environmental justice communities, and grow together to tackle challenges that affect everyone. Public and ecosystem demands for beneficial uses of water will not stop with climate change, and neither will the efforts of the Water Board to ensure the quality of water continues to support those uses.



Chapter 8: Provide Effective Community Engagement and Communication

Engage with agencies, organizations, communities, and the public to improve communication, create two-way learning opportunities, and inform the implementation of the Practical Vision.

Public engagement in the decision-making process of the Water Board is essential to our success and represented in our Practical Vision Values. In the first seven years of the Practical Vision, the Water Board engaged in proactive community outreach that helped inform and improve regulation of storm water, irrigated lands, and water supply resiliency projects.

Communication is integral in all Water Board programs, actions, and work. Going beyond standard public forum comment opportunities or constrained outreach on a single pending issue will help establish a pathway to continually identify the issues of concern and environmental outcomes that are important to the community. Creating opportunities for dialog helps inform Water Board policy and decision making at the highest level. During the next seven years of the Practical Vision, the Water Board will continue the following efforts:

- Convene community outreach events and workshops with non-governmental organizations, community groups, and members of the public to inform key regulatory actions and Practical Vision projects
- Conduct periodic Water Board community outreach events throughout the region with local, state, and federal agencies and elected officials
- Enhance community outreach and participation in decision making using weekend meetings and remote meeting technology to expand access



Chapter 9: Create a Supported, Empowered, and Energized Organizational Community

Support a healthy organizational culture that fosters integrity, high morale, communication, productivity, leadership, and growth.

This chapter of the Practical Vision provides a stepping-stone for the development of a healthy organizational culture. Employees feel valued when there is a culture of trust and communication, and opportunities for professional growth. The Water Board will use the results of the 2020 Statewide employee survey, as well as any future surveys, to engage staff in conversations about our organizational culture. To improve upon our culture, the Water Board will strive to achieve the following five goals:

- Improve equity in the workplace
- Increase employee morale
- Improve communication
- Promote a learning culture
- Increase professional growth opportunities

These goals focus on an organizational culture which places a high emphasis on the well-being of its employees and reflect the values of the organization. This type of organizational culture promotes mutual respect, appreciation of effort, open communication, and dedication to the Mission of the Water Board. In turn, increases in retention of quality employees, work productivity, and employee morale will help achieve other goals of the Practical Vision. Some ongoing and future projects include:

- Employment recruitment and retention expansion efforts for candidates from local, underserved communities
- Employee association wellness program
- Employee engagement survey and culture improvement program
- Employee cross training and advancement and retention efforts



Chapter 10: Ensure Effective Mission Support

Appropriate business resources, information, and expertise supported by employees with the operational knowledge and skills to empower the success of the Water Board Mission.

Effective Mission support is a Practical Vision priority because business and information management functions provide a strong foundation for the work of the water quality programs. This Practical Vision Chapter focuses on projects that sustain and improve on the effectiveness and efficiency of the Mission Support Services Unit and in turn the Water Board's Practical Vision and Mission. Core services provided include human resources, records management, accounting and budgets, procurement, facility management, health & safety, and reception.

To ensure sufficient business resources, information, and expertise, the Water Board will implement the following initiatives:

- Conduct periodic business needs evaluations and assessments to identify future resource requirements
- Maximize the benefits of the Enterprise Content Management (ECM) system for records management
- Continue and expand support for remote work force effectiveness during and following the global COVID-19 pandemic
- Support remote training for staff in technical, organization, and communication practices



Strategic Planning through the Practical Vision

Protecting human and environmental health is vital to our quality of life and requires leadership at all levels of the Water Board and our communities. With climate change, global pandemics, drought, and rapidly changing economic factors, leadership in water quality protection and restoration has rarely been more important.

The strategic challenge for the Water Board is to bring communities together to help achieve the shared goal of clean water through this Practical Vision. In the rapidly changing world of water quality protection challenges, the Water Board must employ a leadership approach that is nimble, adaptive, and plans to meet future demands. This Practical Vision will guide and focus us on what's most important for water quality and our community.

