REVISED

SAWPA COMMISSION MEMORANDUM NO. 2020.3

DATE: January 21, 2020

TO: SAWPA Commission

SUBJECT: Integrated Regional Water Management (IRWM) Support in Future 2020 Resources Bonds

PREPARED BY: Mark Norton, PE, Water Resources & Planning Manager

RECOMMENDATION

Authorize staff to send the Integrated Regional Water Management (IRWM) 2020 Resources Bond Support Letter to pertinent legislators to indicate funding support for IRWM in all future 2020 resources bonds.

DISCUSSION

In July 2019, the Association of California Water Agencies (ACWA) developed and adopted new policy principles for integrated regional water management (IRWM). ACWA felt that IRWM has proven to be a valuable and important tool for managing water resources, and that the Department of Water Resources (DWR) should renew its emphasis on the IRWM program.

In April 2019, the Governor issued an executive order directing State agencies to develop a Water Resilience Portfolio, with the effort being led by the Natural Resources Agency. The Portfolio will serve as a pathway for the new administration to prioritize activities for the next several years related to water supply, flood control, water quality, safe drinking water, disadvantaged communities, habitat management, and other related issues. The Natural Resources Agency called for public input by the beginning of September to assist in the drafting of the Portfolio. Many water agencies, including SAWPA and ACWA, submitted feedback to the State. The Draft Portfolio was released to the public on January 3, 2020.

Overall the draft portfolio embraces a broad, diversified approach. Goals and actions are organized into four categories:1) Maintain and diversify water supplies; 2) protect and enhance natural systems; 3) build connections; and 4) be prepared. It does not recommend a one-size fits all approach to water resilience across the state. Instead, it emphasizes that water resilience will be achieved *region by region* based on the unique challenges and opportunities in each area. Leadership at the local, regional and tribal levels is essential. The water portfolio discusses the need for important tools to local and regional entities building resilience and to encourage collaboration within and across these regions. More than 100 separate detailed actions are listed by the lead state agency tasked with implementing them to ensure California water systems work for communities, the economy, and the environment. The suggested actions would be implemented based on priority and to the extent resources are available.

In review of the Draft Portfolio to relation to IRWM, some of the detailed actions reference IRWM as follows:

> *20.1 Build on the Integrated Regional Water Management Program and other regional efforts to align climate scenarios and expand watershed-scale coordination and investments that contribute*

to water resilience. Emphasize outcome-based management that builds on integrated planning, action, and monitoring across sectors, including groundwater sustainability, upper watershed land management, and climate resilience.

20.2 Structure funding sources to reduce the hurdles for water projects that reflect integrated solutions, produce multiple benefits, and improve watershed function.

20.3 Support the capacity, participation, and full integration of tribal governments and underrepresented communities in regional planning processes

Though the list of 100+ recommended implementation actions recommended in the Draft Portfolio appears to be a thorough list of State agency actions with reliance on regional partnerships to implement, it doesn't state how this will specifically occur nor support being implemented through the existing State accepted 48 IRWM regions located across the state. Originally, the draft portfolio also seemed to encourage the use of regional implementation and multi-benefit solutions as expressed in the foundational seven principles identified in the Executive Order N-10-19 as indicated below:

- Prioritize **multi-benefit approaches** that meet several needs at once;
- Utilize natural infrastructure such as forests and floodplains;
- Embrace innovation and new technologies;
- Encourage **regional approaches** among water users **sharing watersheds**;
- Incorporate successful approaches from other parts of the world;
- **Integrate** investments, policies, and programs across state government; and
- **Strengthen partnerships** with local, federal and tribal governments, water agencies and irrigation districts, and other stakeholders.

By listing out individual detailed actions with specific state agencies responsible, the portfolio appears minimize the value of addressing solutions through an "integrated approach." Many of the listed action items are single purpose actions by the State agencies without focusing on the IRWM partnerships and its tenets of regional "integration", "collaboration" and "multi-benefit" solutions. The draft portfolio instead gives some mention to IRWM without recognizing that the Portfolio would be better served through "regional resiliency partnerships" rather than just giving this passing mention.

On November 20, 2019, leaders of ACWA, the Roundtable of Regions, DWR, and the State Water Resources Control Board met in Burbank for an IRWM Summit organized by the Roundtable of IRWM Regions. Feedback was received from various speakers including Art Hinojosa, Division Chief, Division of Regional Assistance, DWR; Melissa Sparks-Kranz, ACWA Regulatory Advocate; Carmel Brown, Branch Chief, Financial Assistance Branch, DWR**;** and Debbie Franco, Senior Advisor, Water and Rural Affairs, Governor's Office of Planning and Research, who emphasized that the concept of "regional resilience" will be a major focus of the Water Resilience Portfolio. The Summit also included information about four resources bonds under development for consideration by the electorate in Year 2020.

The list of resources bonds and lead legislators or organizers is shown below:

- SB 45 (Allen -- Los Angeles) $4.1 B has been in print since January.
- AB 352 (E. Garcia -- Coachella) $3.9 B "Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2020."

- AB 1298 (Mullin – San Francisco) No amounts specified yet. "Climate Resiliency, Fire Risk Reduction, Recycling, Groundwater and Drinking Water Supply, Clean Beaches, and Jobs Infrastructure Bond Act of 2020.
- Joseph Caves Initiative (signature petition) $7.8 B.

Unfortunately, none of these early resource bonds at this stage reflect funding support for IRWM programs and projects like past water bonds such as Proposition 50, Proposition 84 and Proposition 1. Recognizing the significant benefit of the IRWM approach to produce multi-benefit solutions to water resources challenges facing this region and others across the State, feedback is needed from IRWM committees, practitioners and stakeholders to ensure that IRWM planning, project and programs continue. Further, in discussions with the Roundtable of Regions and Nancy Vogel, lead author of the Portfolio, Ms. Vogel emphasized it is up to the IRWM regions and their supporters to work with legislators now to craft text in the proposed future resources bonds to include the IRWM role and funding support to help implement the Portfolio partnerships.

On January 10th, SAWPA was pleased to report that a $4.75B Climate Resilience Bond is proposed under the Governor's Budget for FY2020-21. Out of the $4.75B, $2.925B has been designated for Drinking Water, Flood and Drought with $1B designated for Regional and Inter-regional Water Resilience. Though the funding is again not specifically defined to IRWM region or IRWM Funding Areas, this is a promising sign and will help with discussions with the State legislators for a new bond.

Staff has prepared a draft letter indicating the value and benefit of IRWM and why it should be included in future resource bonds. The letter emphasizes that we need to address the State Portfolio Item 20.2 as well as the Governor's proposed water resilience recommendations for a new Climate Resilience Bond. Based on feedback from the SAWPA Member Agency General Managers, they too were supportive of IRWM support as long as funding support for other individual water sectors was also defined such as water quality improvement, recycling, desalting, stormwater mgt., etc. Recognizing that multiple resources bonds are under development in the legislature, through the signature petition process and now by the Governor, SAWPA recommends that funding for Statewide IRWM and other water needs planning, programs and projects should be included in these bonds.

Staff recommends authorization and signature of the attached letter to legislators to serve as a unified voice in support of IRWM and general water funding in any future resources bond benefiting the Santa Ana Funding Area and the SAWPA IRWM region.

Attachments:
1. PowerPoint Presentation
2. SAWPA Support Letter
3. Roundtable White Paper: Funding for the IRWM Program to Ensure Water Resilience in California
4. Roundtable White Paper: The Need for Baseline Funding for Local IRWM Program Management
5. ACWA IRWM Policy Principles
6. Map of IRWM Regions
7. Governor's Budget Summary FY2020/21 – Climate Resilience Bond excerpt

IRWM Support in Future 2020 Resources Bonds

Mark Norton, Water Resources & Planning Manager

SAWPA Commission | January 21, 2020

Item No. 5.B.

OWOW and SAWPA Goals and Objectives

OWOW Plan Update 2018 Goals are as follows:

- Achieve resilient water resources …
- Ensure high-quality water for all people and the environment.
- Preserve and enhance recreational areas, open space, habitat, and natural hydrologic function.
- Engage with members of disadvantaged communities and associated supporting organizations …
- Educate and build trust between people and organizations.
- Improve data integration, tracking, and reporting…

SAWPA's OWOW Purpose and Objectives:

- 4. Maximize funding opportunities and policy influence by uniting efforts watershed wide.

SAWPA's approach—coordination, cooperation, and integration of water agencies to pool resources and manage water at the basin scale—is one of California's best models for integrated water management.

—Public Policy Institute of California 2011, "Managing California's Water – From Conflict to Reconciliation"

ACWA Support of Integrated Regional Water Management Principles

1. ACWA supports IRWM as a tool to assist local water agencies in solving short- and long-term water management challenges through an integrated planning approach.
5. ACWA supports the continued use of IRWM governance structures, known as Regional Water Management Groups (RWMGs), to build on the well-established, inclusive stakeholder outreach and facilitation efforts through IRWM.

Governor's Executive Order to Create Water Resilience Portfolio

Seven Stated Foundational Principles

- Prioritize **multi-benefit approaches** that meet several needs at once;
- Utilize natural infrastructure such as forests and floodplains;
- Embrace innovation and new technologies;
- Encourage **regional approaches** among water users **sharing watersheds**;
- Incorporate successful approaches from other parts of the world;
- **Integrate** investments, policies, and programs across state government; and
- **Strengthen partnerships** with local, federal and tribal governments, water agencies and irrigation districts, and other stakeholders.

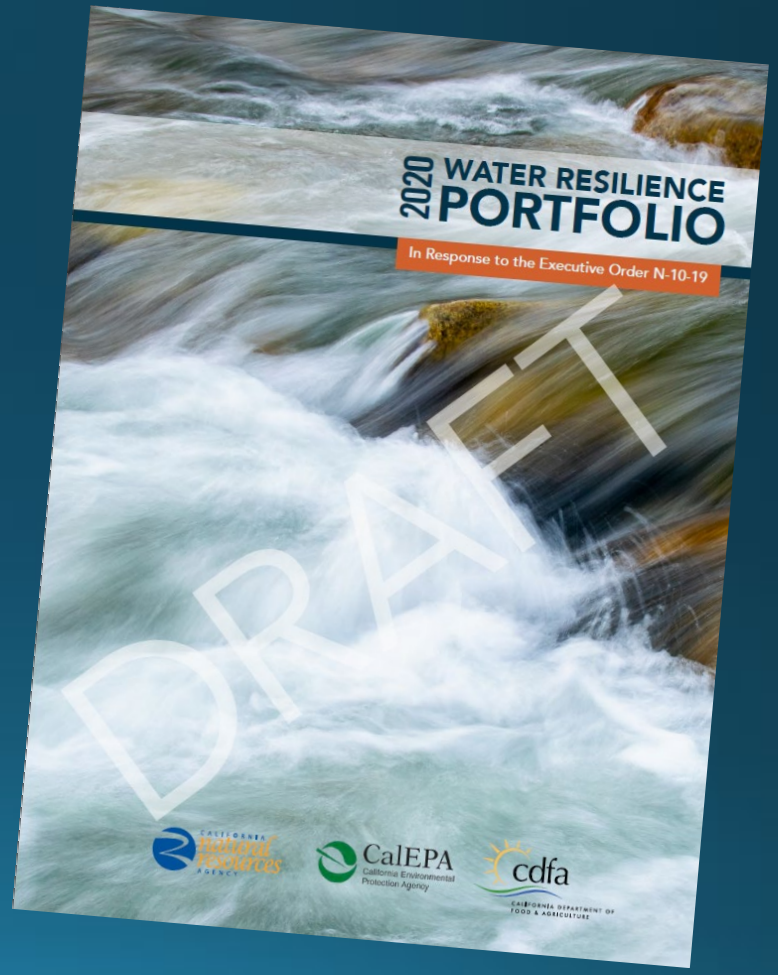
Draft 2020 Water Resilience Portfolio

Only three out of 100 + specific actions mention IRWM as follows:

- *20.1 Build on the Integrated Regional Water Management Program and other regional efforts to align climate scenarios and expand watershed-scale coordination and investments that contribute to water resilience.*

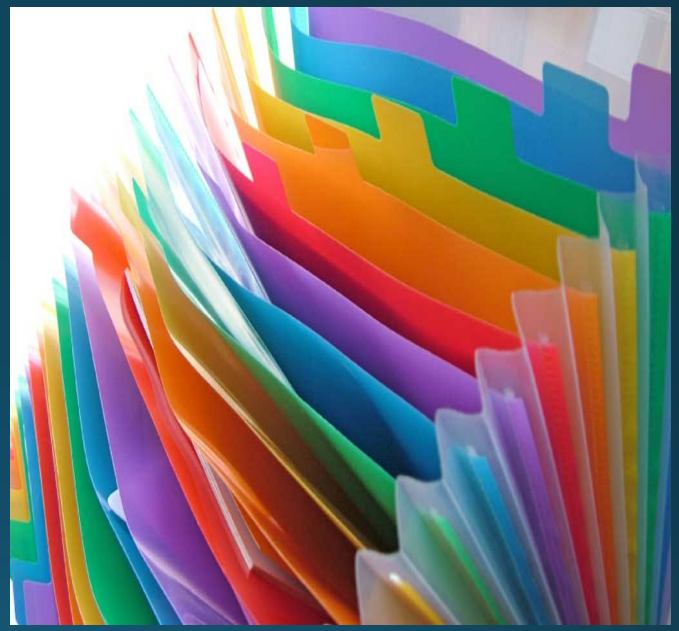
- *20.2 Structure funding sources to reduce the hurdles for water projects that reflect integrated solutions, produce multiple benefits, and improve watershed function.*

- *20.3 Support the capacity, participation, and full integration of tribal governments and underrepresented communities in regional planning processes*



Draft Water Resilience Portfolio Approach

- *"Includes 100 + separate detailed actions to ensure California water systems work for our communities, our economy, and our environment."*
- *"No quick or singular fix will safeguard our communities in coming decades and preserve access to water for all Californians. Rather, advanced planning, thoughtful investments, integrated management, and unprecedented collaboration will prepare us for the future."*



Concerns with Portfolio Approach

- Though the list of detailed actions with specific responsible state agencies is thorough, it appears to sidestep how the actions would be addressed through regional partnerships.
- Many listed action items appear to be single purpose, siloed actions reflecting a move away from vision of IRWM and tenets of "integration", "collaboration" and "multi-benefit" solutions at "regional scale".
- Insufficient merit of the IRWM approach as an effective measure to address partnership implementation at the regional scale.

Pillars of the OWOW Plan reflect water resource strategies that integrate into multi-benefit solutions

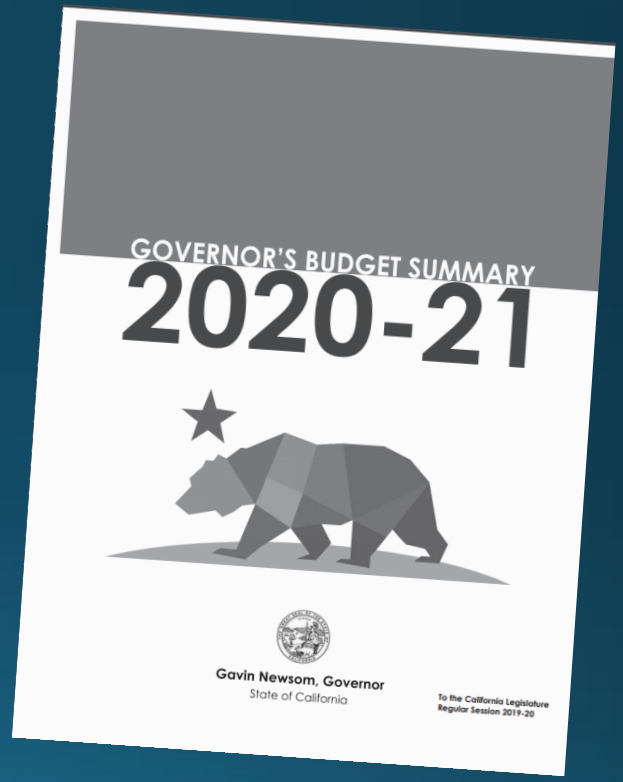
Broad Planning/Management Guidance Strategies

Four Resources Bonds under development now

- SB 45 (Allen -- Los Angeles) $4.1 B has been in print since January.
- AB 352 (E. Garcia -- Coachella) $3.9 B "Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2020."
- AB 1298 (Mullin – San Francisco) No amounts specified yet. "Climate Resiliency, Fire Risk Reduction, Recycling, Groundwater and Drinking Water Supply, Clean Beaches, and Jobs Infrastructure Bond Act of 2020.
- Joseph Caves Initiative (signature petition) $7.8 B.

Governor's Budget – New Climate Resilience Bond

- Jan. 3rd Governor's Budget Summary FY 2020/21 released
- Proposes including a $4.75 billion Climate Resilience Bond
  - $2.925 billion or 62% of bond funding would be directed to Drinking Water, Flood and Drought.
    - Within the $2.925 billion, $1 billion is proposed for Regional and Inter-regional Water Resilience
    - This could include but not limited to IRWM projects.



SAWPA Member Agency GMs Feedback

- GMs are supportive of IRWM funding and inclusion in any future Climate Resilience or Resources Bond
- GMs felt SAWPA should also advocate for funding support for individual water sectors as part of the overall water funding support. This would include such individual categories as water quality improvement, water recycling, desalting, stormwater management, etc.
- Letter now reflects this additional request.

Recommendation:

Authorize staff to send the Integrated Regional Water Management (IRWM) 2020 Resources Bond Support Letter to pertinent legislators to indicate funding support for IRWM in all future 2020 resources bonds.

Santa Ana Watershed Project Authority

OVER 50 YEARS OF INNOVATION, VISION, AND WATERSHED LEADERSHIP

SAWPA

January 23, 2020

Assemblymember First Name, Last Name
State Capitol
P.O. Box 942849
Room XXXX
Sacramento, CA 94249-0056

RE: Inclusion of IRWM in 2020 Resources Bond

Dear Assemblymember Last Name:

We are writing on behalf of the Santa Ana Watershed Project Authority which serves as the lead for the Integrated Regional Water Management group for the Santa Ana River Watershed, an area that is home to over six million people and Southern California's largest river and coastal stream system. Since 2007, SAWPA along with the SAWPA OWOW Steering Committee has convened as this watershed's Regional Water Management Group (RWMG) to develop watershed-wide plans, set priorities, approve project funding, and resolve conflicts between upstream and downstream stakeholders.

We understand that the California legislature is currently working on a resources bond for the November ballot and that many State leaders want it to reflect many of the principles in Governor Gavin Newsom's Water Resilience Portfolio (Portfolio) as well as the Governor's proposed Climate Resilience Bond described in the Governor's Budget Summary for FY2020/21. We request the following items be included in this 2020 Water Bond:

1) The IRWM approach be the foundation, utilizing IRWM Regions as the primary means to execute the regional resilience activities defined in the Portfolio and the Climate Resilience Bond,
2) $1 billion in State-wide funding for IRWM be allocated IRWM Funding Areas as defined under Proposition 1 Water Bond along with funding for individual water sector needs.

The Governor's Executive Order N-10-19 directed that the Portfolio embody seven priorities such as concentrating on multi-benefit approaches and encouraging regional approaches among water users sharing watersheds. As a means to implement the Executive Order, the Committee strongly supports the principles of the Executive Order be reflected in any 2020 Resources Bond as results show that water resources in California are most effectively managed at a system and regional scale, rather than by program type.

As you know, the draft Portfolio includes a major focus on addressing climate resiliency, regional approaches, underrepresented community water needs and broader Statewide water supply needs. The Committee recommends that IRWM regions serve as the foundation for implementing the Portfolio by taking the goals and objectives; and developing integrated and regional projects through the local collaborative networks. The IRWM regions and water agencies across the State can use the requested $1 billion in State-wide funding to incentivize these multi-benefit projects that focus on tenets of the Portfolio such as "enabling a faster pace of adaptation and coordination," especially regarding the new challenges of climate change. Further, funding support for individual water sectors such as water quality improvement, water recycling, desalting and stormwater management is also encouraged.

IRWM has a proven history of success. **In the Santa Ana River Watershed alone, Proposition 50 and Proposition 84 IRWM Program grant dollars matched by local funding have implemented over 43 projects in the watershed that have created 200,000 acre-feet of new water supply, reduced flood risk by over $91 million, rehabilitated 4,700 acres of habitat and created over 11,000 construction related jobs.** Our integrated planning approach, referred to as OWOW, involves the active involvement of stakeholders from across the watershed such as state, local and federal agencies; water providers; wastewater agencies; environmental and other community organizations; disadvantaged and other under-represented communities; Tribes; academics; and business and labor leaders. Combined, OWOW and IRWM regions across the State have provided a high rate of return on these investments of public money: portfolio approaches implemented by IRWM groups using Proposition 84 and 50 funding at the local level represent an investment of 3.5 times that of the state through local grant funding match and coordinated project planning (approximately $4.2 billion local versus $1.3 billion state).

As the Legislature works to develop a 2020 Resources Bond, it is imperative that the approach to water resiliency is integrated across all aspects of water resources management. With a rapidly changing climate and associated risks on the horizon, agencies' first reaction could be to use familiar approaches from the past – reinforce established regulatory silos and attempt to address problems in a piecemeal fashion. Through the support of IRWM regions and water needs in general, we can satisfy the broad structure of regional collaboration necessary to assist the state in implementing the Governor's Portfolio and Budget and serve as an umbrella for water resources management.

If you have any questions or wish to discuss these ideas further, please contact SAWPA Water Resources and Planning Manager Mark Norton at mnorton@sawpa.org, or (951) 354-4221.

Respectfully,

Ronald W. Sullivan, Chair
SAWPA Commission

Attachments:

- Roundtable White Paper: Funding for the IRWM Program to Ensure Water Resilience in California
- Roundtable White Paper: The Need for Baseline Funding for Local IRWM Program Management
- ACWA IRWM Policy Principles
- Map of IRWM Regions

Funding for the IRWM Program to Ensure Water Resilience in California

White Paper by the Integrated Regional Water Management Roundtable of Regions

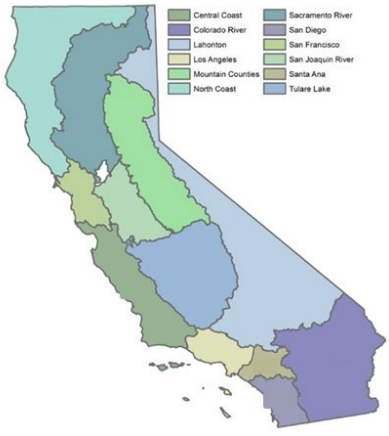
California's Integrated Regional Water Management (IRWM) regions have established networks and formal decision-making bodies, referred to as Regional Water Management Groups (RWMG), both of which are composed of local water agencies, non-profits, tribal representatives, state agencies, and disadvantaged community leaders. IRWM planning leads to cooperative "big picture" water planning at the regional level, improved trust between stakeholders, multiple benefit projects and other state-wide benefits as identified in Figure 1.

Figure 1: Diagram from DWR's *Stakeholders Perspectives* (2017)

Historically, individual water agencies have pursued smaller, localized water projects and often competed against neighboring agencies for water and State grant funding. With this inclusive systems approach, local agencies and stakeholders, can act efficiently to solve California's water challenges listed in Governor Gavin Newsom's Executive Order N-10-19 on the Water Resilience Portfolio such as severely depleted groundwater basins and access to safe drinking water.

The Roundtable believes the IRWM approach is an effective business model for the management of water resources to ensure sustainability and resilience. Ultimate implementation of the results of the regional plans that reflect State-wide strategies, such as those listed in the Executive Order and the draft Water Resilience Portfolio released on January 3, 2020, occurs efficiently because conflicts are minimized and resources are focused on agreed-upon priorities. For these reasons the Roundtable is advocating for $1 billion in funding to be included in the 2020 Water Bond for IRWM.

Figure 2: Funding Areas Used in Proposition 1



What Would the $1 Billion in Funding Be Used For?

IRWM regions can use its networks of actively engaged stakeholders and program staff, that manage the long-term IRWM planning efforts, at the local level to implement multi-benefit projects and the Water Resilience Portfolio. This would be done

through two methods: developing and updating long-term regional planning documents and prioritizing projects for funding through various local "calls for projects." The majority of the $1 billion would be provided to competitive projects that are responding to these calls for projects and meet the goals of long-term regional planning documents. The Roundtable supports the use of the 12 Funding Areas, as shown in Figure 2, to apportion the funding as they largely mirror the State's ten established hydrologic regions. We believe the apportionment of funding by Funding Areas supports equity of grant funding across the State particularly for rural areas that are often hit the hardest with resilience challenges but often lack the resources to compete with larger, more heavily urbanized regions.

Like Proposition 1, the Roundtable advocates that on average, local cost share of not less than 50% of the total project costs in a proposal be required. Based on previous levels of bond funding for IRWM, as of December 2016, $1.3 billion in State grants to IRWM regions have been matched by approximately $4.2 billion in local and regional investments.

How Can IRWM Be Enhanced Through the Water Bond?

The Roundtable strongly believes that the IRWM Program should be the major venue for local agencies to rank and determine priority projects that reflect the goals of the Water Resilience Portfolio. IRWM regions across the State can serve as the venue to engage public agencies, non-profits, and other local stakeholders so important projects that implement the portfolio's priorities can be collaboratively identified and funded. The draft Water Resilience Portfolio emphasizes that moving forward, "state-regional partnerships that advance broad, multi-benefit projects are critical to achieving water resilience." With 48 State-recognized IRWM Regions, approximately 87% of the State's land area, and 99% of the population are contained within a region. Executive Order N-10-19 embodies priorities such as concentrating on multi-benefit approaches and encouraging regional collaboration among water users within a watershed. The IRWM regions are well positioned to work with state agencies tasked with implementing the portfolio's more than 100 separate actions and local stakeholders.

This new investment in IRWM could also be apportioned based on multiple factors such as population by Funding Areas, area of disadvantaged communities and/or the population living in disadvantaged communities. IRWM regions have been at the forefront of engagement with disadvantaged communities with the passage of Proposition 1 and the implementation of various disadvantaged community involvement programs. These programs have led to regional evaluations of community water challenges and implemented environmental and facility planning so that projects that benefit disadvantaged communities can ultimately be implemented. Bond funding would ensure these important projects are constructed. The draft portfolio refers to these projects as "regional supply diversification," which is another way to describe and interpret multi-benefit and regional projects. Some of the projects listed in the draft portfolio include water use efficiency projects that achieve cost efficiencies and benefit the environment, or groundwater recharge projects that act as a buffer against drought and climate change.

The concept of IRWM ensures multiple water management strategies, like water use efficiency and groundwater recharge, are integrated to solve multiple priority challenges. With new funding, the Roundtable wants to ensure that IRWM is practiced not just at the regional level but also between state agencies. The Roundtable recommends that all State Water Resource Control Board and Department of Water Resources' programs are aligned to support integrated and regional water management. These programs include California Water Plan updates, sustainable groundwater management and climate

change adaptable management. By aligining these programs, state agencies can find opportunities to reduce duplication and streamline reporting requirements. The Roundtable is fully supportive of the draft portfolio's recommendation No. 28 "Institutionalize better coordination across state agencies." In particular, sub-recommendation No. 28.3 focused on finding nexuses between multi-benefit funding programs is an important step in coordination between the eight agencies and departments listed in the draft portfolio.

One of the hallmarks of the IRWM Program is that it funds innovative projects that aren't necessarily eligible for funding under other state and federal grant programs. This tenet is reflected in Chapter 4 of Proposition 1 which states, "Special consideration will be given to projects that employ new or innovative technology or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation." These types of innovative programs include web-based decision support tools focused on water conservation and habitat restoration projects that include benefits beyond their baseline mitigation requirements.

The Roundtable advocates that IRWM funding continue to prioritize these types of innovative projects as well as support programs focused on education and outreach, particularly those efforts led by non-governmental organizations (NGOs). In order to ensure that stakeholders from NGOs and disadvantaged communities stay engaged with regional water planning and project implementation, the State needs to ensure that projects they can lead, which are primarily education and outreach related, are eligible for funding. NGOs that are heavily invested in the communities they serve have great networks and important skillsets that can benefit the same underserved regions the State is focused on through its Water Resilience Portfolio.

The Need for Baseline Funding for Local IRWM Program Management

White Paper by the Integrated Regional Water Management Roundtable of Regions

California's Integrated Regional Water Management (IRWM) regions have established networks and formal decision-making bodies, referred to as Regional Water Management Groups (RWMG), both of which are composed of local water agencies, non-profits, tribal representatives, state agencies, and disadvantaged community leaders. IRWM promotes cooperative, "big picture" water planning at the regional level. Historically, individual water agencies have pursued smaller, localized water projects and often competed against neighboring agencies for water and State grant funding. With this inclusive systems approach, local agencies and stakeholders, can act efficiently to solve California's water challenges such as severely depleted groundwater basins and access to safe drinking water.

In order to ensure the principles of IRWM continue such as regional water planning and outreach to overburden communities, the IRWM Roundtable of Regions recommends that **$13 million** in baseline funding be provided to IRWM regions to support the functions of local program staff.

What Would Baseline Funding Support?

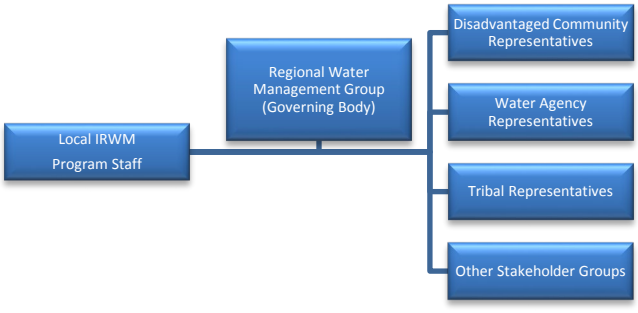
IRWM regions rely on the hard work of volunteers, elected officials, tribal representatives, and public agency and non-profit staff. Often, one local agency in the region will be designated as the lead for managing timelines, the finalization of planning documents, data analyses, and staffing RWMGs. Local IRWM regions set water-related goals and targets, and track data related to unsafe drinking water, major flood risks, depleted aquifers, and endangered species issues. IRWM regions achieve consensus by bringing plans and multi-benefit projects to RWMGs and coordinate with agencies like the Department of Water Resources, who manages the IRWM grant program, and regulatory agencies that approve projects.

THE WORK OF AN IRWM REGION

IRWM groups perform the following functions:

- Watershed-based planning and project development,
- Education and outreach,
- Regular meetings for governance and stakeholder engagement,
- Outreach through websites, social media and mailers, and
- Data collection and watershed-based tracking.

Example IRWM Region Organizational Chart



Baseline funding from the State would support these tasks especially in regions where the local IRWM program staff are from smaller organizations and may lack the capacity to implement these tasks.

Why is Baseline Funding Needed?

Many of the IRWM regions, especially the more rural ones, have historically relied on State funding to manage their IRWM Program. For example, the Inyo-Mono IRWM Phase II Plan Update 2019 is a result of more than eleven years of public meetings and open, transparent communication among stakeholders about important water related issues faced by the region. The program staff in that region also manage a 41-member regional water management group which makes decisions on project priorities and funding. Much of that work was funded by Proposition 84 and Proposition 1 which were passed by the California electorate in 2006 and 2014.

Some of the State's IRWM regions encompass large areas, such as the North Coast Resource Partnership, which covers a 19,000 square mile area that includes tribal lands and the counties of Del Norte, Humboldt, Trinity, Siskiyou, Modoc, Mendocino and Sonoma. To develop meaningful planning documents and implement projects, such as the Proposition 1 Disadvantaged Community Involvement Program, program staff from the Mojave IRWM led seven public meetings and workshops across the 5,400 square mile high desert area to increase public participation and obtain meaningful input by targeting disadvantaged communities.

Included in the Assembly Bill 1755 Stakeholder Working Group Synthesis Report: Data for Water Decision Making is the recommendation information, data, and tools are essential for ensuring that decisions and actions result in intended outcomes, as well as measure progress toward accomplishing those outcomes. Often State and local water managers do not have access to the data and facilitation services needed to support regional efforts toward sustainable and integrated water management. To solves these issues, baseline funding for the IRWM program managers would ensure informed decisions are made by local and State agencies, especially in areas that lack resources such as under-represented and economically disadvantaged communities.

What Amount of State Funding is Needed?

IRWM regions cover more than 87 percent of the State's land area and 99 percent of its population. An amount of $250,000 in funding per region would ensure that the activities of these regions would continue. This amount was recommended as part of the Department of Water Resources' Stakeholders Perspectives document (2017). As shown in the table below, funding for potentially new regions as well as technical assistance by DWR staff is requested. Technical assistance by DWR would include support with tribal outreach, data gathering and monitoring, and solving conflict between stakeholder groups.

Number of Existing IRWM Regions	48
Baseline Funding Per Region	$250,000
Total Funding for Existing Regions	$12,00,000
Additional Funding for New Regions	$1,000,000
DWR Technical Assistance	$5,000,000
Grand Total	**$18,000,000**

INTEGRATED REGIONAL WATER MANAGEMENT

ACWA POLICY PRINCIPLES

PREAMBLE

Integrated Regional Water Management (IRWM) is a voluntary, collaborative effort to plan and implement water management solutions on a regional scale. State lawmakers created the IRWM Planning Act in 2002 to encourage local entities to improve water quality and water supply reliability to meet the state's overall agricultural, domestic, industrial and environmental water needs. IRWM is an efficient model for water management planning. IRWM delivers higher value for investments by utilizing early and collaborative stakeholder processes and prioritizing funding for multi-benefit projects that help diversify a region's water management portfolio. The public water agencies which have engaged in IRWM have significantly invested in this collaborative approach. IRWM provides a path forward to address many of California's major water challenges.

Following are the Association of California Water Agencies' IRWM Policy Principles:

1. Water resources are best managed by local jurisdictions to effectively and efficiently manage water quality and supplies. ACWA supports IRWM as a tool to assist local water agencies in solving short- and long-term water management challenges through an integrated planning approach.

2. IRWM integrates planning across water management sectors, including water supply, water quality, flood management, stormwater, and habitat restoration to achieve regional goals and objectives. Integrated planning results in multi-benefit projects developed in a time- and cost-efficient manner.

3. Local and regional scale planning through IRWM is integral to California's comprehensive water management planning, providing a foundation for the state to achieve its coequal goals of improved water supply reliability and enhanced ecosystem health in an era of climate change.

4. IRWM is a hub for diverse stakeholder engagement at the regional scale. The collaborative partnerships attained through IRWM result in improved water management planning and project development, reducing potential conflicts, and forming regional leadership.

5. ACWA supports the continued use of IRWM governance structures, known as Regional Water Management Groups (RWMGs), to build on the well-established, inclusive stakeholder outreach and facilitation efforts through IRWM. RWMG stakeholder processes result in the balance of diverse interests within a region.

ACWA
Association of California Water Agencies

JULY 2019

www.acwa.com
916.441.4545

CASE STUDIES

Climate Resiliency Planning

VENTURA IRWM

The Watersheds Coalition of Ventura County (IRWM Region) recently completed a collaborative process regarding the impacts of climate change on its region. This process, hosted through IRWM, began with a study conducted by climatologists at the Desert Research Institute who provided scaled down projections for future changes in climate based on accepted climate models. The results are informing development of adaptation strategies and selection of projects/programs for implementation. Two workshops and a series of small group meetings were conducted with local stakeholders and the researchers, resulting in new opportunities and methods to be climate resilient.

Comprehensive Management

UPPER SACRAMENTO-MCCLOUD IRWM

After seven years of writing the Upper Sacramento, McCloud and Lower Pit River IRWM Plan, a diverse group of stakeholders including municipalities, Tribes and community organizations have built an unprecedented level of trust and familiarity in Siskiyou County. With an established foundation for communication and a successful track record of funding projects, the IRWM stakeholders are strengthening their region's capacity to respond appropriately to climate change. Important investments include funding grey and green infrastructure improvement projects in this critical source water area to replenish California's high quality water supply and serve as a giant carbon sink for the state.

Involving Underserved Communities

MOJAVE IRWM

The Mojave IRWM region has partnered with a non-profit who specializes in assisting rural disadvantaged water systems. Through strong, transparent regional support and oversight via local IRWM plan governance structure, the regional Small Water Systems Assistance Program consistently delivers technical, managerial and financial support to these traditionally underserved utilities in an effort to make them sustainable moving forward. The Program consistently attracts financial support from a variety of local, state level and federal sources and serves approximately 40 disadvantaged small water systems in the region.

Managing at a Watershed System Scale

SANTA ANA WATERSHED PROJECT AUTHORITY IRWM

In the Santa Ana River watershed, the One Water, One Watershed (OWOW) Program used IRWM grants to encourage agencies to focus on actions to benefit the entire watershed. The result was the Santa Ana River Conservation and Conjunctive Use Project, which combines demand reduction with groundwater banking to increase resilience. The heart of the project is collaboration to optimize the use of multiple distinct groundwater basins in order to store imported water during wet years, and then produce dry year supplies to benefit all the partners. The partners include the five large water agencies in three different counties whose service areas comprise the entire urbanized part of the watershed.

6. RWMGs organize transparent processes that encourage the involvement of and input from underserved and disadvantaged communities (DACs), Tribes, environmental and non-governmental organizations (NGOs), and interested stakeholders into local water resources decision-making, planning and management. ACWA supports the role of RWMGs in working with DACs, Tribes, academia and NGOs.

7. IRWM is a voluntary program that can help achieve regulatory compliance through project development and implementation. State or federal entities should streamline permit processes or allow flexibility on the development of regulatory requirements for projects supported by IRWM. Such regulatory alignment supports efficient, integrated water resource management.

8. Projects developed and funded through IRWM result in measurable benefits for local and regional entities. Benefits and regional data for these projects are recommended to be integrated with statewide water resource management efforts for accountability, stewardship and transparency purposes, where applicable.

9. Streamlined administrative practices are essential for continued success of IRWM. The Department of Water Resources, other state and federal funding agencies, and RWMGs must partner, analyze and improve the efficiency and consistency of current grant administration and plan review practices.

10. Successful implementation of IRWM throughout California will require continued federal, state, regional, local and private investments. ACWA further supports increased funding for IRWM and encourages funding entities to align funding criteria and cycles to encourage IRWM participation.

11. ACWA encourages RWMGs to leverage multiple funding sources of different types and purposes, including but not limited to funding from federal, state, local, public, and private sources. The development of diverse funding portfolios at the regional scale strengthens the ability for local entities to continue to develop integrated, multi-benefit solutions.

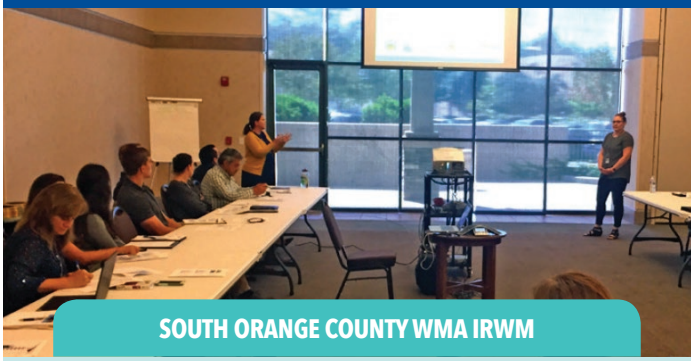
12. ACWA will continue to coordinate on IRWM with interested entities and encourages other statewide associations, local and regional entities, interest groups and the state to educate and collaboratively advocate regarding why IRWM enhances water resource planning and project development efforts statewide.

SGMA & IRWM Facilitation

SAN DIEGO IRWM

Through IRWM, the Yuima Municipal Water District is facilitating the partnership of six water districts and resource conservation districts and the San Luis Rey Indian Water Authority, an intertribal organization formed by five San Luis Rey basin tribes. The groundwater sub-basin aquifers are depleted, putting stress on water supplies for the many overlying disadvantaged communities. These stakeholder engagement efforts are the first steps toward developing a Groundwater Sustainability Plan for the Upper San Luis Rey Valley Groundwater Sub-basin, located in the Pauma Valley in North San Diego County. Regional-scale stakeholder engagement through IRWM can continue to support SGMA efforts.

Inclusive Governance



SOUTH ORANGE COUNTY WMA IRWM

The SOC Watershed Management Area (WMA) IRWM is a 22-member agency cooperative agreement comprising the backbone for the funding and governance structure for IRWM stakeholder activities that are developed and then successfully implemented through projects for the past decade. The IRWM Group and other NGO, regulatory and municipal representatives identified the need for a watershed-based, stakeholder-driven project development framework, providing opportunities for water, wastewater, stormwater, and groundwater representatives to coordinate on a regional scale with a data-driven planning process that helps meet statewide resiliency goals.

CASE STUDIES

Measurable Benefits

SANTA BARBARA COUNTY IRWM

The City of Santa Barbara completed its Recycled Water Enhancement Project through IRWM planning and funding efforts. The Project supports regional priorities of protecting, conserving, and augmenting water supplies by upgrading the City's recycled water plant in order to meet turbidity requirements so the City no longer needs to use potable "blend water" to serve its recycled water customers, thus reducing the City's potable water demand by up to 990 acre-feet per year.

Funding Portfolios

CABY IRWM

The Cosumnes, American, Bear, Yuba (CABY) IRWM group has successfully attracted more than $20 million from a variety of sources, including the California Department of Water Resources for a series of integrated water management programs, developing a broad funding portfolio. One example is the CABY-sponsored project at the Malakoff Diggins State Historic Park, a collaborative project with the state, U.S. Geological Survey, U.S. Forest Service, and The Sierra Fund assessing an historic gold mine for remediation to improve water quality in the Yuba River.

Funding Alignment

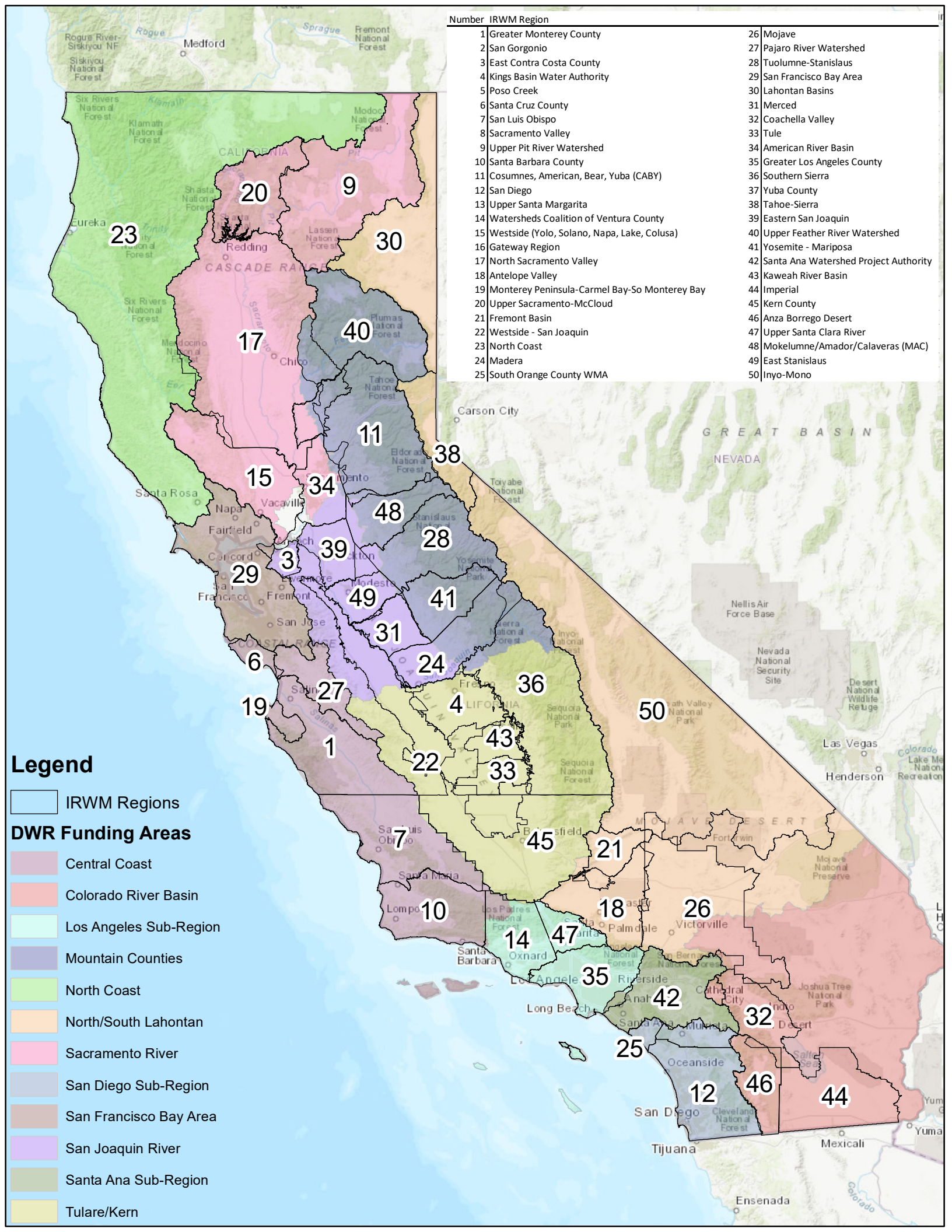
GREATER LOS ANGELES COUNTY IRWM

The Safe, Clean Water Program is a Los Angeles-based special property tax that passed by voters in November 2018. This Program was developed collaboratively with stakeholders to create an expenditure plan to implement eligible municipal, regional, and district-wide programs and projects for improved water supply, water quality and community investment. Implementation is ongoing and includes integrated regional governance committees, broad stakeholder input, DAC consideration, and transparency and accountability. The result from this Program will be up to $300 million in annual revenue starting in Spring 2020.

Investing in Ecosystems

INYO-MONO IRWM

The Inyo-Mono IRWM Region received funding for a stream stabilization study for the Oak Creek watershed on the eastern slope of the Sierra Nevada in collaboration with the Inyo National Forest and the Fort Independence Indian Reservation. The study serves as the planning foundation for the restoration of the Oak Creek watershed, which experienced a severe flood and mudslide following a fire in the watershed in previous years.

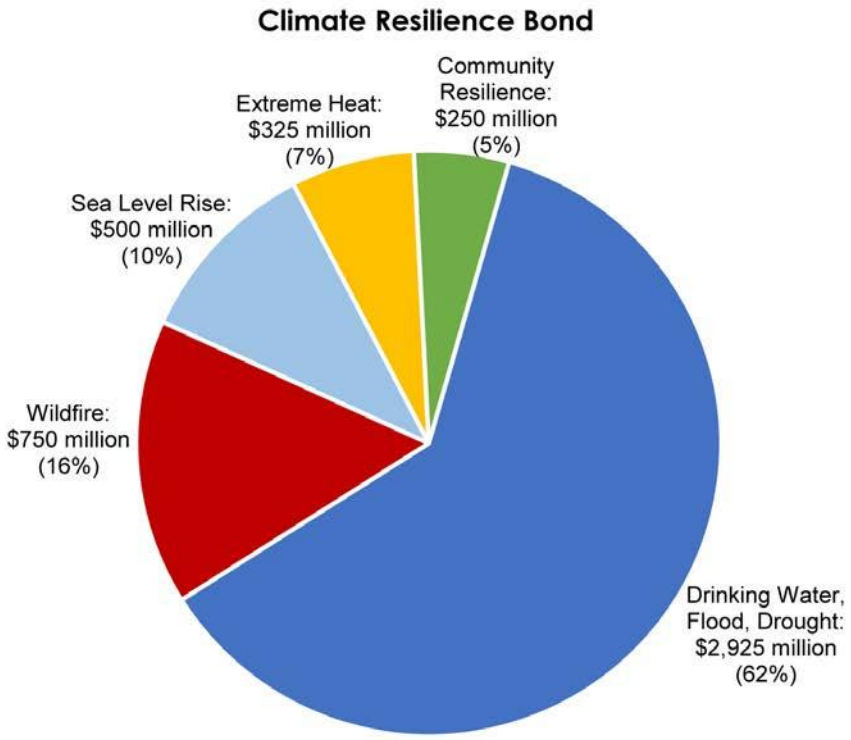

Number IRWM Region
1 Greater Monterey County
2 San Gorgonio
3 East Contra Costa County
4 Kings Basin Water Authority
5 Poso Creek
6 Santa Cruz County
7 San Luis Obispo
8 Sacramento Valley
9 Upper Pit River Watershed
10 Santa Barbara County
11 Cosumnes, American, Bear, Yuba (CABY)
12 San Diego
13 Upper Santa Margarita
14 Watersheds Coalition of Ventura County
15 Westside (Yolo, Solano, Napa, Lake, Colusa)
16 Gateway Region
17 North Sacramento Valley
18 Antelope Valley
19 Monterey Peninsula-Carmel Bay-So Monterey Bay
20 Upper Sacramento-McCloud
21 Fremont Basin
22 Westside - San Joaquin
23 North Coast
24 Madera
25 South Orange County WMA
26 Mojave
27 Pajaro River Watershed
28 Tuolumne-Stanislaus
29 San Francisco Bay Area
30 Lahontan Basins
31 Merced
32 Coachella Valley
33 Tule
34 American River Basin
35 Greater Los Angeles County
36 Southern Sierra
37 Yuba County
38 Tahoe-Sierra
39 Eastern San Joaquin
40 Upper Feather River Watershed
41 Yosemite - Mariposa
42 Santa Ana Watershed Project Authority
43 Kaweah River Basin
44 Imperial
45 Kern County
46 Anza Borrego Desert
47 Upper Santa Clara River
48 Mokelumne/Amador/Calaveras (MAC)
49 East Stanislaus
50 Inyo-Mono
Legend
IRWM Regions
DWR Funding Areas
Central Coast
Colorado River Basin
Los Angeles Sub-Region
Mountain Counties
North Coast
North/South Lahontan
Sacramento River
San Diego Sub-Region
San Francisco Bay Area
San Joaquin River
Santa Ana Sub-Region
Tulare/Kern
Medford
Eureka
Redding
Chico
Santa Rosa
Napa
Vacaville
Fairfield
Concord
San Francisco
Fremont
San Jose
Modesto
Fresno
Bakersfield
Santa Maria
Lompoc
Oxnard
Los Angeles
Long Beach
Anaheim
Riverside
Palmdale
Victorville
Barstow
Oceanside
San Diego
Tijuana
Ensenada
Mexicali
Yuma
Carson City
Las Vegas
Henderson
Nellis Air Force Base
Nevada National Security Site
Death Valley National Park
Joshua Tree National Park
Mojave National Preserve
Sequoia National Forest
Sequoia National Park
Yosemite National Park
Lassen National Forest
Shasta National Forest
Six Rivers National Forest
Klamath National Forest
Plumas National Forest
Tahoe National Forest
Eldorado National Forest
Stanislaus National Forest
Inyo National Forest
Sierra National Forest
Los Padres National Forest
San Bernardino National Forest
Cleveland National Forest
Toiyabe National Forest
Fort Irwin
Salton Sea
Colorado
Lake Mead National Recreation
Desert National Wildlife Refuge
CALIFORNIA
NEVADA
GREAT BASIN
CASCADE RANGE
COASTAL RANGE
MOJAVE DESERT

Climate Budget
(Dollars in Millions)

Funding Mechanism	2020-21 Total	5 Year Total
Climate Resilience Bond	-	$4,750
Cap and Trade Expenditure Plan	$965	$4,825
Climate Catalyst Fund	$250	$1,000
General Fund One-Time Investments	$169	$169
General Fund Ongoing Expenditures	$35	$315
Existing Bond and Special Fund Expenditures	$308	$1,424
Total	**$1,727**	**$12,483**

CLIMATE RESILIENCE BOND

The Administration is proposing a $4.75 billion climate resilience bond for the November 2020 ballot to support investments over the next five years to reduce specific climate risks across California through long-term investment in natural and built infrastructure, especially in the state's most climate-vulnerable communities. The bond is structured based on climate risks, and approximately 80 percent of the funds are allocated to address immediate, near-term risks (floods, drought, and wildfires), while the remaining funds lay the groundwork for addressing long-term climate risk (sea level rise and extreme heat). The bond aligns with the Administration's draft Water Resilience Portfolio in addressing drought and flood risks, and also makes strategic investments in community resilience. If approved by the voters, the bond will help the state move toward achieving carbon neutrality and carbon sequestration goals, and provide funding for programs that result in multiple benefits, leverage non-state funding, and help address liabilities such as the Salton Sea. For additional information on the draft Water Resilience Portfolio, see the Infrastructure chapter.


Climate Resilience Bond
Community Resilience: $250 million (5%)
Extreme Heat: $325 million (7%)
Sea Level Rise: $500 million (10%)
Wildfire: $750 million (16%)
Drinking Water, Flood, Drought: $2,925 million (62%)

Climate Resilience Bond
(Dollars in Millions)

Investment Category	Department	Program	Amount
Drinking Water, Flood, Drought	Department of Water Resources / State Water Resources Control Board	Regional and Inter-regional Water Resilience	$1,000
	Department of Water Resources	Sustainable Groundwater Management	$395
	State Water Resources Control Board	Safe Drinking Water	$360
	Department of Water Resources	Flood - Urban/USACE Projects	$340
		Flood - Systemwide Multi-benefit	$270
	Natural Resources Agency	Salton Sea	$220
	California Department of Food and Agriculture	Environmental Farming Incentive Program	$200
	Department of Fish and Wildlife	Enhanced Stream Flows and Fish Passage	$140
		Subtotal	$2,925
Wildfire	Natural Resources Agency, CAL FIRE, and Office of Emergency Services	Hardening of Critical Community Infrastructure	$500
	CAL FIRE	Forest Health	$250
		Subtotal	$750
Sea Level Rise	Ocean Protection Council	Coastal Wetland Restoration	$320
		Nature-Based Solutions to Build Resilience	$130
		Demonstration Projects to Protect Critical Infrastructure	$50
		Subtotal	$500
Extreme Heat	Natural Resources Agency	Urban Greening and Forestry	$200
	Strategic Growth Council	Cool Surface Materials	$125
		Subtotal	$325
Community Resilience	Strategic Growth Council	Community Resilience Planning	$25
		Community Resiliency Centers	$225
		Subtotal	$250
		Total	**$4,750**

DRINKING WATER, FLOOD, AND DROUGHT

Across various categories of water resilience approaches, 62 percent of the bond focuses on reducing risks to communities from climate impacts on water systems,

including floods, droughts, and degraded drinking water quality. The bond takes a regional and integrated state approach to these issues, recognizing that each area of the state faces different challenges and opportunities. These funds will be allocated to:

- Regional and Inter-regional Water Resilience—$1 billion to support various water management programs and projects with a focus on regional and inter-regional water projects, including but not limited to: Integrated Regional Water Management projects; multi-benefit stormwater management; wastewater treatment; water reuse and recycling; water use efficiency and water conservation; water storage; water conveyance; watershed protection, restoration, and management; and water quality. This funding specifically supports the regional resilience approach identified in the draft Water Resilience Portfolio.
- Sustainable Groundwater Management—$395 million to support local groundwater sustainability agencies implementing projects and programs related to the groundwater sustainability plans for critically overdrafted basins.
- Safe Drinking Water—$360 million to provide grants and loans to disadvantaged communities to improve access to safe drinking water, including funding capital infrastructure costs for improved water supplies, treatment, and distribution to make vulnerable communities more resilient to the effects of climate change.
- Flood Control: Urban/U.S. Army Corps of Engineers Projects—$340 million for Urban Flood Risk Reduction projects that provide the projected state cost share needs for various priority projects through 2024-25.
- Flood Control: Systemwide Multi-benefit—$270 million to support multi-benefit flood risk reduction and ecosystem restoration efforts.
- Salton Sea—$220 million to support Salton Sea habitat and air quality mitigation projects necessary for the 2018 Salton Sea Management Plan.
- Environmental Farming Incentive Program—$200 million for grants, incentives, and demonstration projects to enhance agricultural lands for soil health, water quality and efficiency, biodiversity, resiliency, and habitat benefits. Specific projects include healthy soils, water efficiency, nutrient management, and other conservation practices on farms and ranches.
- Enhanced Stream Flows and Fish Passage—$140 million to remove barriers to passage of native fish species and provide enhanced water flows, and reconnect aquatic habitat to help fish and wildlife endure drought and adapt to climate change.

WILDFIRE

In recognition of the unprecedented wildfires the state has experienced in recent years, the bond allocates $750 million to harden critical public infrastructure in high fire-risk communities and makes additional investments in forest health. This forest health investment is complementary to the forest heath and fuel reduction activities supported by the Greenhouse Gas Reduction Fund, and to the investments the Governor and Legislature have required that utilities make in high-risk areas across the state. These funds will be allocated to:

- Hardening of Critical Community Infrastructure—$500 million to facilitate hardening of critical infrastructure, with a focus on low-income areas at significant risk of wildfires. Types of projects include hardening of drinking water infrastructure, emergency shelters (such as fairgrounds), and public medical facilities.
- Forest Health—$250 million to support various long-term forest health projects, including reforestation; conservation easements; activities that promote long-term carbon storage; and upper watershed, riparian, mountain meadow, and inland wetland restoration.

SEA LEVEL RISE

Sea level rise is a chronic long-term threat facing the state's coastal communities. The bond invests $500 million in reducing risks from sea level rise and changing ocean conditions. This complements funding from Proposition 68 and the Greenhouse Gas Reduction Fund to support coastal communities in planning for sea level rise. These funds will be allocated to:

- Coastal Wetland Restoration—$320 million to support the restoration of coastal wetlands, which provide protection against sea level rise and flooding, enhance carbon sequestration, and provide benefits for biodiversity.
- Nature-Based Solutions to Build Resilience—$130 million to support projects that build resilience of ocean ecosystems, such as kelp forests, seagrass habitat, eelgrass beds, and marine protected areas.
- Demonstration Projects to Protect Critical Infrastructure—$50 million to support demonstration projects to protect infrastructure that is vulnerable to sea level rise and flooding such as roads, railways, sewage treatment plans, and power plants.

EXTREME HEAT

Extreme heat is both an immediate and chronic risk to many communities, especially in the Central Valley and inland regions. The bond invests $325 million in proven cooling techniques such as urban greening and urban forestry, as well as in advanced materials for buildings and transportation systems that are designed to reflect rather than trap heat. Both sea level rise and extreme heat are areas where strategic bond investments today will help to create stronger and more resilient infrastructure over the next several decades. These funds will be allocated to:

- Urban Greening and Forestry—$200 million to mitigate urban heat island impacts in the regions most affected by extreme heat. Funds would support urban forestry projects and an expanded urban greening program that supports the creation of green recreational parks in underserved areas.
- Cool Surface Materials—$125 million for a new program to incentivize the use of "cool materials" in projects (e.g. paving and roofing) within vulnerable communities.

COMMUNITY RESILIENCE

Finally, the bond provides $250 million to invest directly in communities to bolster community resilience centers, and support local preparedness, planning, and education around resilience. This community-level support will help to provide a pipeline of locally defined and driven climate resilience projects and programs that are effectively positioned to leverage state, federal, and private investment opportunities, including during emergencies. These funds will be allocated to:

- Community Resilience Planning—$25 million for planning activities to address community-specific climate risks and develop climate resilience plans.
- Community Resiliency Centers—$225 million for the construction of new and retrofitting of existing facilities, including at fairgrounds, to support adaptation needs to address locally relevant climate risks. These centers will serve both as community evacuation and emergency response centers, and to build long-term resilience and recovery operations for local communities.

CAP AND TRADE EXPENDITURE PLAN

Another primary pillar of the Climate Budget is a proposed $965 million Cap and Trade Expenditure Plan. The Budget supports several existing ongoing programs (such as CAL