

Chapter 1: Development Process for the Inyo-Mono IRWM Program

History, Purpose, and Status of State of California IRWM Program

History

In the Implementation Plan of the California Water Plan Update 2009, the first objective listed is to “promote, improve, and expand integrated regional water management to create and build on partnerships that are essential for California water resources planning, sustainable watershed and floodplain management, and increasing regional self-sufficiency.” State-level water managers in California began to recognize the need for local- and regional-scale water planning in the late 1990s. Over the past decade, California has made significant steps in implementing Integrated Regional Water Management (IRWM). In 2002, voters passed Proposition 50, which developed the Integrated Regional Water Management Grant Program as a joint effort between the California Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB). Proposition 50 provided competitive grant funding through the IRWM Program for projects that protected communities from drought, protected and improved water quality, and reduced dependence on imported water. Approximately \$380 million were made available through two rounds of funding.

Subsequently, voters passed Proposition 84 and Proposition 1E in 2006. These propositions created additional funding through the IRWM Grant Program for projects that assist local agencies to meet the long-term water needs of the State, including delivery of safe drinking water and protection of water quality and the environment. To be eligible for this funding, projects and project sponsors must be involved in a Regional Water Management Group (RWMG) that has adopted an IRWM Plan.



Purpose

The IRWM Program is intended to promote and implement integrated regional water management to ensure sustainable water uses, reliable water supplies, improved water quality, environmental stewardship, efficient urban development, sustainable agriculture, and a strong economy. This planning and implementation framework is intended to comprehensively and concurrently address challenges of water supply, water quality, flood management, and ecosystem protection. It also implements integrated solutions through a collaborative multi-partner process that includes water managers; Native American tribes; non-governmental organizations; federal, State, and local government agencies; and disadvantaged communities. IRWM is a portfolio approach for determining the appropriate mix of water-related resource

management strategies, water quality actions, and steps to enhance environmental stewardship for the planning region. The goal is to provide long-term, high-quality, and reliable water supplies for all users at the lowest reasonable cost and with highest possible benefits for economic development, environmental quality, and other societal objectives (CA Water Plan Update, 2009).

Status

Proposition 50 money allocated for the IRWM Program has already been expended through two funding rounds to RWMGs throughout the State. Since 2008, all IRWM Program funding has come from Proposition 84. There have been two rounds of Planning Grant funding (2009 and 2012) and one round of project Implementation funding (2011). It is expected that there will be two additional rounds of implementation funding in 2013 and 2014-15. Beyond Prop. 84, long-term sustainable funding for the IRWM Program is uncertain. A water bond will be on the 2014 ballot, but its passage is not certain. Even if it is approved, it will take time to organize funding programs and make them available to IRWM groups. It may fall to individual RWMGs to ensure continuity of funding for their planning regions.

Eighty-two percent of California's land area is included in an IRWM effort, up from 54% during the Prop. 50 funding rounds. Similarly, 98% of California's population is now included in an IRWM region, slightly up from 94% during Proposition 50. In 2009 the Department of Water Resources administered the first round of a Region Acceptance Process (RAP), in which IRWM regions submitted applications to have their boundaries approved by DWR. In 2009, 46 regions submitted applications and 41 were approved. An additional eleven regions were approved through the second RAP round in 2011, some of which had not been approved (or were conditionally approved) during the first round.

Statewide Priorities for IRWM Program

DWR's IRWM Grant Program encourages development of integrated regional strategies for management of water resources by providing funding through competitive grants. Eligible projects must implement IRWM plans that meet the requirements of Section 75026 of Proposition 84. As required, IRWM plans should identify and address the major water-related objectives and conflicts within the region, consider all resource management strategies identified in the California Water Plan Update, and use an integrated, multi-benefit approach for project selection and design. Plans shall include performance measures and monitoring plans to document progress toward meeting Plan objectives. Projects that may be funded pursuant to this section must be consistent with an adopted IRWM Plan or its functional equivalent as defined in the Department's Proposition 84 IRWM Guidelines. Furthermore, funding preference will be given to projects that address the following Program Preferences:

- Include regional projects or programs
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board region or subdivision; or other region or sub-region specifically identified by DWR
- Effectively resolve significant water-related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta program

- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible Stormwater/Flood Management (SWFM) funding, projects which a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of in-stream erosion and sedimentation, and groundwater recharge
- Address Statewide priorities specific to the IRWM Grant Program:
 - Drought preparedness
 - Use and reuse water more efficiently
 - Climate change response actions
 - Expand environmental stewardship
 - Practice integrated flood management
 - Protect surface water and groundwater quality
 - Improve tribal water and natural resources
 - Ensure equitable distribution of benefits

The text of Proposition 84 specifically directs that projects funded under the IRWM Program should include one or more of the following elements:

- 1) Water supply reliability, water conservation and water use efficiency
- 2) Storm water capture, storage, clean-up, treatment, and management
- 3) Removal of invasive non-native species, the creation and enhancement of wetlands, and the acquisition, protection, and restoration of open space and watershed lands
- 4) Non-point source pollution reduction, management and monitoring
- 5) Groundwater recharge and management projects
- 6) Contaminant and salt removal through reclamation, desalting, and other treatment technologies and conveyance of reclaimed water for distribution to users
- 7) Water banking, exchange, reclamation and improvement of water quality
- 8) Planning and implementation of multipurpose flood management programs
- 9) Watershed protection and management
- 10) Drinking water treatment and distribution
- 11) Ecosystem and fisheries restoration and protection

Inyo-Mono Regional Water Management Group

History and Funding

The Integrated Regional Water Management planning process was initiated in the central-eastern region of California in early 2008 in response to funding opportunities provided by Proposition 84. The initial group consisted of about 15 stakeholders, and at early meetings, the group recognized the benefits of having a multiple-agency and multiple-purpose perspective, and that water resource needs in eastern California are highly interconnected and require a broad and integrated approach. One of the first tasks of the initial stakeholder group was to determine the boundaries of the planning region. After considerable discussion and input from

many parties, the boundaries were drawn as depicted in Figure 1-1 (see also Chapter 2). Because there was some overlap between the Inyo-Mono IRWM planning region and other IRWM planning regions, the Inyo-Mono RWMG initiated conversations with neighboring regions to discuss and agree upon shared boundaries and areas of overlap (see Chapters 6 and 8 for further discussion of this topic).

The Inyo-Mono RWMG received a project launch grant from the Sierra Nevada Conservancy in 2008. This grant allowed for the hiring of a Project Assistant, the involvement of a meeting facilitator, and the recruitment of a grantwriter for the first round of Prop. 84 Planning Grants. This grant was frozen at the end of 2008 due to statewide budget concerns, which meant the discontinuation of meeting facilitation and grantwriting assistance. The RWMG pushed ahead nonetheless and prepared an application for the 2009 Region Acceptance Process. This process resulted in the unconditional approval from DWR of the Inyo-Mono regional boundaries and an affirmation of the overall planning process being employed by the RWMG.

Because funding remained limited, the RWMG prepared a Round 1 Planning Grant application in-house. This application was submitted in September, 2010, and was fully funded by DWR. This funding provided support for the ongoing operations of the RWMG as well as an opportunity to revise the Phase I IRWM Plan prepared by the RWMG in late 2010. It was recognized that the Phase I Plan only minimally addressed some of the Plan Standards required by DWR in order to be eligible to apply for a Round 1 Implementation Grant. The RWMG submitted a Round 1 Implementation Grant proposal in early 2011 that contained 15 projects and requested just over \$4 million in grant funding. The preliminary funding recommendations provided no funding for the Inyo-Mono application; however, after working with DWR during the public comment process, the region eventually received \$1,075,000. This funding allowed seven on-the-ground projects to be implemented throughout the region (see Chapter 9). The Inyo-Mono Program was awarded a second Planning Grant in 2012 to support updating this IRWM Plan to meet enhanced Plan standards and to match evolving regional priorities. The grant also supports ongoing operations of the Program as well as three discrete planning studies (see Chapter 9). Work on this grant will continue through the first half of 2015.

An additional funding opportunity was made available from DWR in 2010 to identify, engage, and work with disadvantaged communities (DACs). As a region that contains a large number of DACs, the Inyo-Mono RWMG recognized the opportunity and worked to secure one of five available grants. Funding from this grant was made available in 2011, and work on the project will be completed by the end of 2014. Additional DAC grant money was secured in 2012 to supplement and enhance the work being done through the original grant. The Inyo-Mono RWMG will continue to pursue Prop. 84 funding opportunities but, recognizing the finite amount of time and funding remaining through Prop. 84, will begin to look for and pursue other funding options. See Chapter 9 for more information on financing the Inyo-Mono IRWM Program.

Figure 1-1. Boundaries of Eastern California IRWM Planning regions



Eastern California IRWMP Regions



IRWM Planning Regions relative to the Inyo-Mono region noting overlap between the Inyo-Mono and Mojave Regions

Composition and Structure

The Inyo-Mono IRWM Program consists of a main group (RWMG), an advisory committee (Administrative Committee), paid staff, and ad-hoc working committees. The RWMG is the largest and most inclusive group and is the main decision-making body for the Inyo-Mono IRWM planning and implementation processes. The RWMG has been organized as a non-binding, non-regulatory, voluntary entity governed by a Memorandum of Understanding (MOU; more information on governance can be found in Chapter 5). Signatories to the MOU are considered “Members” of the RWMG and can participate in the decision-making process. There is no monetary requirement for Members, and Members may leave the RWMG at any time. During the pre-planning phase of the IRWM Program, 28 RWMG participants signed an initial MOU which described the governance structure and provided "ground rules" that defined roles and responsibilities, stakeholder engagement, and decision-making for the RWMG. A substantially revised MOU was developed in the first half of 2010 to govern the group in the planning and implementation phases of the IRWM planning process. This MOU took effect November 15, 2010. Since that time, minor revisions have been made to the planning/implementation MOU. The RWMG will continue to revise and/or amend the MOU as necessary. As of the writing of this Plan, there were 34 signatories to the planning/implementation MOU. A list of the current signatories can be found in Chapter 5. All organizations involved with the IRWM Program, regardless of membership in the RWMG, as well as members of the public, are welcome to attend RWMG meetings and provide input on decisions. The RWMG meets in-person at various locations within the planning area approximately once per month and always provides a conference call option for Members and others who cannot attend in person, given the large size of the region.

The Inyo-Mono RWMG is comprised of a broad array of stakeholders from throughout Inyo and Mono Counties as well as stakeholders from northern San Bernardino and Kern Counties, including agencies with statutory authority over water (see Chapter 5). Those entities involved represent interests ranging from federal, state, and local government; resource and water agencies; non-profit and conservation organizations; American Indian tribal organizations; educational organizations; business interests; agriculture and ranching groups; and individuals having vested interests in how water is managed in eastern California. In addition to those entities that are Members of the RWMG and/or regularly participate in the planning process, there is a large number of organizations and individuals who are on the Inyo-Mono RWMG contact list and regularly receive updates and notices of meetings. Some of these entities have been regular participants in the past but do not currently participate at a high level. Other entities have had little contact with the RWMG or Program Office but wish to stay informed of issues being addressed by the RWMG. In total, more than 200 people, representing 106 organizations, are included in the Inyo-Mono contact list (Table 1-1).

Table 1-1. Organizations included in the Inyo-Mono IRWM Program contact list.

Inyo-Mono IRWM Program Contact List Organizations

<ul style="list-style-type: none"> ▪ Amargosa Conservancy 	<ul style="list-style-type: none"> ▪ Eastern Kern County RCD 	<ul style="list-style-type: none"> ▪ Lower Rock Creek Mutual Water Company 	<ul style="list-style-type: none"> ▪ Timbisha-Shoshone Tribe of Death Valley
<ul style="list-style-type: none"> ▪ Aspendell Mutual Water Company 	<ul style="list-style-type: none"> ▪ Eastern Sierra Audubon Society 	<ul style="list-style-type: none"> ▪ Lundy Mutual Water Company 	<ul style="list-style-type: none"> ▪ Town of Mammoth Lakes
<ul style="list-style-type: none"> ▪ Benton Paiute Reservation 	<ul style="list-style-type: none"> ▪ Eastern Sierra Cattleman's Association 	<ul style="list-style-type: none"> ▪ Mammoth Community Water District 	<ul style="list-style-type: none"> ▪ U.S. Bureau of Reclamation
<ul style="list-style-type: none"> ▪ Big Pine CSD 	<ul style="list-style-type: none"> ▪ Eastern Sierra Land Trust 	<ul style="list-style-type: none"> ▪ Mammoth Lakes Trails and Public Access 	<ul style="list-style-type: none"> ▪ U.S. Fish and Wildlife Service
<ul style="list-style-type: none"> ▪ Big Pine Paiute Tribe of the Owens Valley 	<ul style="list-style-type: none"> ▪ Eastern Sierra Unified School District 	<ul style="list-style-type: none"> ▪ Mammoth Mountain Ski Area 	<ul style="list-style-type: none"> ▪ Valentine Eastern Sierra University of California Natural Reserve
<ul style="list-style-type: none"> ▪ Birchim CSD 	<ul style="list-style-type: none"> ▪ EM Hydrology 	<ul style="list-style-type: none"> ▪ Marine Corps Mountain Warfare Training Center 	<ul style="list-style-type: none"> ▪ Virginia Lakes Mutual Water Company
<ul style="list-style-type: none"> ▪ Bishop Paiute Tribe 	<ul style="list-style-type: none"> ▪ Fort Independence – Amalgamated Reservation 	<ul style="list-style-type: none"> ▪ Mariposa County Resource Conservation District 	<ul style="list-style-type: none"> ▪ Walker Irrigation District
<ul style="list-style-type: none"> ▪ Breeze-Martin Consulting 	<ul style="list-style-type: none"> ▪ Friends of the Inyo 	<ul style="list-style-type: none"> ▪ Mojave Desert Mountain Resource Conservation & Development 	<ul style="list-style-type: none"> ▪ Wheeler Crest CSD
<ul style="list-style-type: none"> ▪ Bridgeport Indian Colony 	<ul style="list-style-type: none"> ▪ Great Basin Unified Air Pollution Control District 	<ul style="list-style-type: none"> ▪ Mono County 	<ul style="list-style-type: none"> ▪ The Wilderness Society
<ul style="list-style-type: none"> ▪ Bridgeport PUD 	<ul style="list-style-type: none"> ▪ High Sierra Energy Foundation 	<ul style="list-style-type: none"> ▪ Mono County RCD 	<ul style="list-style-type: none"> ▪ State Water Resources Control Board
<ul style="list-style-type: none"> ▪ Bridgeport Ranchers Association 	<ul style="list-style-type: none"> ▪ Hot Creek Ranch 	<ul style="list-style-type: none"> ▪ Mono Lake Committee 	<ul style="list-style-type: none"> ▪ South Tahoe Public Utilities District
<ul style="list-style-type: none"> ▪ Bureau of Land Management - Bishop Office 	<ul style="list-style-type: none"> ▪ Humboldt-Toiyabe National Forest 	<ul style="list-style-type: none"> ▪ Mountain Meadows Mutual Water District 	<ul style="list-style-type: none"> ▪
<ul style="list-style-type: none"> ▪ Bristlecone Media 	<ul style="list-style-type: none"> ▪ Independence Civic Club 	<ul style="list-style-type: none"> ▪ Natural Resource Conservation Service - Bishop Office 	<ul style="list-style-type: none"> ▪
<ul style="list-style-type: none"> ▪ California Department of Fish and Wildlife 	<ul style="list-style-type: none"> ▪ Indian Wells Valley Cooperative Groundwater Management Group 	<ul style="list-style-type: none"> ▪ Natural Resource Conservation Service - Minden Office 	<ul style="list-style-type: none"> ▪
<ul style="list-style-type: none"> ▪ California Department Water Resources 	<ul style="list-style-type: none"> ▪ Indian Wells Valley Water District 	<ul style="list-style-type: none"> ▪ Owens Valley Committee 	<ul style="list-style-type: none"> ▪

Inyo-Mono IRWM Program Contact List Organizations

<ul style="list-style-type: none"> ▪ California Native Plant Society - Bristlecone Chapter 	<ul style="list-style-type: none"> ▪ Inland Aquaculture Group 	<ul style="list-style-type: none"> ▪ Owens Valley Indian Water Commission 	▪
<ul style="list-style-type: none"> ▪ California Rural Water Association 	<ul style="list-style-type: none"> ▪ Inyo County 	<ul style="list-style-type: none"> ▪ Lahontan Regional Water Quality Control Board 	▪
<ul style="list-style-type: none"> ▪ California State Lands Commission 	<ul style="list-style-type: none"> ▪ Inyo Mono Farm Bureau 	<ul style="list-style-type: none"> ▪ Round Valley Joint Elementary School District 	▪
<ul style="list-style-type: none"> ▪ California Trout 	<ul style="list-style-type: none"> ▪ Inyo Mono RCD 	<ul style="list-style-type: none"> ▪ Sierra Club, Toiyabe Chapter, Range of Light Group 	▪
<ul style="list-style-type: none"> ▪ Center for Collaborative Policy 	<ul style="list-style-type: none"> ▪ Inyo National Forest 	<ul style="list-style-type: none"> ▪ Sierra East Homeowners Association 	▪
<ul style="list-style-type: none"> ▪ Central Nevada Regional Water Authority 	<ul style="list-style-type: none"> ▪ Inyo/Mono Agricultural Commissioner's Office 	<ul style="list-style-type: none"> ▪ Sierra Nevada Alliance 	▪
<ul style="list-style-type: none"> ▪ Central Sierra Resource Conservation & Development Council 	<ul style="list-style-type: none"> ▪ Inyokern CSD 	<ul style="list-style-type: none"> ▪ Sierra Nevada Conservancy 	▪
<ul style="list-style-type: none"> ▪ City of Bishop 	<ul style="list-style-type: none"> ▪ June Lake Advocates 	<ul style="list-style-type: none"> ▪ Sierra Pacific Power 	▪
<ul style="list-style-type: none"> ▪ Crowley Lake Mutual Water Company 	<ul style="list-style-type: none"> ▪ June Lake PUD 	<ul style="list-style-type: none"> ▪ Small Inyo/Mono water systems 	▪
<ul style="list-style-type: none"> ▪ Crystal Crag Water & Development Association 	<ul style="list-style-type: none"> ▪ Keeler CSD 	<ul style="list-style-type: none"> ▪ Snow Survey Associates 	▪
<ul style="list-style-type: none"> ▪ Death Valley National Park 	<ul style="list-style-type: none"> ▪ Kern County Water Agency 	<ul style="list-style-type: none"> ▪ Southern Cal Edison-Mammoth Service Center 	▪
<ul style="list-style-type: none"> ▪ Desert Fishes Council 	<ul style="list-style-type: none"> ▪ L.A. Department of Water and Power – Bishop Office 	<ul style="list-style-type: none"> ▪ Southern Sierra IRWM Program 	
<ul style="list-style-type: none"> ▪ Devils Postpile National Monument 	<ul style="list-style-type: none"> ▪ Lone Pine Paiute-Shoshone Reservation 	<ul style="list-style-type: none"> ▪ TEAM Engineering 	

During the project launch phase, a Coordinating Committee served as an advisory or steering group for the Planning Committee (which is now known as the RWMG), Program Office, and working committees, and was comprised of a subset of Planning Committee Members. Starting November 15, 2010, an Administrative (Admin.) Committee took over the roles and responsibilities of the Coordinating Committee. The Admin. Committee consists of six RWMG

Members that serve on a voluntary basis. Membership on the Admin. Committee rotates through the RWMG. Each year, three new Admin. Committee members are appointed, so that each Admin. Committee member will serve for two years, thus providing continuity among years. More information on the composition and the role of the Admin. Committee can be found in Chapter 5.

Specialized ad-hoc working committees made up of RWMG participants are established as needed to perform functions, develop programs, and work through concepts (such as organizational structure, internal project ranking processes, etc.). Working committees deliver products to the RWMG and the Administrative Committee for approval and/or adoption.

Finally, the Inyo-Mono IRWM Program Office staff consists of varying numbers of people based on available funding and workload. The Program Office staff is tasked with the overall coordination and day-to-day operations of the RWMG as well as conducting and overseeing the work of both planning grants and the DAC grant. Staff duties include grantwriting, grant administration, research, outreach, data management, GIS, communicating with RWMG Members and participants, participating in Statewide IRWM meetings, and Plan writing. At this time, all staff, except the Program Director, are independent contractors through California Trout, which has been the grantee for all DWR grant applications except the Round 1 Implementation Grant. The Program Office is based in Mammoth Lakes, California.

Purpose, Mission, and Vision

The purpose of the Inyo-Mono IRWM Program is to foster coordination, collaboration, and communication among water-related stakeholders in the region for the purpose of developing water management strategies and projects that will benefit multiple entities and enhance water supply, water quality, and watershed health. Specific objectives and resource management strategies derived from the purpose are presented in Chapter 7.

After a visioning exercise undertaken in early 2010, the following mission and vision statements were adopted by the RWMG:

Mission: *To identify, study, prioritize, and act on regional water issues so as to protect and enhance our environment and economy. Working together, we create and implement a regional water management plan that complements applicable local, state, tribal, and federal policies and regulations and promotes innovative solutions for our region's needs.*

Vision: *Our vision is a landscape that is ecologically, socially, and economically resilient. As diverse stakeholders, we identify and work toward our common goals. We achieve a broad-based perspective that benefits our regional ecosystems and human communities by combining our interests, knowledge, expertise and approaches. We strive to have every voice heard within our region and our collective voice heard in the state and nation.*

Communication, Meetings, and Workshops

Communication with the RWMG primarily takes place through email. Notices and agendas for

upcoming RWMG meetings are sent to all people on the email contact list, as are meeting summaries and any other relevant information about the Inyo-Mono IRWM process or issues related to water planning/management in the region. In addition, Program Office staff is available by phone and by email for questions and information requests. When warranted, staff will travel within the region, to Sacramento, or to other IRWM regions to meet with stakeholders, members of the public, and DWR officials. The project website (www.inyo-monowater.org) has become an increasingly visible and important tool for sharing information with current Members and reaching out to new stakeholders. On this website, visitors can find topics such as introductory information about the Inyo-Mono IRWM Program, member organizations, meeting summaries and other important documents, and links to other IRWM groups (see next section for more information). Because of the rural nature of the Inyo-Mono region, Internet access can be unreliable, and it has been necessary at times to reach people through other means (such as phone, U.S. mail, in- person, etc.).

RWMG meetings are typically held every other month or once per quarter. Meetings take place throughout the region, although attendance is highest when meetings are held in Bishop or Mammoth Lakes. A call-in option is available during all RWMG meetings for those who cannot or prefer not to attend in person. Administrative Committee meetings are typically held via conference call, as are working committee meetings, though there is always an in-person option. All RWMG and Admin. Committee meetings are open to the public and meeting notices and agendas are posted to the Inyo-Mono IRWM Program website as well as in public locations and newspapers throughout the region. All Inyo-Mono IRWM Program meetings are held in accordance with the Ralph M. Brown Act.

Website

The initial Inyo-Mono IRWM Program website (www.inyo-monowater.org) was launched in 2008 as part of the project launch grant through the Sierra Nevada Conservancy. This website provided general information about the IRWM Program and also more specific information on the history, composition, and activities of the Inyo-Mono RWMG. There was also an events calendar and a documents page where users could access meeting summaries and other documents relevant to the IRWM process. The general theme of this first website is depicted in Figure 1-2.

Figure 1-2. Inyo-Mono IRWM Program original website homepage

INYO-MONO

INTEGRATED REGIONAL WATER MANAGEMENT PLAN

[Who We Are](#)

[What is an IRWMP](#)

[How to get Involved](#)

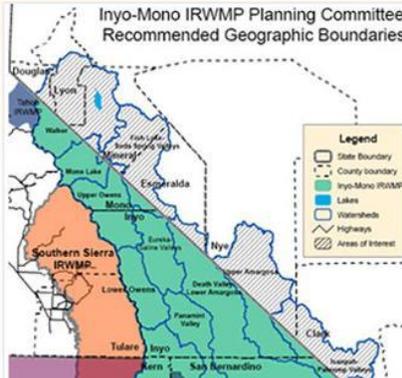
[FAQ](#)

[Documents](#)

[Related Links](#)

WHO IS THE INYO-MONO IRWMP

The Inyo-Mono IRWMP project is comprised of a broad array of stakeholders throughout Inyo and Mono Counties as well as stakeholders from northern San Bernardino and Kern Counties (link to proposed geographic boundary map). Currently there are more than thirty public, private and not-for-profit entities actively working towards the goal of establishing and implementing an IRWMP for Inyo and Mono Counties. Those involved represent interests ranging from municipal water districts, Indian tribes, public lands, farming communities and conservation organizations having vested interests in how water is managed in eastern California (link to bottom right hand column containing the list of participants). The Inyo-Mono IRWMP is governed by two committees. The Planning Committee includes representatives from all entities participating



WHAT IS AN INTEGRATED REGIONAL WATER MANAGEMENT PLAN?

Integrated Regional Water Management Plan (IRWMP)

A voluntary and non-regulatory planning document that identifies broadly-supported goals/objectives pertaining to water resources management informed by the various pre-existing plans in the region

Implemented by a united regional community

Provides a framework within which to address water issues such as water supply, water quality, habitat and environment, recreation, and land use

Millions of dollars have been allocated for IRWMPs by the state through Propositions 50 and 84. Grants are rewarded through the California Department of Water Resources (DWR)

In 2011, the Inyo-Mono IRWM Program website was overhauled (Figure 1-3). This new website contains all the information from the initial website and adds a substantial amount of additional content and functionality. More capacity was built into the website to house specific project information, a documents library, mapping capabilities, a news feed, and log-in pages for controlling secure content. In addition to the e-mail contact list, the website has become a primary tool for communicating with the RWMG. New stakeholders and members of the public are also directed to the website as a way to introduce the IRWM planning concept and provide basic information about the Inyo-Mono RWMG and its processes. The website is maintained by Program Office staff, and the content is continuously being updated and improved. The staff will continue to add content and functionality as needs arise.

Figure 1-3. Homepage of updated Inyo-Mono IRWM Program website.



Public Involvement and Outreach

Any member of the public who is interested in water issues within the Inyo-Mono planning region is welcome to participate in the Inyo-Mono IRWM Program. Initial outreach in 2008 was primarily directed towards informing major water-related stakeholders in the region and inviting them to be part of the process. More recent outreach has targeted any entity or individual in the region working on water planning or management, especially those within designated disadvantaged communities and tribal communities, with the intent being to assess needs and bring needed resources to the region. Since the start of the IRWM Program, staff and other stakeholder volunteers have attended various community meetings throughout the planning region in order to identify additional stakeholders, provide basic information about the Inyo-Mono IRWM Program and related funding opportunities, and learn about water issues and concerns from those living and working in the planning region. In these meetings, Program Office staff also emphasizes that the goal of the IRWM Program is to increase local participation in water management issues and provide a more unified voice in California water planning. A primary goal of the most recent outreach efforts has been to identify and reach out to the more remote and rural communities within the region. Because of the size of the region, it has been difficult to reach every potentially affected stakeholder or community. However, it has been the priority of the Inyo-Mono RWMG from the beginning to maintain an open, transparent, and inclusive process, and public outreach efforts have been fundamental to the success of the Program. At all times, Inyo-Mono RWMG meetings have been open to the public, and notices of the meetings are publicly available on the website, on the Facebook page (<https://www.facebook.com/pages/Inyo-Mono-Integrated-Regional-Water-Management-Group/287154034655884>), in local media outlets, and at public locations throughout the region. More information on the Program's outreach activities can be found in Chapter 6.

Disadvantaged Communities and Native American Indian Tribes

From the beginning of the Inyo-Mono IRWM planning process in early 2008, the RWMG prioritized outreach to and engagement of disadvantaged communities (DACs) and tribes. It was quickly recognized that because of the rural and remote nature of the region, there would likely be a large number of DACs. Indeed, it was discovered that all of Inyo County (the second largest county in California) is a DAC according to its median household income (see below). As described below, DACs in the Inyo-Mono planning region include unincorporated communities in Inyo, Mono, San Bernardino, and Kern Counties, as well as federally-recognized and non-federally-recognized American Indian tribes.

A disadvantaged community is defined by California statute as a community with an annual median household income (MHI) that is less than 80% of the statewide annual MHI (Assembly Bill 1747 [2003]). MHI data were not made available at the community level from the



2010 U.S. Census; instead, we have used 2006-2010 American Community Survey (ACS) data to perform an initial identification of DACs within the Inyo-Mono region (http://www.census.gov/acs/www/about_the_survey/american_community_survey/). Because of the remote and rural nature of the Inyo-Mono region, as well as its sparsely-distributed and often small population centers, neither U.S. Census nor ACS data are available for all communities in the region. Thus, the number of identified DACs in the Inyo-Mono region is likely underestimated. Through the DAC grant from DWR, the Inyo-Mono RWMG is developing a set of metrics that could be used to define and identify DACs and that are not dependent on inconsistent data sources. One of the goals of this effort is to influence the law setting the definition of DACs and help to make it more inclusive. In the meantime, however, the discussion of Inyo-Mono DACs in this Plan will be limited to those meeting the MHI standard as determined by 2006-2010 ACS data. Locations of DACs in the Inyo-Mono region identified using ACS data are shown in Figure 1-4.

Figure 1-4: Disadvantaged Communities of the Inyo-Mono Region



Inyo- Mono DACs & Regional Population Distribution



The above map indicates DACs of the Inyo-Mono region and illustrates problems using Census data in rural regions where numerous communities are excluded.

The statewide annual MHI in California based on the 2006-2010 ACS is \$60,883. Communities

with annual MHIs less than \$48,706 are considered disadvantaged communities by the AB 1747 definition. Using this definition, the entirety of both Inyo and Kern Counties are disadvantaged based on county-wide MHI estimates (Table 1-2). Based on the 2006-2010 ACS data, the MHI for the whole of Inyo County is \$44,808, which is below the statewide 80% of MHI threshold. Eighteen communities in Inyo County qualify as disadvantaged using the current definition. All of the American Indian Reservations in Inyo County qualify as disadvantaged communities. The population of the disadvantaged communities in Inyo County is at least 12,600 (some population data are not available; see Table 1-2), representing 68.5% of the total county population.

The MHI for Mono County is \$55,807, which is higher than Inyo County but still below the statewide MHI. Nine communities in Mono County qualify as disadvantaged, accounting for at least 12% (more than 1,750 people; not all population data are available) of the total population of Mono County. All American Indian Reservations in Mono County qualify as DACs. In addition, there are “pockets” of disadvantage within more wealthy communities that do not officially qualify as DACs. The Inyo-Mono RWMG is working to determine how best to identify these pockets and bring resources to them.

MHI estimates for Mono and San Bernardino Counties are approximately \$7,000 above the statewide 80% MHI threshold. The Kern County MHI is \$47,089, which is also below the DAC MHI threshold. A very small portion of Kern County is located within the Inyo-Mono planning region; however, two communities qualify as disadvantaged, representing 3,229 people.

Similarly, a small portion of northern San Bernardino County is located within the Inyo-Mono planning region. The MHI for San Bernardino County is \$55,845, which is higher than the DAC threshold but still below the statewide MHI. Within the Inyo-Mono portion of San Bernardino County, two communities are considered disadvantaged, representing 2,015 people.

In total, approximately 20,000 people live in disadvantaged communities in the Inyo-Mono region. Given the small population of the region, this represents approximately one-third of the overall population, yet still may not adequately represent the disadvantaged nature of some communities within the region. The work taking place through the DAC grant will attempt to more accurately portray the definition of “disadvantaged” for rural, remote, mountainous, and/or headwaters regions.

As described above, the Inyo-Mono RWMG secured funding from DWR in 2011 specifically for DAC outreach and engagement. Through this funding, one-on-one and public meetings were held throughout the region with the intention of engaging with as many DACs in the area as possible while at the same time gathering information about DAC water-related needs and determining how to best bring resources to these communities. The RWMG has recognized that the success of the IRWM planning effort in the region cannot be fully realized without the participation of DACs. Indeed, inclusion of DACs into the process helps to provide a stronger voice in support of the needs of rural communities. Results from this work will also be provided to DWR and other state water agencies, along with recommendations, to help them develop DAC-specific programs and policies.

It was also recognized early on that it would be imperative to have tribal involvement in the

RWVG as there are several federally-recognized (and a few non-federally-recognized) tribes in the area that contribute significantly to the economy and culture of the region and have been involved in regional water issues for centuries. Targeted outreach efforts yielded good results, and all tribes in the region but two are signatories to the Inyo-Mono MOU.

Table 1-2. Identified disadvantaged communities in the Inyo-Mono IRWM planning region based on 2010 5-year American Community Survey data (unless otherwise noted)

Community (As recognized by the U.S. Census Bureau)	Population	Annual Median Household Income
Inyo County	18,434⁶	\$44,808
Big Pine Paiute Reservation of the Owens Valley	262	\$43,214
Bishop	3,826	\$37,005
Bishop Paiute Tribe	1,828	\$46,384
Darwin	30	\$30,893
Dixon Lane-Meadow Creek	2,660	\$48,542
Fort Independence Tribe	81	\$30,417
Furnace Creek	64	\$27,813
Homewood Canyon	109	\$14,706
Independence	551	\$47,883
Keeler	27	\$44,500
Lone Pine	2,309	\$40,176
Lone Pine Paiute-Shoshone Reservation	148	\$37,188
Pearsonville	5	Not available ⁵
Shoshone	33	\$28,750
Tecopa	101	\$21,806
Timbisha-Shoshone Reservation	32	\$23,063
Valley Wells	Not available	Not available
Wilkerson	563	\$44,356
Kern County	815,693	\$47,089
China Lake Acres	1,553	\$35,102
Inyokern	1,676	\$31,925
Mono County	13,905	\$55,087
Benton	289	\$40,119

Community (As recognized by the U.S. Census Bureau)	Population	Annual Median Household Income
Benton Paiute Reservation	75 ¹	\$9,938 ¹
Bridgeport Indian Colony	35 ²	\$10,625
McGee Creek	29	Not available
Topaz	Not available	Not available
Walker River Reservation	508	\$25,227
Walker	677	\$30,682
Woodfords Community of the Washoe Tribe ⁴	139	\$25,417
San Bernardino County	2,005,287	\$55,845
Searles Valley ³	2,088	\$35,147
Trona	17	Not available

¹From 2009 5-year ACS

²From 2010 Dicennial Census

³Consists of the communities of Argus, Trona, Pioneer Point, and Searles Valley, CA

⁴Woodfords Community is the sole branch of the Washoe Tribe located in CA

⁵Communities with MHI listed as "Not available" are listed as DACs based on their DAC designation using DWR's DAC mapping tool:

<http://www.arcgis.com/apps/OnePane/basicviewer/index.html?&extent={%22xmin%22:-15522106.757711068,%22ymin%22:3383875.113067463,%22xmax%22:-11562057.196313709,%22ymax%22:5663533.044643953,%22spatialReference%22:{%22wkid%22:102100}}&appid=c034d1f8f9f34afeb98f20be2a2fb790>

⁶Overall population numbers for counties may be slightly different from numbers referenced in other sections of the Plan due to differences between 2010 Census and 2006-2010 ACS data.

Principal Water-Related Concerns and Issues in the Inyo-Mono Region

Through the process of working with RWMG Members, participants, and other water-related stakeholders in the region, and through extensive outreach to the communities of the Inyo-Mono planning region, three principal categories of water issues have been identified. Many other issues exist in the region, but these three categories stand out as themes impacting the entire region.

- 1) **Water Quality.** Many communities in the Inyo-Mono planning region primarily depend on groundwater as their potable water supply. Due to the chemical composition and weathering processes of the granitic bedrock that underlies much of the region, natural contaminants are commonly found in surface water and groundwater sources - primarily arsenic and uranium. As a result, water systems in many communities within the planning region regularly exceed state and federal maximum contaminant levels; however, because of the limited resources of many of these rural communities, they are unable to bring their drinking water sources into compliance. Such water quality issues are truly region-wide, from Coleville in the north of the region to Keeler near the center and Tecopa in the southeast corner. Several communities rely on expensive bottled water as their primary

source of drinking water.

- 2) **Water Infrastructure.** Several communities have identified concerns about old, outdated, and/or poor-quality water infrastructure. These problems include pipes, tanks, wells, diversion structures, and underground mainlines. Poor or failing water infrastructure results in substantial water loss, degraded water quality, and inadequate fire-fighting capabilities. Even though the planning region encompasses a wide variety of landscapes and ecosystems, both water infrastructure and fire water storage concerns are found throughout the region.
- 3) **Institutional/Human Capacity.** Although capacity is not directly a water issue, the RWMG has come to see limited capacity and resources as a major obstacle to improving water quality, water supply, and watershed health in the region. Throughout the region, representatives from communities, particularly those that are small and/or disadvantaged, have expressed the need for both technical and financial resources to address water resources concerns. Many of these communities lack the expertise necessary to develop engineering plans, conduct environmental review, write grant proposals, and implement projects, nor do they have the financial resources to hire expensive outside contractors to support these activities. Furthermore, many communities have expressed concern that even after a project is built, they often cannot find the resources to operate and maintain the project, and quality and project longevity may be compromised as a result.

Approach and Relation to Other Planning Efforts within the Region

The Inyo-Mono IRWM Plan is not a legally binding document; however, many of the member organizations and other stakeholders must adhere to various other plans, policies, and regulations that govern water management in the region. Therefore, it is necessary to know of and understand these documents as the Inyo-Mono RWMG develops and implements water resource projects. Planning documents that have been completed and/or implemented before the start of or during the process of the Inyo-Mono IRWM Program are introduced and discussed in Chapter 11. The RWMG relies on the knowledge and community involvement of its Members and participants to stay informed about new or ongoing planning efforts. If possible, Program Office staff attends stakeholder meetings or otherwise communicates with other planning entities to (1) stay updated about the planning effort and (2) to provide input on behalf of the RWMG, if warranted. The relationship of the Inyo-Mono IRWM Plan to other planning efforts in the region is further discussed in Chapters 8 and 11.

Coordination with Other IRWM Programs

Throughout the planning process, RWMG participants and Program Office staff have communicated and coordinated regularly with other IRWM planning regions in the State. During the launch phase, coordination with adjacent and neighboring IRWM planning regions was essential to ensure agreement regarding common boundaries, overlapping boundaries between proposed IRWM planning regions, and gaps between existing and proposed IRWM planning regions. An initial meeting among neighboring IRWM planning regions took place in 2008 to begin a focused dialogue amongst the various IRWM planning regions specific to boundary issues. During the initial meeting, those participating agreed that further coordination should



take place. This communication resulted in a series of Letters of Agreement between neighboring IRWM planning regions that then became part of each region's Region Acceptance Process application. The entities included in these letters of agreement were: Tahoe-Sierra IRWM Program, Southern Sierra IRWM Program, Antelope Valley IRWM Program, Mojave IRWM Program, and Kern County (Figure 1-1). At times, Madera and Mariposa Counties were also included in these boundary discussions, although the formation of IRWM Programs in their areas

was not finalized at the time. Another goal of this outreach to neighboring regions was to lay the groundwork for future collaboration on shared water resource issues.

More recently, conversations have taken place among the six IRWM regional groups of the Lahontan funding region (<http://www.water.ca.gov/irwm/grants/docs/FundingAreaContacts/FA%20factsheetrev1.pdf>)

regarding allocation of the remaining Proposition 84 funds. An informal agreement was developed to split the remaining funds using a formula that accounts for equal allocation, population distribution, and IRWM region land area. This agreement has been presented to DWR, and presuming all Lahontan-area IRWM regions can meet minimum standards in funding applications, this allocation will be adhered to for the final two rounds of Prop. 84 grants.

Meetings with neighboring IRWM groups allowed the Inyo-Mono IRWM planning region to learn how other IRWM planning regions formed, invited and involved stakeholders, wrote IRWM Plans, and implemented projects. Program Office staff has used contacts from other IRWM planning regions throughout California, particularly those at advanced stages of IRWM planning, for advice and input. Likewise, after six years of existence, the Inyo-Mono IRWM Program has now become a resource for "younger" programs as they develop their governance, outreach processes, and Plans. The Inyo-Mono RWMG has also begun to look for possibilities of collaborative projects with neighboring IRWM planning regions.

The Inyo-Mono RWMG and Program Office staff have participated in a number of other efforts involving IRWM regions in various parts of California. Program Office staff regularly participates in the IRWM Roundtable of Regions meetings. This informal group provides an excellent venue for sharing information among IRWM Programs, receiving updates from DWR, and providing feedback about the statewide IRWM Program. The Inyo-Mono RWMG also participates in the Sierra Water Workgroup (SWWG), which is a consortium of IRWM groups in the Sierra Nevada. This group seeks to raise the profile of the Sierra in statewide water policy as well as to provide a forum for Sierra IRWM Programs to share information and resources.

Integration of Stakeholders and Institutions

The six-plus years of RWMG meetings, outreach efforts, and daily operations of the Inyo-Mono IRWM Program have resulted in a truly grassroots, bottom-up, integrated approach to water planning. The composition of the RWMG is unparalleled anywhere else in the region, and indeed, the State, and reflects the open, transparent, and inclusive nature of the Inyo-Mono IRWM process. The RWMG membership includes town and county government agencies; federal, state, and regional resource agencies; American Indian tribes; small and large water purveyors; conservation organizations; private businesses; community advocacy organizations; and educational institutions (Chapter 5). Indeed, other multi-stakeholder efforts in the region, as well as other IRWM groups, have looked to the Inyo-Mono RWMG as a model of collaborative planning.

Integration of stakeholders and resources within the IRWM planning process has been formalized through the RWMG meetings that have been held since February, 2008. At these meetings, representatives from disparate organizations, often with conflicting opinions on water resources topics or representing very different areas within the larger region, come together to discuss the RWMG and the future of water management in the Inyo-Mono region. It is expected that dialogue that takes place at the meeting will be transparent, open, and respectful. As a result of these ongoing meetings, water-related stakeholders that had not previously known each other now communicate about their needs and seek assistance from one another. For example, smaller water districts in the planning region have recognized that they can learn and draw experience from larger water districts, and in turn, larger districts have been willing to lend assistance. Another result of these ongoing meetings is that RWMG participants, while recognizing differences, have found that they share many common interests and concerns with respect to water and the challenges that stem from living in a rural, remote region. This commonality has created a larger sense of obligation and commitment to the planning process among the Members.

Integration of resources has also taken place through the sharing of information within the RWMG and on the Inyo-Mono website. At each RWMG meeting, there is an agenda item for announcements. This opportunity is utilized by RWMG Members and participants to share information about recent or upcoming events, current practices/efforts of their organization, and general water-related news relevant to the region. These announcements are captured in the meeting notes, which are shared with the entire RWMG contact list and are available on the website.

With the development of the upgraded website, capacity has been added for housing and sharing information and data. One goal of the Inyo-Mono website is to become a storehouse for relevant documents and information. The first example of achieving this goal is the creation of a documents library, which was used for the analysis of relevant planning documents in Chapter 11 and has now become an online resource for all interested users (<http://nyo-monowater.org/library/>). The library is organized by geographical scale (i.e., federal, state, regional, etc.), and each document listed is hyper-linked to a PDF or a website where the document can be found. Another example is the combining of data and data sources discussed in Chapter 4. This effort is still in the early stages, but it is anticipated that this collecting and sharing of data sources will benefit many stakeholders in the region. Finally, the development

of Geographic Information System capacity within the Inyo-Mono IRWM Program has greatly increased the integration and sharing of information. It is now possible to perform analyses and create depictions of large amounts of data in a user-friendly format. This capacity is enhanced by the inclusion of static maps and dynamic mapping tools on the Inyo-Mono website. Users can download individual maps or work within interactive mapping platforms to find the information they need (<http://inyo-monowater.org/maps/>). It is expected that the continued improvement of technology will allow for increasingly integrated efforts and the creation of additional tools to enhance water planning in the region.

It has been acknowledged by the RWMG that “integration” is a difficult concept to implement in a region as large and diverse as the Inyo-Mono. Some RWMG Members have argued that it is impossible to integrate stakeholders and processes from the northern part of the region with those in the southern reaches, or to integrate processes from the high-elevation mountains with the low-elevation deserts. Yet we know that there are common water issues and concerns throughout the region, as described earlier in this chapter. This hesitance to fully embrace the concept of integration has resulted in Members pursuing their own water projects in isolation, despite their participation in the larger RWMG. The goal moving forward is to begin to consider opportunities to integrate projects either by geography, by topic (e.g., water quality, aging infrastructure, etc.), or by Inyo Mono objectives and/or resource management strategies (see Chapter 7), and to take advantage of the many potential benefits created by agencies and organizations working together in a collaborative manner.

Plan Development and Updating

Phase I vs. Phase II Plan

When the Inyo-Mono IRWM Program was initiated in early 2008, the RWMG intended to submit a Prop. 84 Planning Grant application to DWR in late 2008 or early 2009. Because of the budget constraints and the bond freeze in late 2008, the RWMG was not able to fulfill that goal. Instead, the RWMG decided to begin work on an initial Plan, without planning grant funds, so that it could be eligible for the first round of Prop. 84 Implementation grants. While all Prop. 84 Plan Standards were at least minimally addressed in the Phase I Plan, the RWMG desired to have an opportunity to more fully consider each Plan Standard and revise the Plan as necessary. The Phase I IRWM Plan was adopted in December, 2010, just ahead of the Round 1 Implementation Grant deadline.

The Round 1 Planning Grant application focused on revising the Inyo-Mono Plan to be more comprehensive and to more fully meet the Prop. 84 IRWM Plan Standards. This document is largely a result of the 17 months of Round 1 Planning Grant work and is considered the Phase II Plan. Updated Prop. 84 IRWM Program Guidelines and Plan Standards were released in 2012, and the Round 2 Planning Grant application was submitted and awarded based on the expectation that the Plan would be updated to meet the revised standards. Subsequently, DWR determined that in order to be eligible to continue receiving funds through Round 1 Implementation Grants, IRWM Plans would need to immediately be updated to 2012 Plan Standards. Therefore, the current document was finalized with the aim of quickly and adequately meeting 2012 Plan Standards, and the Plan will continue to be updated into 2015 to

reflect evolving regional priorities and updated information. This further revision of the Plan, in addition to fully meeting Plan standards, will also include a sustainable finance/funding strategy to support the future of IRWM planning in the Inyo-Mono region; further development of data management techniques and GIS; and enhanced analysis of climate change impacts and adaptation options for the Inyo-Mono region.

Future Plan Revisions

The Inyo-Mono IRWM Plan will be opened for revisions and updates as necessary every two years, beginning two years after the adoption of the Phase II Plan. The full process for revising and adding projects to the Inyo-Mono IRWM Plan is discussed in detail in Chapter 5.