

Stakeholder Perspectives

*Recommendations for Sustaining and Strengthening
Integrated Regional Water Management*

What does this document do?

It informs readers about stakeholder recommendations on actions needed to sustain and strengthen the practice of integrated regional water management (IRWM) with the goal of achieving regional sustainability.

How was this document developed?

Over a period of three years, the California Department of Water Resources engaged IRWM practitioners and other stakeholders in an extensive, robust, and transparent dialogue about IRWM and its future. Stakeholder engagement efforts followed a strategic planning approach and included scoping exercises, two intensive rounds of facilitated public workshops throughout the state, an assessment of IRWM planning and implementation projects, coordination with other State water resources planning efforts, presentations and discussions at various conferences, and interviews with water managers and other experts from multiple State and local organizations. Information about these activities is available at: www.water.ca.gov/irwm/

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Stakeholder Perspectives

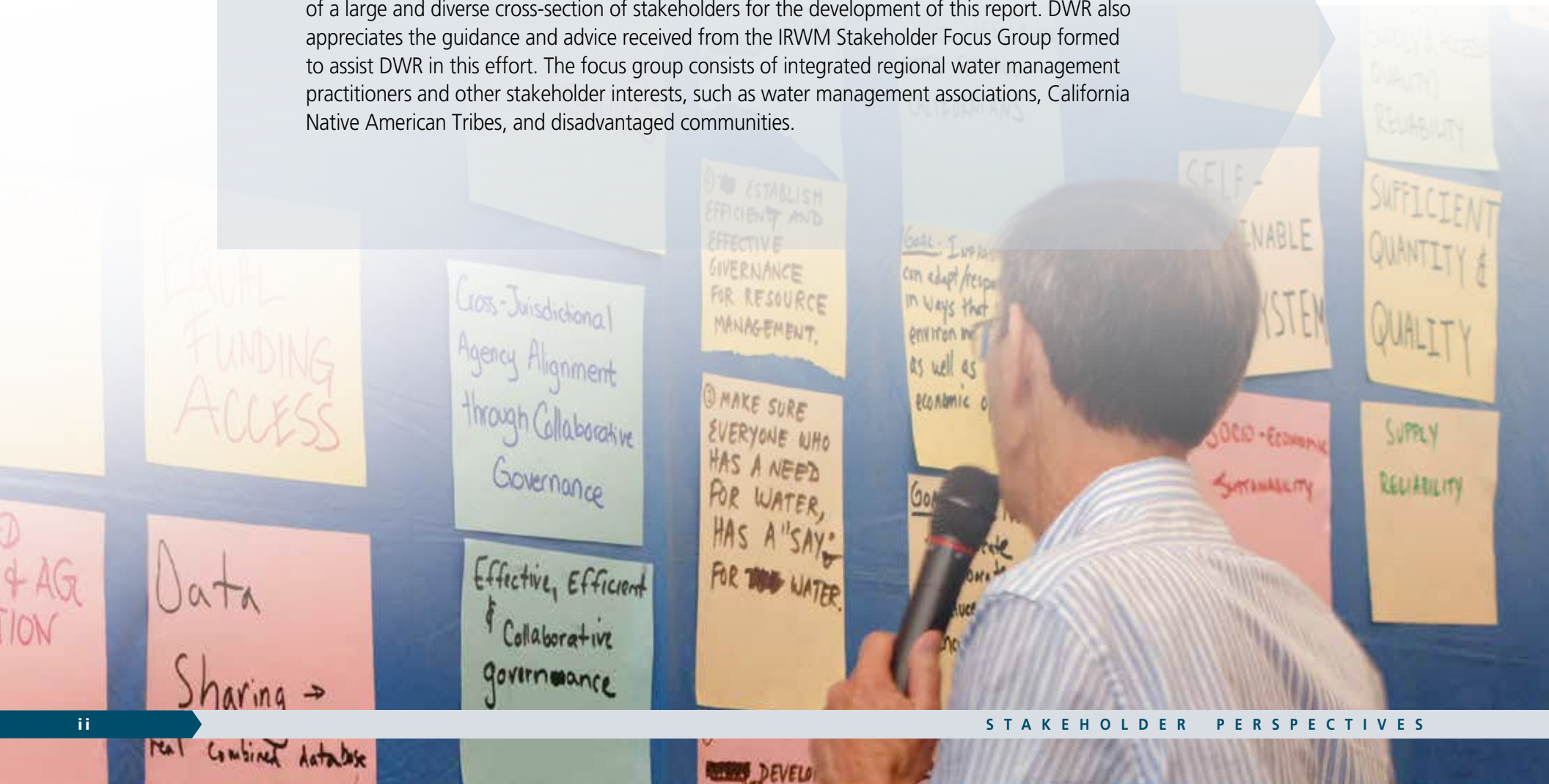
*Recommendations for Sustaining and Strengthening
Integrated Regional Water Management*

March 2017

It is possible that web addresses referenced in this publication will change with time and that printed copies will not reflect changes. If any difficulties are experienced accessing web-based information referenced in this report, please visit the online version of this publication at: www.water.ca.gov/irwm/docs/IRWM_Recommendations.pdf or call (916) 651-9613 for assistance.

Acknowledgments

The California Department of Water Resources (DWR) is grateful for the extensive participation of a large and diverse cross-section of stakeholders for the development of this report. DWR also appreciates the guidance and advice received from the IRWM Stakeholder Focus Group formed to assist DWR in this effort. The focus group consists of integrated regional water management practitioners and other stakeholder interests, such as water management associations, California Native American Tribes, and disadvantaged communities.



Foreword



When it comes to managing something as challenging, complex, and essential as water resources, great things are accomplished when people work together. That is a key underlying principle of integrated regional water management.

Since the Integrated Regional Water Management (IRWM) Planning Act of 2002, Californians have been working together more, and in an increasingly integrated manner, to address regional water management challenges effectively and efficiently. The hard work and dedication of local and regional water managers throughout the state, along with a total of more than \$5.5 billion in State and local investments in IRWM, have improved water supplies, water quality, public safety, and environmental protection and restoration through cooperative planning and action.

While significant progress has been made in advancing IRWM, much more must be done. This document identifies a comprehensive set of actions to sustain and strengthen regional water management for the future. The strength and relevance of these actions come directly from the collective experience and wisdom of regional practitioners and other stakeholders.

The California Department of Water Resources (DWR) stands ready to work collaboratively with other State, federal, regional, and local agencies, as well as California Native American Tribes, to help address all of the actions listed in this report where we have the authority and the resources to do so.

I strongly encourage everyone with an interest in water to read this important report, learn more about the essential role of IRWM in California, and discover how we can work together to sustain and strengthen integrated water management throughout the state.

Sincerely,

A handwritten signature in black ink, appearing to read 'Art Hinojosa'.

Arthur Hinojosa, Jr., Chief
Division of Integrated Regional
Water Management



Acronyms & Abbreviations

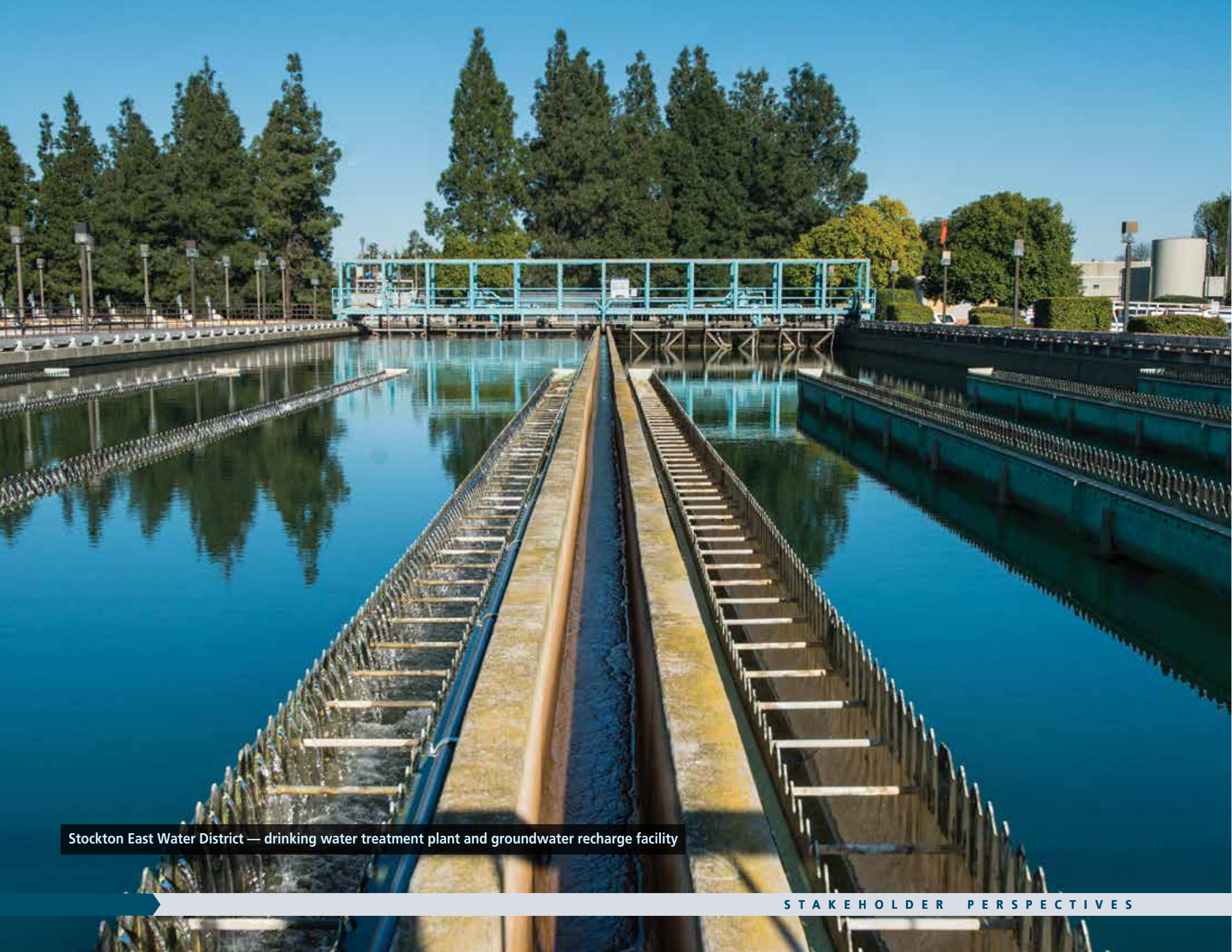
BIA	U.S. Bureau of Indian Affairs
CEQA	California Environmental Quality Act
DAC	disadvantaged community
DWR	California Department of Water Resources
GSA	groundwater sustainability agency
IRWM	integrated regional water management
RSR	regional service representative
RWVG	regional water management group
SGMA	Sustainable Groundwater Management Act
SWRCB	State Water Resources Control Board
Tribes	California Native American Tribes

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State Water Project
aqueduct near
San Bernardino



Stockton East Water District — drinking water treatment plant and groundwater recharge facility

IRWM Today

Integrated regional water management (IRWM) is the application of integrated water management principles at the regional level. IRWM brings local agencies and other stakeholders, with a range of water-related roles and interests, together to address water management needs collaboratively within self-identified regions accepted by the State. The practice of IRWM is rooted in the principle of regional control, recognizing that local and regional water managers and other stakeholders, working together in a collaborative, open, and transparent manner, are best suited and best positioned to manage water resources in their regions. Issues including limited groundwater and surface water supplies, drought, flooding, climate change, water quality, environmental degradation, aging infrastructure, economic constraints, recreation, and cultural considerations are addressed through coordinated and integrated actions.

IRWM is helping California move away from a legacy of fragmented, divisive, conflict prone, and sometimes ineffective water management practices by supporting cooperation among agencies and other stakeholders. Integrated water management at the regional level:

- Helps provide for public safety.
- Supports a healthy economy.
- Supports ecosystem vitality.

IRWM benefits accrue at the local and regional level, but also “roll up” to the state level, helping California meet its collective water management needs. When IRWM succeeds, California succeeds.

The California Water Action Plan, released by Governor Brown in January, 2014, recognizes the value of integrated water management and identifies it as a cornerstone of its ten actions to address urgent needs and help achieve water resource sustainability. The plan can be viewed at: resources.ca.gov/california_water_action_plan/

Integrated water management is a comprehensive and collaborative approach for managing water to concurrently achieve social, environmental, and economic objectives.

This integrated approach delivers higher value for investments by considering all interests, providing multiple benefits, and working across jurisdictional boundaries at the appropriate geographic scale.

Examples of multiple benefits include improved water quality, better flood management, restored and enhanced ecosystems, and more reliable water supplies.

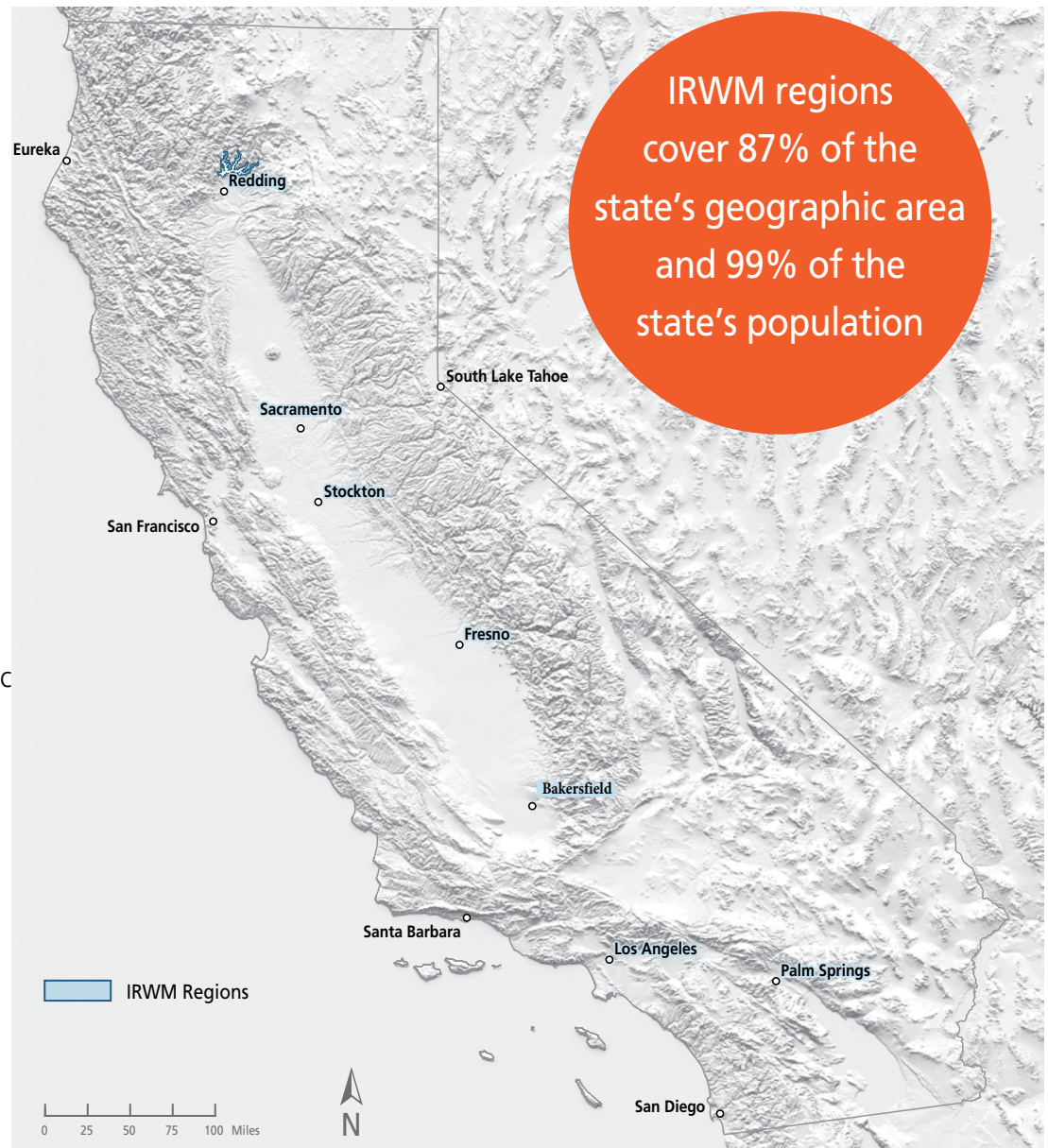
— California Water Plan Update 2013

Setting a Strong Foundation

Water managers in some areas of California have worked for decades to integrate their efforts at the regional level. IRWM was brought to the forefront throughout the state when the Integrated Regional Water Management Planning Act was passed by the Legislature in 2002. The act encouraged local and regional agencies to work together to establish a strong foundation for IRWM.

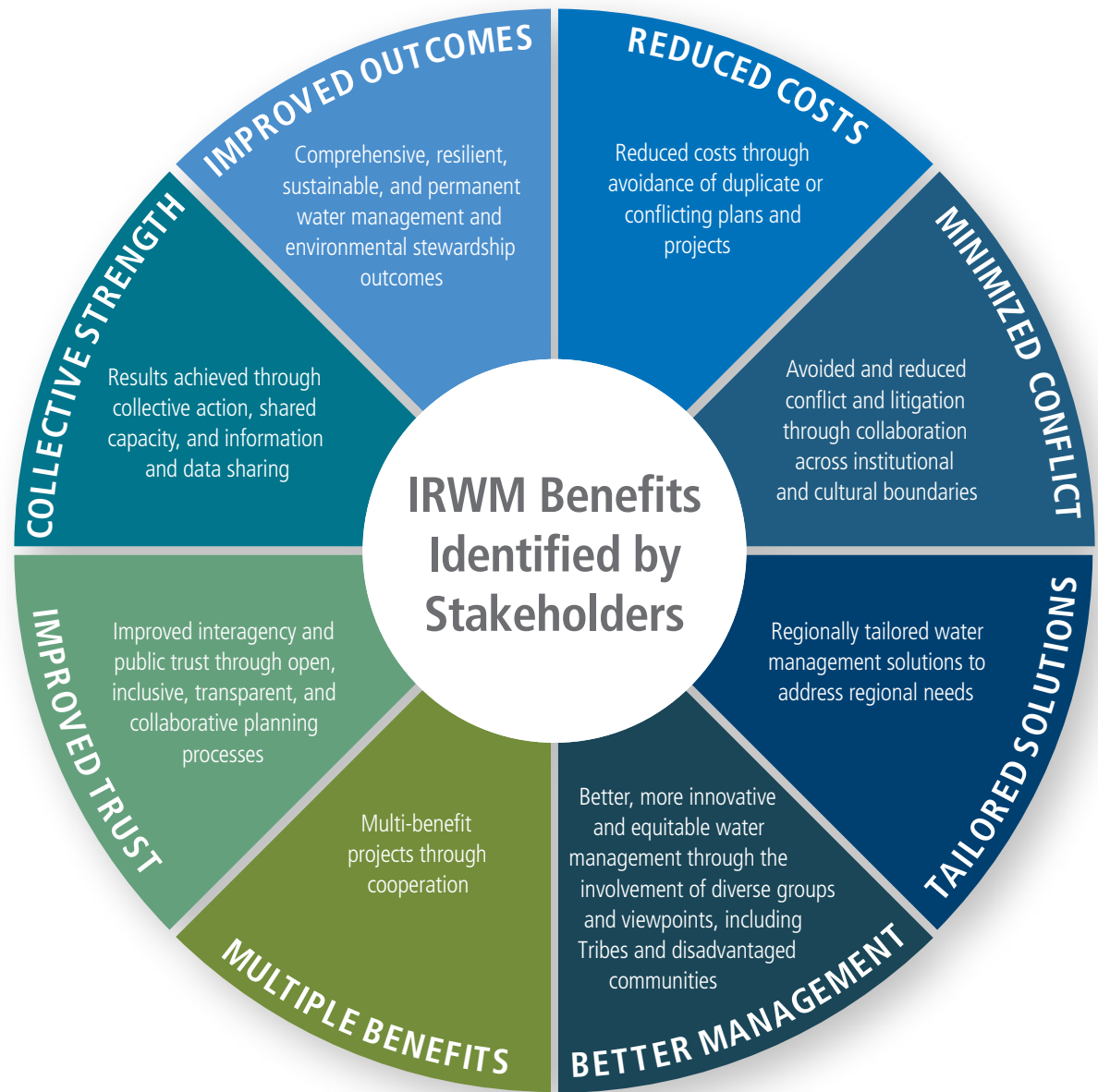
Three voter-approved State bond measures followed the IRWM Planning Act — Proposition 50 (2002), Proposition 84 (2006), and Proposition 1 (2014). Each bond measure allocated State funds to help support IRWM planning and implementation efforts by regional water management groups (RWMGs).

Today, 49 IRWM regions cover 87 percent of the state's geographic area and 99 percent of the state's population. IRWM has significantly improved water management in California and has gained wide acceptance as the best way of doing business.



The Benefits of IRWM

During the extensive stakeholder process for the development of this report, IRWM practitioners and other stakeholders throughout the state expressed overwhelming support for IRWM and its principles. Stakeholders identified a wide range of key benefits that accrue from IRWM. Many of these benefits are summarized in the adjoining illustration.

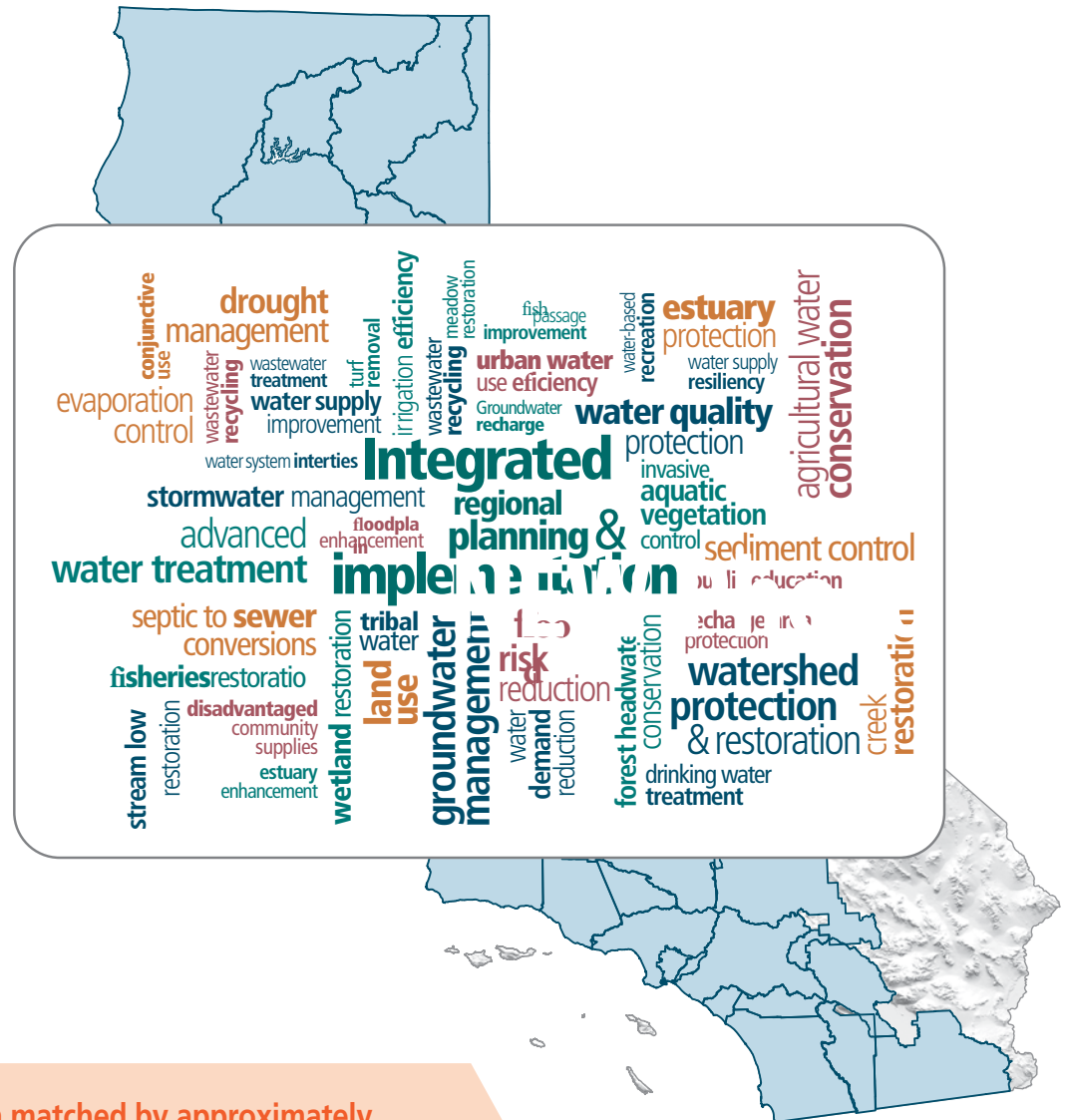




San Diego RWMG meeting
Courtesy of San Diego RWMG

State investments, supported by the previously mentioned bond measures, have been an important catalyst for IRWM practices in California. But, the vast majority of IRWM investments have come from local and regional agencies. As of December 2016, approximately \$1.3 billion in State grants to RWMGs have been matched by approximately \$4.2 billion in local and regional investments. Added to this are the countless hours of time dedicated by local officials and other stakeholders to establish and maintain collaborative working relationships to collectively address regional water management needs.

While much has been accomplished through State and local investments in IRWM, more investments are needed. Additional investments will improve IRWM planning and implementation efforts throughout the state and help continue progress toward the sustainable management of water. The “Stakeholder Recommendations” section of this report identifies specific investment needs along with a diverse set of other stakeholder recommendations for sustaining and strengthening IRWM.



Recommendations for Sustaining and Strengthening Integrated Regional Water Management

The Future of IRWM

Groundwater well near Gridley

The Need for Action

The practice of IRWM has not fully matured in California. While some IRWM regions are successfully implementing their IRWM plans, others have fallen behind. Based on stakeholder input, the key needs of IRWM regions include greater recognition and support of IRWM by federal, State, and local agencies and California Native American Tribes (Tribes), and better alignment of government policies, regulations, and programs. Other key needs include technical assistance for RWMGs, greater participation in IRWM at the regional level, stable and diversified investments in IRWM, and increased public recognition and appreciation of IRWM.

Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014, continues important State investments for IRWM. But, Proposition 1, by itself, does not address the full range of actions necessary for the long-term future of IRWM. It is widely held among water professionals that a comprehensive set of actions must be taken now to ensure the future of IRWM and broaden its application in meeting water management challenges at the regional level, as described in “Stakeholder Recommendations.”

Upscaling IRWM

Today, IRWM regions provide the predominant and the most important context for integrated water management in California. But, in some areas, integration can also occur at geographic scales larger than individual IRWM regions. By working together through inter-regional efforts, IRWM regions can serve as the primary “building blocks” for integrated water management at larger scales. Depending on the area of the state, inter-regional integration opportunities include the management of aqueducts, extensive watersheds, entire groundwater basins, inter-regional flood management systems, and environmental protection and restoration efforts. Some IRWM regions are already working together to address these needs, but there is still more to be done inter-regionally in some areas.

IRWM and the Sustainable Groundwater Management Act

Another important opportunity for IRWM is the implementation of the Sustainable Groundwater Management Act (SGMA), passed by the Legislature in September 2014. SGMA mandates that all groundwater basins identified by the California Department of Water Resources (DWR) as high or medium priority as of January 31, 2015, must have groundwater sustainability agencies (GSAs) established by June 30, 2017. The act also requires all high- and medium-priority basins classified as subject to critical conditions of overdraft, as of January 1, 2017, to have groundwater sustainability plans by January 31, 2020. Groundwater sustainability plans must be established for all other high- and medium-priority basins by January 31, 2022. More information about SGMA can be found at:

www.water.ca.gov/groundwater/sgm/index.cfm

SGMA implementation offers an important opportunity for attaining sustainable groundwater management through the application of integrated water management principles. Sustainable groundwater management requires integration with every other water resource management efforts because all aspects of water resources and their uses are linked. Groundwater management tied to IRWM processes and plans can improve integration and regional outcomes, maximize returns on public investments, and support sustainability.

RWMGs exist in most of the state and can offer a suitable forum and framework to help GSAs achieve integration and sustainable groundwater management. Various RWMGs could potentially serve as GSAs, or combine efforts with other RWMGs through inter-IRWM region cooperation for large groundwater basins.

Stakeholders' Vision

Tower Bridge over the Sacramento River

STAKEHOLDERS' VISION

- ✓ *The value of water is recognized by the people of California and their elected representatives.*
- ✓ *IRWM is practiced to its full potential throughout the state to ensure reliable water supplies, adequate flood protection, sustainable ecosystems, and resilient water systems.*
- ✓ *Agency policies, statutes, programs, and regulations are aligned to support IRWM.*
- ✓ *IRWM helps economic stability and social and environmental justice.*

DWR engaged IRWM practitioners and other stakeholders in an extensive dialog about the practice of IRWM and its future. Stakeholders throughout the state consistently voiced support for IRWM. What emerged from stakeholder input is an overall vision for the future of IRWM and a comprehensive set of actions necessary for sustaining and strengthening it.

Stakeholder Recommendations



- Visioning Common Themes*
- Setting of major issues + goals
 - core stability
 - Trust + security
 - environmental protection
 - economics
 - sustainability
 - reliability
 - collaboration
 - protection of the property (land/water)
 - stakeholder involvement: engagement
 - planning for uncertainty

Throughout the extensive stakeholder engagement process for the development of this report, DWR received robust input reflective of stakeholders' varying experiences and perspectives. A number of actions for sustaining and strengthening IRWM were derived from this input. These actions are listed in the following pages under four strategies—Improve Alignment, Strengthen Practices, Improve Services, and Communicate Values. Under each strategy, the actions have been further sorted into various themes.



Strategy 1 | **IMPROVE ALIGNMENT**

Alignment Planning and Support | Non-Regulatory Programs | Regulatory Programs



Strategy 2 | **STRENGTHEN PRACTICES**

Support for Regional Capacity Building | Regional Governance | Regional Practices



Strategy 3 | **IMPROVE SERVICES**

Customer Service Principles and Practices | IRWM Grant Program | Technical Support




Strategy 4 | **COMMUNICATE VALUES**

Official Recognition | Information Sharing | Education

While the actions derived from the stakeholder engagement process do not represent every stakeholder's views, they do reflect numerous areas of common input.

Finally, with regard to efforts to implement these actions, IRWM stakeholders largely agreed that RWMG processes and decisions must be respected and supported in consideration of the diverse needs and circumstances of IRWM regions in California.








Stakeholders have repeatedly expressed the need for, and importance of, better alignment of government policies, regulations, and programs to support IRWM. The need for alignment is also addressed in California Water Plan Update 2013 and the California Water Action Plan.

On the steps of the State Capitol

Strategy 1 | IMPROVE ALIGNMENT





Better alignment in support of IRWM will require concerted and sustained efforts to address the wide array of non-aligned policies, regulations, and programs that have accumulated over decades prior to the advent of IRWM in California. These efforts should be planned, organized, directed, and supported through the following actions.

ALIGNMENT PLANNING AND SUPPORT		NON-REGULATORY PROGRAMS	REGULATORY PROGRAMS	IMPLEMENTATION LEVEL ¹	
	Task Force for Regulatory Alignment	Expand the composition of the task force of federal, State, and local permitting and flood management agencies identified in Action 8 of the California Water Action Plan to include RWMG representatives. This task force, in addition to its responsibilities under the California Water Action Plan, should identify policy, program, and regulatory misalignments and inefficiencies that impede, or are inconsistent with, IRWM. The task force should also define specific remedies to establish a “path to alignment” with IRWM.			State
	State Support for Regulatory Alignment	Direct relevant State agencies to collaborate with the California Water Action Plan task force (referenced in the “Task Force for Regulatory Alignment” action) and RWMGs to support regulatory alignment with IRWM. Initiate a focused study of specific regulations and policies that impede or increase the transaction costs (time and money) of IRWM projects and/or those that do not improve regional outcomes.			State
	Federal Agency Support for Regulatory Alignment	Collaborate with state agencies and RWMGs to improve the efficiency of federal regulatory processes to support IRWM projects, improve regional outcomes, and reduce transaction costs, wherever possible.			Federal
	IRWM CEQA Incentives/Cost Reduction	Direct relevant State agencies to work with the State Office of Planning and Research to investigate the potential for fulfilling California Environmental Quality Act (CEQA) public disclosure requirements for projects that are fully vetted through a functionally equivalent IRWM public involvement process, and are included in an adopted IRWM plan.			State
	IRWM Alignment Support Funding for State and Federal Agencies	Provide funding for alignment and related coordination and collaboration activities to support and advance IRWM. This funding is to enable State agencies and federal agencies to implement actions related to alignment. <ul style="list-style-type: none">Recommended level of investment—To be determined by individual agencies.			Federal and State

¹ Please see page 34 for summary descriptions of each implementation level.





Strategy 1 | IMPROVE ALIGNMENT

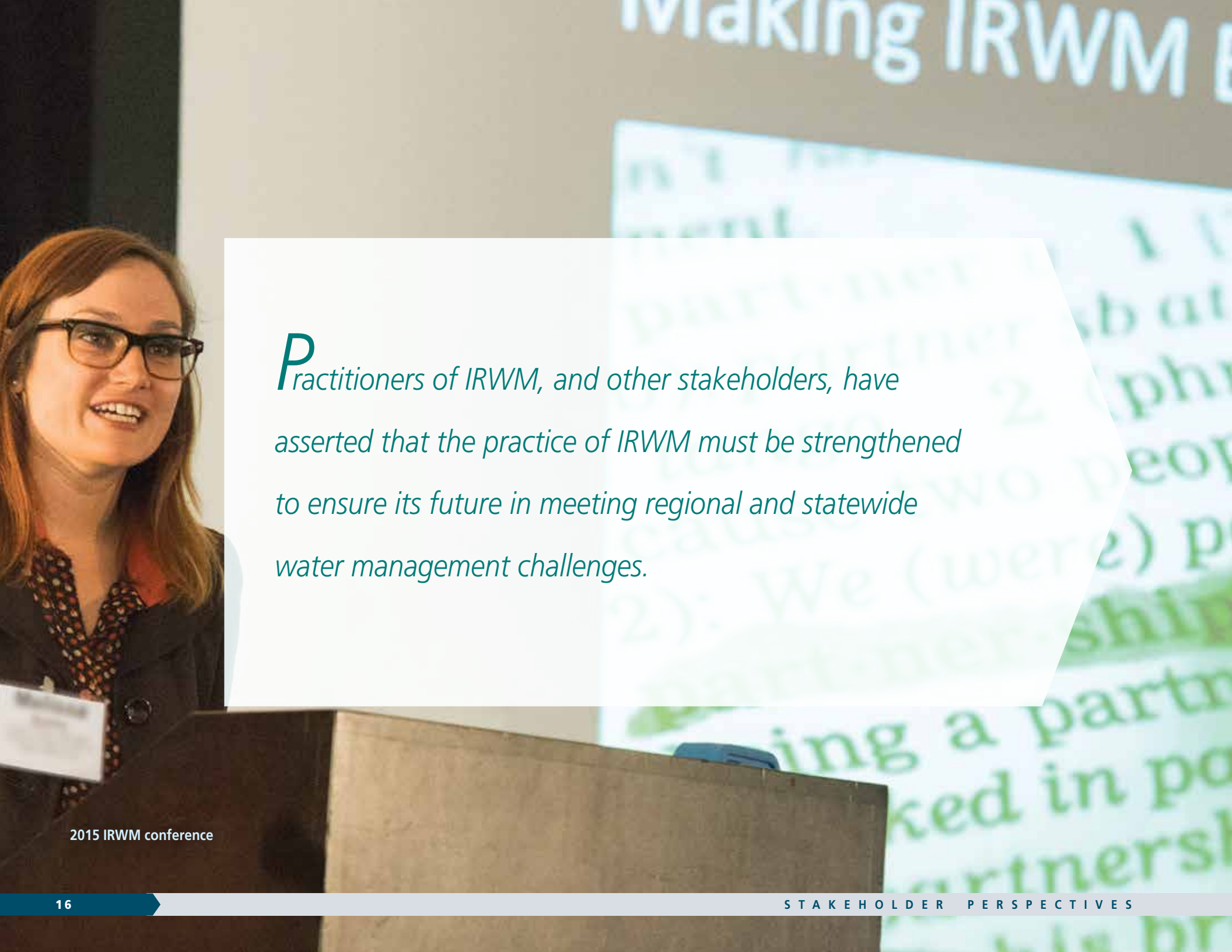
Numerous federal, State, and local agencies are involved with water management in California. These agencies are identified in California Water Plan Update 2013. Most agencies were created to address individual or limited aspects of water management. Consequently, agency policies and programs often lack integration with other aspects of water management, particularly at the regional level. Aligning non-regulatory programs will promote and facilitate integration and improve regional outcomes by reducing overlapping and conflicting requirements, schedules, and planning efforts. These actions will improve the efficiency and effectiveness of water management.

ALIGNMENT PLANNING AND SUPPORT		NON-REGULATORY PROGRAMS	REGULATORY PROGRAMS	IMPLEMENTATION LEVEL
	Agency Program Alignment	Align water-related programs, to the degree possible, to support IRWM.	Federal, Tribes, State, Local, and Regional	
	Funding Program Alignment	<p>Coordinate among State and federal agencies to improve the alignment of grant and loan programs, schedules, application processes, and funding criteria for all water-related projects relevant to IRWM.</p> <ul style="list-style-type: none"> Water Grants Inventory—Develop and maintain a public web-based inventory of water-related grant and loan programs administered by State, federal, regional, local agencies, and private entities. Funding Alignment Opportunities—Complete a study of requirements governing various water-related grant and loan programs, including the identification of synergies, gaps, and opportunities to support IRWM through the alignment of application schedules, processes, and selection criteria. 	Federal and State	
	IRWM Incentives for Non-IRWM Grants	Direct State agencies administering water-management related grant and loan programs to take necessary steps to implement the provisions of California Water Code Sections 10544 and 10608.50 to give preference to projects included in an adopted IRWM plan, to the extent allowed by funding program statutes. Preferences for IRWM projects could be in the form of reduced matching fund requirements and/or additional points in competitive application scoring.	State	
	DWR Program Alignment	<p>Better align all DWR programs to support IRWM, to the extent possible. These programs include, but are not limited to, California Water Plan updates, inter-regional and statewide flood planning, climate change, data programs, sustainable groundwater management, and water use efficiency.</p> <ul style="list-style-type: none"> Program Integration Work Group—Establish a multi-divisional program integration work group within DWR and accelerate ongoing efforts to identify (1) opportunities for better alignment of various DWR programs, (2) options for changes and integration of programs and policies, and (3) costs associated with each option. The program integration work group should publish a report describing its findings and recommendations. Sustainable Groundwater Management Act (SGMA) Implementation—Implement the provisions of SGMA in a manner that supports IRWM and promotes consistency and continuity with IRWM statutes. Funding—Seek funding through the State budget process to implement preferred options for the alignment of DWR programs with IRWM. 	State	

Strategy 1 | IMPROVE ALIGNMENT

Aligning government regulatory programs would strengthen IRWM, improve regional outcomes, and reduce permitting costs and delays by eliminating overlapping, conflicting, unconnected, and ineffective regulatory requirements.

ALIGNMENT PLANNING AND SUPPORT		NON-REGULATORY PROGRAMS	REGULATORY PROGRAMS	IMPLEMENTATION LEVEL
	One-Stop Shop	Direct DWR to work with State and federal regulatory agencies to create a pilot program for “one-stop shop” environmental permitting for projects included in an adopted IRWM plan to support the practice of IRWM, reduce transaction costs, and improve regional outcomes.	State	
	Delegated Authority	Work with RWMGs to evaluate the need for, and possible means of, delegating some regional water quality control board regulatory responsibilities to RWMGs, upon mutual consent, for improved regional solutions and reduced transaction costs.	State	
	Local Planning Requirement Alignment	Direct DWR to collaborate with the State Water Resources Control Board (SWRCB), other State agencies, and RWMGs to conduct case studies on required water management plans in various watersheds to determine the extent that multiple planning requirements support, or fail to support, an integrated approach to water management. DWR should use these case studies to develop recommendations for regulatory and funding changes, pursuant to California Water Code Section 10608.50, to improve alignment of State-required plans to better support IRWM.	State	
	General Plan Integration	Consider expanding upon California Government Code Section 65352.5(a) and enact legislation to change general plan guidelines to encourage cooperation, coordination, and consultation with RWMGs, and to incorporate relevant components of adopted IRWM plans into general plans to ensure water-wise development. This action should be coordinated with efforts pertaining to land use under Action 2 of the California Water Action Plan.	State	








Practitioners of IRWM, and other stakeholders, have asserted that the practice of IRWM must be strengthened to ensure its future in meeting regional and statewide water management challenges.

2015 IRWM conference




Strategy 2 | STRENGTHEN PRACTICES

Actions necessary for strengthening IRWM practices include support for regional capacity building through stable and diversified investments in IRWM. These actions will help support the essential operations of RWMGs, incentivize cooperative projects within and among IRWM regions, and support efforts to address State water management priorities identified in the California Water Action Plan.

SUPPORT FOR REGIONAL CAPACITY BUILDING		REGIONAL GOVERNANCE	REGIONAL PRACTICES
	Base-Level Funding for IRWM Regions <p>Provide noncompetitive base-level funding, subject to State accountability requirements, for individual IRWM regions to help support key operations. The purpose of the funding is to strengthen State partnerships with IRWM regions by providing stable State funding to help support stakeholder engagement, coordination and collaboration, IRWM plan updates, and participation of underrepresented groups, such as disadvantaged communities, and local agencies with budget constraints.</p> <p>Recommended level of investment—\$12.25 million per year (\$250,000 annually for each of the 49 IRWM regions), beginning as soon as possible.</p>	State	IMPLEMENTATION LEVEL
	Regional Priorities Funding <p>Continue to provide funding for competitive grants to IRWM regions to help address regional water management needs and priorities. The purpose of the funding is to accelerate and leverage local and regional water investments by continuing State investments in IRWM through competitive IRWM grants.</p> <p>Recommended level of investment—\$600 million every four to six years, which is comparable to the \$510 million allocation for IRWM in Proposition 1, passed in 2014. The first cycle could begin after Proposition 1 IRWM funds have been fully committed</p>	State	
	Inter-Regional and Statewide Priorities Funding <p>Provide funding for noncompetitive grants to IRWM regions to address inter-regional and designated statewide water management priorities. The purpose of the funding is to broaden IRWM practices to address inter-regional and statewide water management priorities.</p> <p>Recommended level of investment—\$200 million every four to six years, beginning as soon as possible.</p>	State	
	Capacity Needs Identification <p>Work with RWMG member agencies and DWR to identify local agency capacity-building needs (technical, organizational, and financial) for practicing IRWM. Communicate those needs to DWR.</p>	Regional and Local	
	Inter-Regional Cooperation and Collaboration <p>Promote inter-regional cooperation and collaboration, and work with RWMGs to identify and resolve barriers to inter-regional integrated water management planning and implementation.</p>	State	

Strategy 2 | STRENGTHEN PRACTICES


(continued)

SUPPORT FOR REGIONAL CAPACITY BUILDING		REGIONAL GOVERNANCE	REGIONAL PRACTICES
 Tribal Participation	Provide funding to Tribes to support participation in IRWM planning and implementation.		Federal and State
 IRWM Conferences	Work with the IRWM Roundtable of Regions and other stakeholders to organize IRWM conferences for sharing experiences and advancements in IRWM.		State
 DAC Involvement	<p>Establish a disadvantaged community (DAC) task force that includes DWR, DAC, and RWMG representatives to facilitate and monitor the implementation of necessary actions to increase DAC involvement in IRWM. The initial activities of the DAC task force should include:</p> <ul style="list-style-type: none"> • DAC Coordinator—Secure stable funding for a lead statewide DAC coordinator to serve DACs and RWMGs, and act as a single point of contact for information about IRWM and DACs. • DAC Identification—Collaborate with RWMGs, DACs, SWRCB, California Environmental Protection Agency, cities, and counties to establish improved criteria and methods for identifying DACs. • Coordination—Collaborate with RWMGs, DACs, and the SWRCB to identify tools and processes for improving coordination and collaboration with DACs. • DAC Capacity Building and Technical Assistance Needs Assessment—In collaboration with DACs and RWMGs, determine the capacity building and technical assistance needs of DACs. • Targeted Education for DACs—In coordination with RWMGs, SWRCB, and local health departments, develop a training program for DAC representatives to enhance understanding of roles, responsibilities, policies, and procedures related to DWR's IRWM program services (technical, facilitation, communication, coordination, and financial assistance), and other State agency services. • Training—Identify the training needs of DWR's regional service representatives (RSRs) and RWMG representatives to improve communication and collaboration with DACs. 		State

IMPLEMENTATION LEVEL





Strategy 2 | STRENGTHEN PRACTICES

(continued)

SUPPORT FOR REGIONAL CAPACITY BUILDING		REGIONAL GOVERNANCE	REGIONAL PRACTICES
 Tribal Involvement	<p>Establish a tribal task force that includes tribal, RWMG, and State representatives to facilitate and monitor the implementation of necessary initiatives and actions to increase the involvement of Tribes in IRWM. The initial activities of the tribal task force should be:</p> <ul style="list-style-type: none"> • Tribal Liaison—Secure sustained funding for a staff position to serve as the special liaison between DWR’s IRWM Program and Tribes. • Needs Identification—Collaborate with Tribes and RWMGs to identify tribal needs and identify approaches for enabling tribal involvement in IRWM processes. • Coordination—Coordinate with Tribes and RWMGs to identify tools and processes necessary for improved collaboration with Tribes. • Tribal Capacity Building and Technical Assistance—In collaboration with the U.S. Bureau of Indian Affairs (BIA) and other federal agencies, determine the capacity building and technical assistance needs of Tribes. • Targeted Education for Tribes—In coordination with Tribes, BIA, SWRCB, and RWMGs, develop a training program for tribal representatives to enhance understanding of roles, responsibilities, policies, and procedures related to DWR’s IRWM Program services. • Training—Identify the training needs of RSRs and RWMG representatives to improve communication and collaboration with Tribes. 	State	IMPLEMENTATION LEVEL

Strategy 2 | STRENGTHEN PRACTICES

Governance plays a critical role in determining how IRWM planning and implementation activities are directed and conducted in each IRWM region. Voluntary actions for strengthening regional governance have been identified from stakeholder input for the consideration of RWMGs, local agencies, and Tribes, as appropriate to regional needs and circumstances.

SUPPORT FOR REGIONAL CAPACITY BUILDING		REGIONAL GOVERNANCE	REGIONAL PRACTICES	
	Strengthened Governance	Evaluate whether the existing means of governance in a region provides an adequate framework for sustaining IRWM and achieving regional water management goals. Strengthen governance, where appropriate.	Regional	IMPLEMENTATION LEVEL
	Adaptation to New Legislation	Evaluate, on an ongoing basis, whether the existing means of governance in a region should be modified to address the provisions of any newly enacted legislation (e.g., Sustainable Groundwater Management Act) and make changes, as appropriate.	Regional	
	Representation in Governance	Evaluate, in coordination with Tribes, whether the existing means of governance in a region should be modified to improve tribal representation in IRWM and make necessary changes, as appropriate. Also, in coordination with DACs, evaluate whether the existing means of governance in a region should be modified to improve DAC representation in IRWM and make necessary changes, as appropriate.	Regional	
	Collective Representation	Collaborate with other IRWM regions to establish a representative advocacy association for RWMGs and other IRWM stakeholders.	Regional	






Strategy 2 | STRENGTHEN PRACTICES

IRWM is a voluntary practice. At the heart of the advancement and success of IRWM in California are the 49 RWMGs and their members and stakeholders. IRWM practitioners and other stakeholders have identified ways that RWMGs and their members could voluntarily strengthen the practice of IRWM, as appropriate, according to regional needs and circumstances.

SUPPORT FOR REGIONAL CAPACITY BUILDING		REGIONAL GOVERNANCE	REGIONAL PRACTICES	IMPLEMENTATION LEVEL
	Land Use Alignment	Coordinate on a regional basis to align water management plans, projects, and decisions with land use planning.	Regional and Local	
	Consistency of IRWM Projects	Improve consistency between IRWM projects and local water agency capital improvement and operational plans, as appropriate.	Regional and Local	
	Plan Updates	Update IRWM plans, as needed, to remain relevant and adequately reflect regional conditions, priorities, and progress.	Regional and Local	
	Inter-Regional Collaboration	Collaborate, where appropriate, with neighboring IRWM regions and DWR to share information and work toward addressing inter-regional water management issues, such as flood management, groundwater sustainability, source water protection, ecosystems, forest management, and federal land management.	Regional and Local	
	Promotion of IRWM Projects	Encourage RWMG members and others to develop and implement IRWM projects and help members overcome barriers to project implementation.	Regional and Local	
	Resource Pooling	Identify and leverage opportunities for pooling fiscal and personnel resources among RWMG member agencies, Tribes, and neighboring IRWM regions, where appropriate (e.g., cost sharing for regional environmental mitigation banking and joint project coordinator positions).	Regional and Local	
	Funding Source Identification	Seek funding for IRWM projects from multiple potential sources, including federal, State, and private organizations, and coordinate with DWR to update the Water Grants Inventory, as referenced in the “Funding Program Alignment” action.	Regional and Local	
	Participation Barriers	Identify barriers to participation in IRWM processes within regions and, to the extent possible, work to resolve them.	Regional and Local	

Strategy 2 | STRENGTHEN PRACTICES

(continued)

SUPPORT FOR REGIONAL CAPACITY BUILDING		REGIONAL GOVERNANCE	REGIONAL PRACTICES	IMPLEMENTATION LEVEL
	Promotion of Participation	Encourage stakeholders to participate in IRWM, including sharing information about the need for, and benefits of, participation.	Regional and Local	
	Agency Participation	Establish policies, protocols, and budgets, where needed, to enable increased levels of participation in IRWM planning processes.	Regional and Local	
	DAC Participation	Work with DWR and DAC representatives, where needed, to enable increased DAC participation in IRWM planning and implementation.	Regional and Local	
	Tribal Participation	Consider establishing policies, protocols, and budgets, where needed, to enable increased Tribal participation in IRWM planning and implementation.	Tribes	
	Grant Management Support from RWMGs	Continue to improve local agency project management controls, where needed, to ensure compliance with, and timely fulfillment of, IRWM grant agreement terms and conditions.	Regional and Local	




Los Angeles River



Since 2002, DWR has provided support services to RWMGs for the development and implementation of IRWM plans. IRWM practitioners and other stakeholders repeatedly reinforced the importance and value of DWR's services but stated that DWR must enhance its services to better meet the needs of IRWM regions.








Strategy 3 | IMPROVE SERVICES

The enhancement of DWR's services should begin with the following actions affirming DWR's IRWM customer support principles and establishing procedures to support enhanced services.

CUSTOMER SERVICE PRINCIPLES & PRACTICES		IRWM GRANT PROGRAM	TECHNICAL SUPPORT
 DWR IRWM Program Operating Principle	Adopt a program operating principle, such as: <i>To help all IRWM regions successfully practice integrated water management and increase regional self-reliance by forging stronger partnerships between DWR and IRWM regions, founded on respect for regional decisions and improved services.</i>	State	IMPLEMENTATION LEVEL
	Establish procedures to support enhancing customer service to IRWM regions. <ul style="list-style-type: none"> IRWM Stakeholder Advisory Group—Form a stakeholder advisory group with representatives from the IRWM Roundtable of Regions and other stakeholders to advise DWR about ways to improve its regional assistance services and grant administration processes. Performance Standards and Metrics—Develop explicit performance standards and metrics for the continuing evaluation of regional assistance services and grant administration processes. Feedback Survey—Conduct annual customer feedback surveys of IRWM program customers and other stakeholders. Post the survey results on a publicly accessible website. 	State	
	Regional Service Representative Training Identify the coordination and support needs of IRWM regions and provide comprehensive training to RSRs to meet those needs.	State	

Strategy 3 | IMPROVE SERVICES


DWR has administered multiple rounds of IRWM planning and implementation grants since the inception of the IRWM grant program. DWR values the importance of customer satisfaction and has received stakeholder input, reflected in the following actions, on how it can improve its IRWM grant services.

CUSTOMER SERVICE PRINCIPLES & PRACTICES		IRWM GRANT PROGRAM	TECHNICAL SUPPORT
	Deference to IRWM Regions	Work with the IRWM Stakeholder Advisory Group (established under the “Customer Service” action) to improve provisions and clarifications in IRWM grant guidelines and ensure maximum deference to regional project priorities and decision-making processes consistent with legislative intent.	State
	Diversity Accommodation	Continue promoting IRWM in all regions through the IRWM grant program by accounting for the widely ranging needs and circumstances of IRWM regions (technical and fiscal capacity, experience, history, geography, water resource conditions, stakeholder interests, economic conditions, DACs, rural agencies, and Tribes) to ensure that no regions are left behind.	State
	Strengthened Inter-Regional Partnerships	Seek necessary authority from the Legislature to develop appropriate grant funding guidelines to help reduce inter-IRWM region competition and strengthen cooperation within grant funding areas.	State
	Plan Update Flexibility	Include explicit provisions in future grant guidelines to allow RWMGs to exercise discretion in updating IRWM plans in response to changes in State IRWM plan requirements. Depending on the judgment of individual RWMGs, plans could be revised through addenda, where appropriate, to reduce costs and delays.	State
	Improved Contracting Processes	Improve the timeliness and efficiency of grant agreement development and contract execution.	State
	Contract Management Training	Periodically provide joint training to both DWR and grantee contract managers to ensure consistent understanding and application of grant contract management requirements.	State
	Improved Reimbursement Processes	To reduce grantee administrative costs and payment delays, direct appropriate State fiscal management offices to identify and implement further means of simplifying grantee invoices and invoice submittal protocols for public agency grantees willing to assume increased fiduciary responsibilities and accountability.	State

IMPLEMENTATION LEVEL





Strategy 3 | IMPROVE SERVICES

(continued)

CUSTOMER SERVICE PRINCIPLES & PRACTICES		IRWM GRANT PROGRAM	TECHNICAL SUPPORT	
	DAC Listening Sessions	Hold DAC “listening sessions” before issuing water-related grant guidelines, application requirements, and scoring criteria to ensure that DAC priorities are addressed by grant programs.	State	IMPLEMENTATION LEVEL
	Simplified DAC Grant Applications	Work with DAC representatives and RWMGs to develop simplified grant application criteria for DAC grants under Proposition 1—Water Quality, Supply, and Infrastructure Improvement Act of 2014 and other relevant grant funding programs. This will facilitate DAC capacity building and project implementation.	State	
	Advance Disbursement of Grant Funds	Work with the Legislature and appropriate State offices (e.g., Department of Finance and State Treasurer’s Office) to develop and implement guidelines and procedures for the partial, full, or incremental advance disbursement of grant funds to certain grantees. Provisions for advance grant fund disbursements, such as through the use of assigned trustees, are needed to alleviate critical debt-holding burdens that are an impediment to participation in the IRWM grant program, such as for DACs, non-governmental organizations, and small agencies. During guideline development, seek input from stakeholders on advance disbursement eligibility criteria and payment processes.	State	


Strategy 3 | IMPROVE SERVICES

DWR has provided technical, facilitation, communication, and coordination support to RWMGs. The demand for technical support services has risen significantly with time because of the statewide growth of IRWM and other factors. DWR's ability to deliver these services ended effectively June 30, 2015, because of a lack of funding. The following actions were identified from extensive stakeholder input regarding the need for maintaining and improving DWR's technical support services.

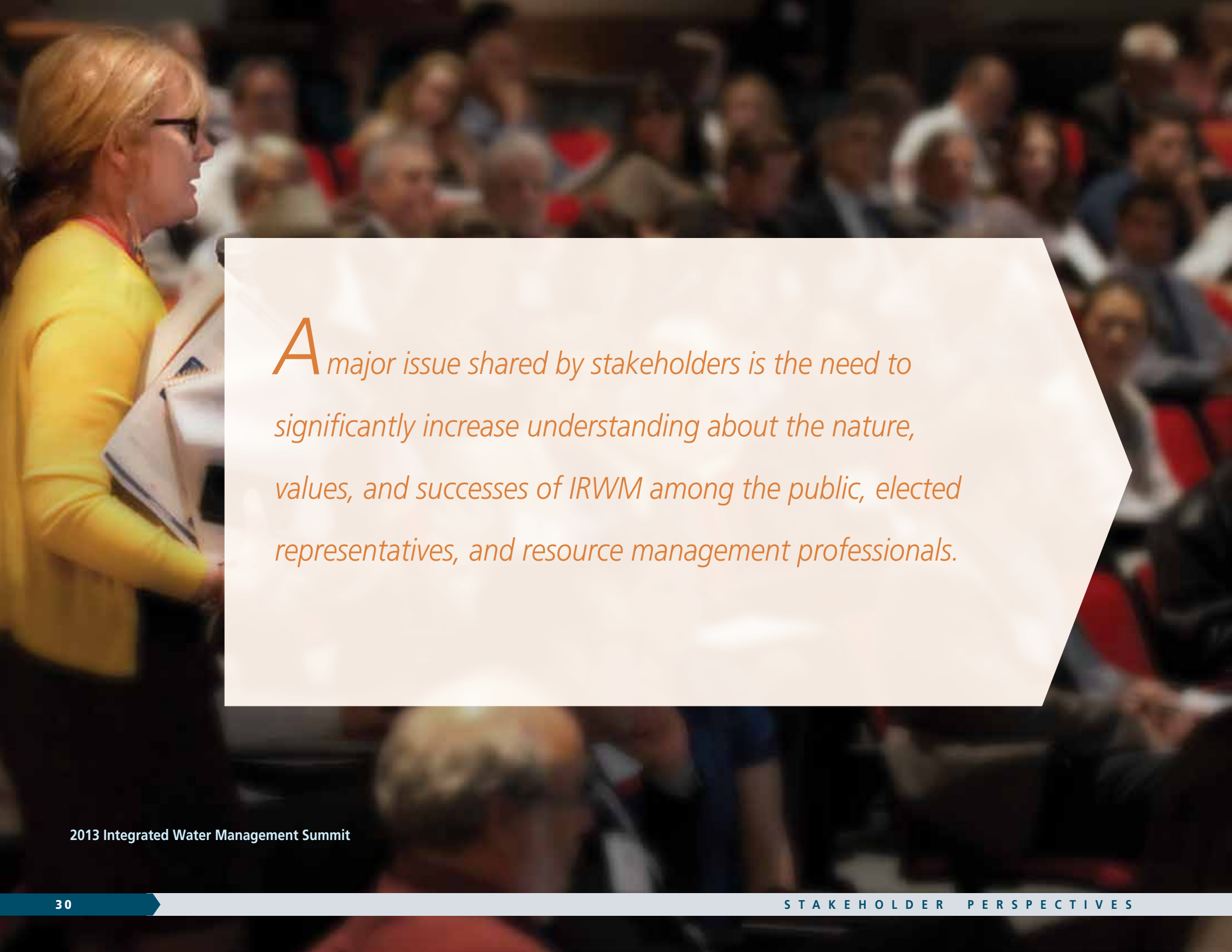
CUSTOMER SERVICE PRINCIPLES & PRACTICES		IRWM GRANT PROGRAM	TECHNICAL SUPPORT	IMPLEMENTATION LEVEL
	Communication of Needs	Work with DWR's RSRs on an ongoing basis to inform DWR about technical, facilitation, communication, and coordination assistance needs, and help identify and implement solutions.	Regional	
	Training	Provide training opportunities for IRWM practitioners and other stakeholders on topics including public outreach, grant proposal preparation, project formulation and evaluation, economic analysis, State data resources, water resources stewardship, collaborative planning, conflict resolution, data management, climate change, and water resources modeling.	State	
	Technical Support Services for Water Budget Development	<p>Work with RWMGs and GSAs to provide technical support, when requested, for the development of local and regional water resource budgets.</p> <ul style="list-style-type: none"> • Guidance Document, Tools, and Data—Publish a guidance document and provide tools and data that could be used on a voluntary basis by RWMGs and local agencies for the development of water budgets to support integrated regional planning and meet the requirements of SGMA. • Technical Assistance and Training for RWMGs and GSAs—Provide technical assistance and training to RWMGs and GSAs for developing water budgets, where needed. • Technical Assistance and Training for DACs and Tribes—Provide technical assistance and training to DACs and Tribes to participate in water budget development processes. 	State	
	Technical Support Services for Data Management	<p>Work with RWMGs to determine individual and statewide IRWM data management needs, and develop a plan for addressing those needs.</p> <ul style="list-style-type: none"> • Assess Needs—Work with RWMGs to complete an IRWM data management needs assessment for RWMGs and their member agencies, DACs, and Tribes. • Identify Data Management Solutions—Work with RWMGs to identify regional data management solutions that can be adopted by RWMGs on a voluntary basis. • Implement Statewide Data Management Solutions—Coordinate with RWMGs to implement statewide IRWM data solutions (e.g. a data warehouse) that can interface with regional data management systems. 	State	

Strategy 3 | IMPROVE SERVICES

(continued)

CUSTOMER SERVICE PRINCIPLES & PRACTICES		IRWM GRANT PROGRAM	TECHNICAL SUPPORT
	Technical Support Services for Climate Change Analyses	<p>Work with RWMGs to identify and assess technical and nontechnical challenges to address climate change in IRWM planning and implementation, and develop recommended approaches to address those challenges.</p> <ul style="list-style-type: none"> • Readiness Assessment—Assess the readiness and ability of IRWM regions to conduct climate change impact analyses for planning and implementation projects. • Climate Change Scenarios and Tools—Identify climate change scenarios and related planning tools for IRWM regions with similar expected vulnerabilities and characteristics. 	State
	Center of Excellence	<p>Seek long-term funding from the Legislature for a center of excellence to support the emerging technical needs of IRWM practitioners.</p> <ul style="list-style-type: none"> • Research Partnership—Engage universities to develop research projects that provide information to support and help advance the practice of IRWM. • Information Dissemination—Coordinate with universities and research organizations to help keep RWMGs informed about emerging integrated water management practices and technologies. 	State
	Regional Assistance Funding to DWR	<p>Provide funding for maintaining and enhancing the level of DWR's assistance services to IRWM regions, and State leadership in alignment and innovation. The purpose of the funding is to improve IRWM practices throughout the state by providing adequate levels of support to RWMGs. Assistance would include technical, facilitation, communication, and coordination services to IRWM regions, and State leadership for achieving alignment and innovation in water management.</p> <p>Recommended level of investment—\$12 million per year, beginning as soon as possible. This funding includes, but is not limited to, support for 12 DWR RSR positions to serve 49 IRWM regions, four region office lead positions to oversee RSR support activities in each of DWR's regional service areas, and one statewide coordinator position.</p>	State





IMPLEMENTATION LEVEL

A woman with blonde hair and glasses, wearing a yellow long-sleeved shirt, is standing on the left side of the frame, facing right and speaking. She is holding a folder or stack of papers. In the background, a large, out-of-focus audience of people is seated in rows, suggesting a conference or summit setting. The lighting is warm and focused on the speaker.

A major issue shared by stakeholders is the need to significantly increase understanding about the nature, values, and successes of IRWM among the public, elected representatives, and resource management professionals.

Strategy 4 | COMMUNICATE VALUES








Stakeholders have stated that increased understanding about the nature, values, and successes of IRWM must start with official recognition of IRWM. Official recognition will help pave the way for integrated water management across all levels of government, consistent with Action 2 of the California Water Action Plan.

OFFICIAL RECOGNITION		INFORMATION SHARING	EDUCATION
	Intrinsic Value Recognition	Officially recognize and adopt the practice of IRWM for its intrinsic value and collaborate on regional multi-benefit integrated projects, with or without State incentives.	Regional and Local
	Legislative Recognition	Consider adding language to California Water Code Section 10531 to officially recognize IRWM as a key means of increasing regional self-reliance and helping achieve sustainable management of California's water resources.	State
	State Administrative Directive	Consider directing all State agencies involved in, or affecting, any aspect of water management to officially recognize IRWM, and work cooperatively in promoting and supporting IRWM by aligning their policies, programs, and regulations with IRWM, to the extent possible.	State
	Agency Recognition	Modify existing operating principles to officially recognize the critical role of IRWM in water management and support integration across all levels of government.	Federal, Tribes, State, Regional, and Local

IMPLEMENTATION LEVEL

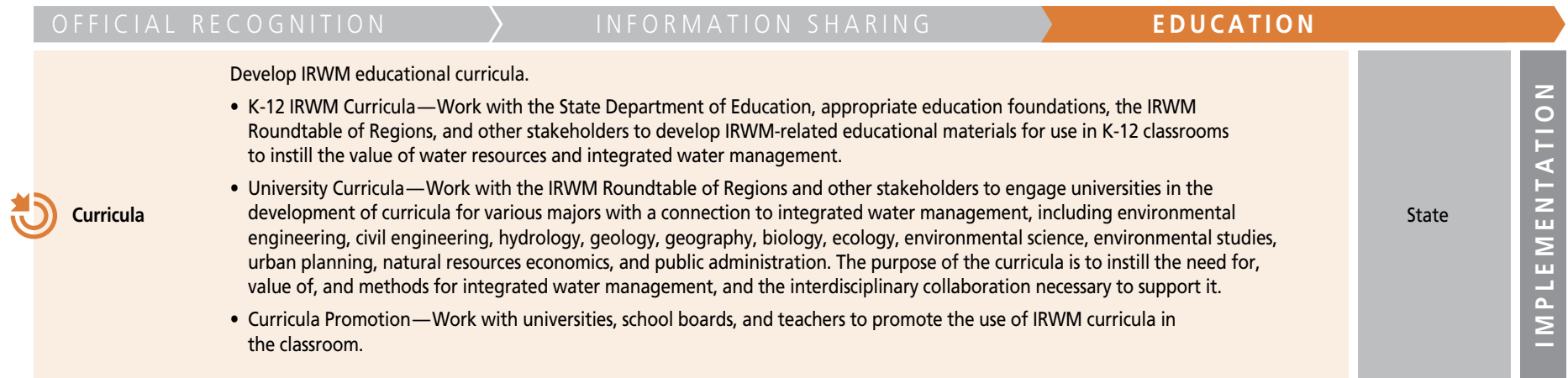
Strategy 4 | COMMUNICATE VALUES

Stakeholders have often emphasized the need to improve understanding of the key role of IRWM in meeting regional and statewide water management challenges, the returns IRWM provides on State and local investments, and other values and successes. Improved understanding through information sharing will help increase support for IRWM and ensure its future.

OFFICIAL RECOGNITION		INFORMATION SHARING	EDUCATION	IMPLEMENTATION LEVEL
	IRWM Information Officer	Establish a full-time position to serve as the statewide IRWM information officer responsible for collaborating with the IRWM Roundtable of Regions and other stakeholders to develop statewide IRWM information, including values and accomplishments.	State	
	Performance Metrics	Work with the IRWM Roundtable of Regions and other stakeholders to develop performance metrics and reporting processes to measure and track the value and accomplishments of IRWM in accordance with bond accountability requirements and other needs.	State	
	Information Sharing Tools	<p>Establish, in collaboration with the IRWM Roundtable of Regions and other stakeholders, tools for collecting and reporting information on the value and accomplishments of IRWM.</p> <ul style="list-style-type: none"> • IRWM Atlas—Publish and maintain a web-based IRWM atlas summarizing the makeup of IRWM regions across the state, and their water management challenges and successes. • Printed Materials—Develop and provide general, as well as region-specific, printed IRWM informational materials for use by RWMGs, water agencies, local decision makers, community groups, DACs, Tribes, and schools. • Web-based Sharing Center—Maintain a web-based tool to readily allow RWMGs to publish and share IRWM case studies, lessons learned, and success stories. • Educational Videos—Develop informational videos about the values and accomplishments of IRWM. Distribute the videos to public officials and the general public. 	State	
	Reporting	Collect and report IRWM project benefit information, in coordination with DWR, to document the value and accomplishments of IRWM.	Regional and Local	
	Lessons Learned	Continually share unique and innovative water management solutions and lessons learned with other RWMGs and DWR.	Regional and Local	
	IRWM Region Websites	Continue to maintain and enhance publicly accessible IRWM region websites with up-to-date information about regional water challenges, IRWM projects and benefits, and other relevant information.	Regional and Local	
	Local Media	Work with local media, where feasible, to promote understanding of water management issues and the values and successes of IRWM.	Regional and Local	

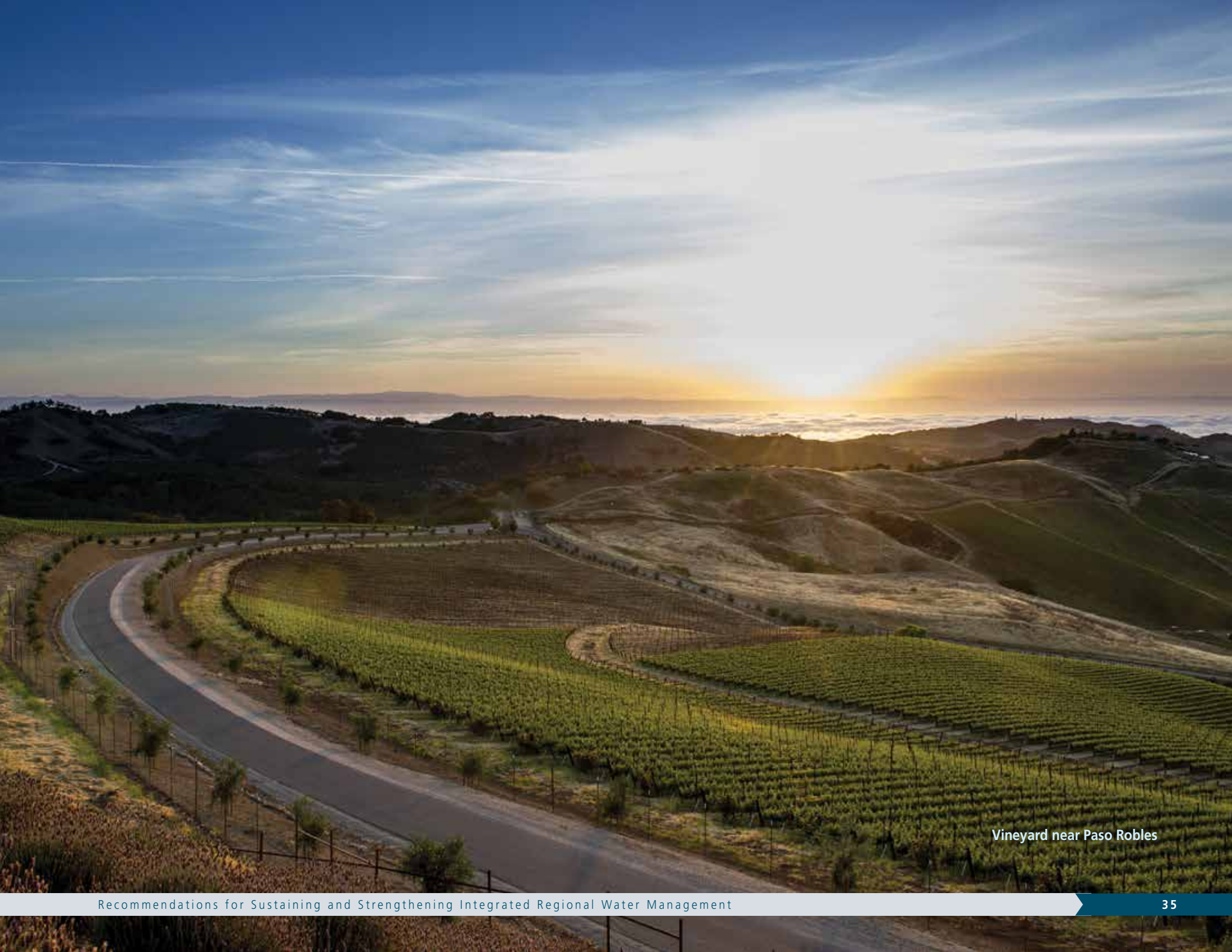
Strategy 4 | COMMUNICATE VALUES

Stakeholders have shared that education is a key consideration for the long-term sustainability of IRWM. Future voters, as well as future public officials and professionals in disciplines with a connection to water management, should receive instruction about the essential need for, and value of, IRWM.



Summary descriptions of each implementation level referenced in the preceding pages.

Federal	Federal agencies with water-related responsibilities, including studies, planning, policy development, regulation, and water storage and distribution.
California Native American Tribes (Tribes)	All indigenous communities of California, which are on the contact list maintained by the Native American Heritage Commission, including those that are federally non-recognized and federally recognized, and those with allotment lands, regardless of whether they own those lands. Additionally, because some water bodies and tribal boundaries cross state borders, this term may include indigenous communities in Oregon, Nevada, and Arizona that are impacted by water in California.
State	State government and agencies that manage and protect California's water, including those responsible for developing and assessing strategies for managing water resources and supporting IRWM.
Regional	Lead regional organizations for the practice of IRWM, such as those set forth in California Water Code Section 10539.
Local	Counties, cities, water districts, and other local governmental organizations with water-related responsibilities.



Vineyard near Paso Robles

GLOSSARY

California Environmental Quality Act (CEQA) — Body of State laws that require State and local agencies to identify the significant environmental impacts of their decisions and actions, and to avoid or mitigate those impacts, if feasible.

California Native American Tribes — All indigenous communities of California, which are on the contact list maintained by the Native American Heritage Commission, including those that are federally non-recognized and federally recognized, and those with allotment lands, regardless of whether they own those lands. Additionally, because some water bodies and tribal boundaries cross state borders, this term may include indigenous communities in Oregon, Nevada, and Arizona that are impacted by water in California.

California Water Action Plan — A State plan for water management in California, signed by Governor Brown in January, 2014 and updated in 2016, that includes ten steps (actions) that can be taken to address California's most pressing water issues while laying the groundwork for a sustainable and resilient future.

California Water Code — California State laws addressing water and water resources rules and regulations.

California Water Plan — A planning document that assesses the State's water management challenges and opportunities. It is developed through a collaborative planning framework with elected officials, agencies, Tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations for California's water future. The plan, updated every five years, presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios.

capacity building — A process of equipping entities, usually public agencies, with certain skills, competencies, or abilities that would allow them to upgrade their performance capabilities.

California Statewide Groundwater Elevation Monitoring (CASGEM) — The California Department of Water Resources (DWR) developed the CASGEM Program in response to Senate Bill X7-6 (Chapter 1, Statutes of 2009) which added provisions of groundwater monitoring to Division 6 of the California Water Code (Section 10920 et seq.). The intent of the CASGEM Program is to establish a permanent, locally managed program of regular and systematic water level monitoring in all of California's groundwater basins. The CASGEM Program relies and

builds on the many established, local, long-term groundwater monitoring and management programs. DWR's role is to coordinate the CASGEM Program with local entities and maintain the collected water level data in a readily and widely available public database.

climate change — Changes in long-term global average temperature, precipitation, wind, or other climatic variables.

disadvantaged community (DAC) — California Water Code Section 79505.5 defines a disadvantaged community as a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

environmental justice — Equal protection from environmental hazards for individuals, groups, or communities regardless of race, ethnicity, or economic status. The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.

general plan — A local government-approved planning document that sets forth the goals, policies, and directions that the local government will take in managing future land uses within its jurisdiction.

governance — The processes, structures, and organizational practices of a group that determines how power is exercised, how stakeholders participate, how decisions are made, and how decision-makers are held accountable.

groundwater — Water beneath the land surface that fills the pore spaces of sediment, soil, or rock formations. It excludes soil moisture, which refers to water stored in the upper unsaturated zones of soil or rock.

groundwater sustainability agency (GSA) — An agency that implements provisions of the Sustainable Groundwater Management Act of 2014.

groundwater sustainability plan — A plan by a groundwater sustainability agency as defined by California Water Code Section 10721(k).

high- and medium-priority groundwater basins — Groundwater basins designated by DWR as “high priority” or “medium priority” are basins with high reliance on groundwater from the statewide perspective (statewide relative ranking).

integrated regional water management (IRWM) — A collaborative effort to manage all aspects of water resources in a region in an integrated manner. IRWM is the application of integrated water management principles at the regional level to improve public safety, environmental stewardship, and economic stability. IRWM is based on the concept that regional water managers are best suited and best positioned to manage regional and local water resources to meet regional needs.

Integrated Regional Water Management Planning Act — Legislation passed in California in 2002 that authorizes the establishment of regional water management groups to prepare and adopt IRWM plans that address programs, projects, reports, or studies relating to water supply, water quality, flood protection, or related matters in a region.

IRWM practitioners — Members of RWMGs that are planning or implementing IRWM.

joint powers agreement (JPA) — An agreement entered into by two or more public agencies that allows them to jointly exercise any power common to the contracting parties. JPA is defined in California Government Code Title 1, Division 7, Chapter 5 (commencing with Section 6500).

mitigation banking — The preservation, enhancement, restoration, or creation of a resource that offsets, or compensates for, expected adverse impacts to similar nearby resources.

Proposition 1 — A \$7.5 billion State water bond titled the Water Quality, Supply and Infrastructure Improvement Act of 2014. It provides \$510 million in funding to support IRWM, among other programs.

Proposition 50 — A \$3.4 billion State water bond titled the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. It provides \$500 million to support IRWM, among other programs.

Proposition 84 — A \$5.4 billion State water bond titled the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006. It provides \$1 billion in grant funds for IRWM, among other programs.

regional service representative (RSR) — A DWR staff member responsible for the day-to-day contact with RWMGs. An RSR is responsible for providing information about IRWM and other DWR programs, managing IRWM grant agreements, and serving as the principal contact for technical support and facilitation services to support RWMGs.

regional water management group (RWMG) — A group in which three or more local agencies, at least two of which have statutory authority over water supply or water management, as well as those other persons who may be necessary for the development and implementation of a plan that meets the requirements of California Water Code 10540 and 10541, participate by means of a joint powers agreement, memorandum of understanding, or other written agreement, as appropriate, that is approved by the governing bodies of those local agencies.

Roundtable of Regions — An ad-hoc group comprised of representatives from IRWM regions throughout California. It provides a statewide forum for sharing experiences relating to the development and implementation of IRWM plans among regions and with the State.

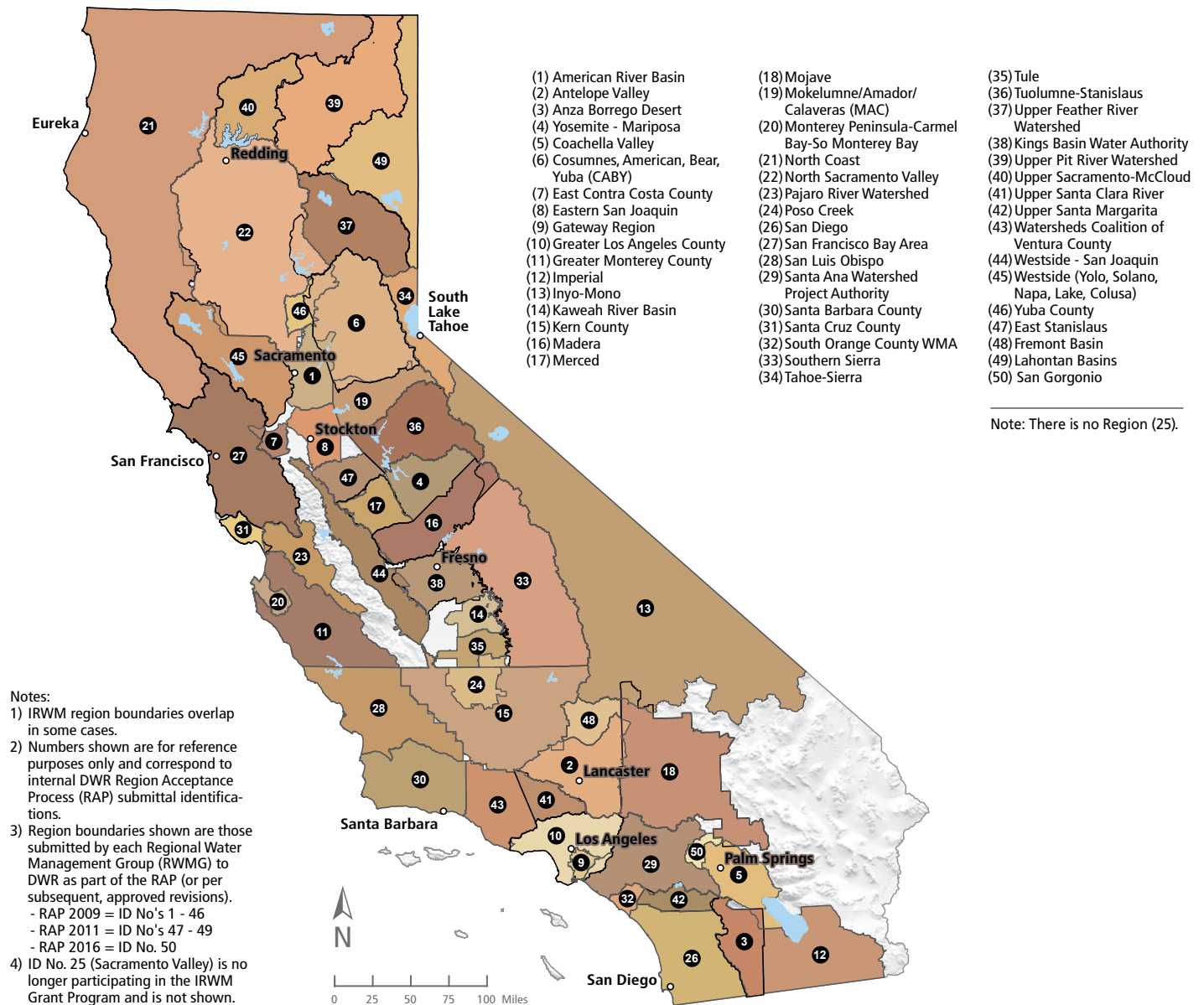
stakeholders — Individuals who can affect or be affected by an organization's activities; or individuals or groups with an interest or "stake" in what happens as a result of any decision or action. All residents of California are IRWM stakeholders.

IRWM stakeholder focus group — Group of IRWM stakeholders that helped shape the process to develop this report.

Sustainable Groundwater Management Act (SGMA) — The three-bill legislative package signed into law in 2014 that requires high- and medium-priority groundwater basins as identified under the CASGEM Program to create groundwater sustainability agencies for development and implementation of groundwater sustainability plans (Assembly Bill 1739, Senate Bill 1168, and Senate Bill 1319; 2014).

water budget — A numeric accounting of the water inputs, cycling, and outputs for a region or specific area.

IRWM Regions



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