Chapter 7: Objectives and Resource Management Strategies

Development of Inyo-Mono IRWM Plan Objectives and Resource Management Strategies

In the IRWM planning process, development of goals and objectives is a key step as they provide a basis for decision-making, guide work efforts, and can be used to evaluate project benefits. A set of resource management strategies (RMS) can provide further guidance on steps to take to achieve the objectives. Understanding this, the Inyo-Mono RWMG started this discussion by reviewing relevant existing plans and undertaking extensive outreach within the region. With a better understanding of the water-related issues facing the diverse communities of the region, in 2010 the RWMG developed and adopted both mission and vision statements to guide the overall effort. Utilizing a consensus-based approach, the RWMG adopted the following mission statement to guide the overall planning effort:

> *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.*

To help the diverse communities living within the planning region understand their role in implementing and undertaking this mission, the RWMG adopted the following vision statement:

> *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.*

True to this vision, the RWMG has diligently solicited input from the varied residents and organizations within this extremely large planning region. To begin the process of soliciting stakeholder participation and input into the development of goals and objectives, Program Office staff collected and reviewed all relevant water supply plans, general plans, resource management plans, and existing watershed planning efforts, and an initial list of goals and objectives was drafted in August 2008. A working committee was formed to further refine this list, and a revised draft was presented to the RWMG in 2009.

The written product of this effort presented water resource objectives and management strategies organized under three strategic goal areas: Watershed Ecosystem Health, Water Resources, and Water and Community. Each goal had a number of specific objectives and

management strategies identified. With this initial work in hand, the RWMG undertook an extensive outreach campaign in 2009 and 2010 across the planning region to meet with interested parties and identify and discuss their water related issues and concerns. Based on meetings with interested landowners and representatives from various tribes, non-profits, and rural communities, including disadvantaged communities, the initial strategic goal areas were confirmed to be appropriate, and the objectives and RMS were clarified and refined. During this time, the RWMG also decided to simplify the presentation of the goals, objectives, and RMS in order to better align with the identified regional concerns and with the California Water Plan, Proposition 84 requirements, and the Lahontan Basin Plan. These strategic goal areas, objectives, and RMS became the backbone of the Inyo-Mono IRWM planning process, including being laid out in the Phase I IRWM Plan and used as the basis for the project review process.

With Phase I planning complete and an initial set of projects under implementation, the Inyo-Mono RWMG undertook another extensive outreach campaign (described in Chapter 6) to further understand the water-related issues facing the region and what resources the RWMG might be able to provide to address those issues. Public meetings were held in Ridgecrest, Benton, and Coleville in 2011 to gather feedback on the current set of objectives and RMS. Based on the results of these meetings, the initial set of six objectives and associated resource management strategies (RMS) was expanded in 2012 to eight objectives as the RWMG felt the original six objectives were not addressing key water concerns in the Inyo-Mono region – specifically, groundwater and flooding/stormwater management. This set of objectives and RMS was incorporated into the Phase II IRWM Plan.

In 2013, the Inyo-Mono RWMG re-visited the objectives and RMS to ask if the objectives are accurately reflecting the identified water-related needs of the region and whether the RWMG has appropriately identified projects to help meet each objective. These discussions resulted in altered language for some of the objectives and RMS as well as revised evaluation metrics. At the same time, the RWMG also chose to develop statements to reflect the broader goals of the region, as it felt there were no goals against which to measure the success of project and Plan implementation. The goal statements, revised objectives and RMS, and slightly re-worded mission and vision statements were approved by the Inyo-Mono RWMG in July 2014.

Goals

The desired outcomes of efforts made by the Inyo-Mono Regional Water Management Group are:

1) Functioning watersheds that support regional flora and fauna

2) Sustainable livelihoods supported by reliable access to potable water

Current Objectives and Resource Management Strategies

The planning objectives are targeted outcomes that benefit the region. When implementing regional projects, project partners will strive to meet as many objectives as possible utilizing the resource management strategies developed for each objective while also recognizing that some objectives may not be fully achieved. The following section describe the objectives, their rationale, corresponding resource management strategies to achieve the objectives, and evaluation metrics that can be used to gauge the utility of each RMS towards meeting its objective.

Objective 1: Protect, Conserve, Optimize, and Augment Water Supply While Maintaining Ecosystem Health

Water is a highly valued resource in the Inyo-Mono IRWM region. Rivers, streams, lakes, and aquifers supply water for domestic, agricultural, and recreational uses, support abundant wildlife and fisheries, and are an important aesthetic component of the local landscape. Water resources in the region have been heavily impacted over the years by the export of large volumes of water for use outside the planning region, a practice that has been detrimental to local water users and the natural environment within the region. Water exports are a continuing concern.

Water for future development is a concern. While some communities have community water systems, other areas are served by a variety of mutual water companies, small private systems, and individual-owned wells. Additional surface water is becoming more difficult to obtain due to concerns about in-stream and water-dependent resources. Inadequate and insufficient data about many groundwater resources hinder projections on meeting future demand from those sources. Potential off-site impacts on natural resources as a result of groundwater extraction are also a concern. In addition, wells for existing development are running dry in some areas; pumping new and deeper wells is expensive. At this time, many communities do not know how much groundwater is available, nor can they assume a constant supply of groundwater in the future. A further complication to managing water resources is the impact of climate change to the region's hydrology. The uncertainty around climate change projections and lack of region-specific information make it difficult to adequately prepare for, and respond to, impacts.

The demand for water is constantly changing. Communities in the region that see heavy tourism must plan for large short-term fluctuations in water use. For some communities, such as Mammoth Lakes and June Lake, these fluctuations occur year-round. We have also seen populations of permanent residents increase in several Inyo-Mono communities. In addition, development of new agricultural land, such as that being developed in the Indian Wells Valley, can put pressure on already-strapped groundwater supplies.

The availability of water for future development is also affected by more stringent requirements concerning water quality. Existing community water systems that do not meet the standards set by the Lahontan Regional Water Quality Control Board (RWQCB) will have to update their systems. The cost of doing so may inhibit the ability of those systems to provide additional water for future development. In areas that do not currently have community systems, the Lahontan RWQCB will require a community system when a certain level of development is reached. The

cost of installing and maintaining a system may preclude additional development in areas which are currently served by wells or small private systems.

Resource Management Strategy	Evaluation Metric
Objective 1: Protect, conserve, optimize, and augment water supply while maintaining ecosystem health	
1.1 Improve water supply reliability	Reduction of number of water distribution systems that are unable to attain or distribute a reliable potable water supply
1.2 Improve system flexibility and efficiency	Reduction of amount of water lost and/or increase in number of uses resulting from specific water sources
1.3 Update and improve compliance with current and future state and federal water supply standards	Reduction of number of water supply standards compliance violations
1.4 Increase local water supply through various techniques, including, but not limited to: groundwater recharge projects, conjunctive use of water supplies, water recycling, water conservation, water transfers, and precipitation enhancement	Amount of increase in local water supply through techniques listed
1.5 Optimize existing storage capacity	Increase in volume of water stored
1.6 Conserve and adapt water uses to future conditions	Reduction in amount of water used
1.7 Capture and manage stormwater runoff where feasible	Reduction in amount of unmanaged runoff entering natural waterways
1.8 Promote and implement low-impact development design features, techniques, and construction practices	Reduction in amount of water used
1.9 Promote education about water supply issues and needs	Number of people indicating additional understanding of issue and needs
1.10 Promote planning efforts to provide emergency drinking water to communities in the region in the event of a disaster	Number of emergency preparedness/ response plans developed or revised
1.11 Promote water efficiency in fish hatcheries	Reduction in amount of water used in hatcheries
1.12 Protect water supplies that support public recreational opportunities	Number of plans, agreements, or projects aimed at improving quality and quantity of water supporting recreational activities

Objective 2: Protect, Preserve, Restore, and Enhance Domestic and Ecosystem Water Quality

A primary purpose of the IRWM Program is to support the provision of high quality drinking water that meets current and future federal and state drinking water standards throughout the region and that supports our water-dependent ecosystems. Clean, high-quality water is essential to public health, economic well-being, and healthy ecosystems. The region's IRWM water quality objective and corresponding RMS are consistent with the intent of *Safe Drinking Water Act* goals to protect drinking water "from source to tap" and broader *Clean Water Act* goals for clean, fishable, and swimmable waters.

The region's water quality related issues vary, and certain areas are affected by outdated and aging water and wastewater infrastructure, land management practices, sewage disposal, construction practices, solid waste disposal, road maintenance techniques, naturally occurring minerals and ores, alternative energy development, etc. There is a concern in some areas about the potential impacts of increased stormwater runoff resulting from increased development, and inadequate or failing stormwater infrastructure. Potential unmitigated stormwater impacts in some areas include increased streamflows, siltation, erosion, loss of aquatic habitat, flooding, and impacts to roads and agricultural areas. In other areas, particularly in the Indian Wells Valley, salt accumulation creates issues for both human water consumption and agricultural concerns. Climate change will add another challenging element to preserving and improving water quality in the region as air and water temperatures rise and timing of snowmelt and streamflow shifts.

At present, the water quality of the snowmelt runoff in the region is generally excellent, but degraded in some reaches and threatened throughout the entire region due to non-point source loading from increased recreational use, grazing, development, and on-site septic systems. The Owens hydrologic unit (Mammoth Creek, Crowley Lake, and Pleasant Valley Reservoir) is an impaired waterbody identified in Table 3 of the 2010 CWA 319(h) NPS Grant Program Guidelines. Although Total Mean Daily Loads (TMDLs) have not been established for the Owens hydrologic unit, constituents of concern include: mercury, manganese, dissolved oxygen, ammonia, and organic enrichment (see Chapter 2 for more information on water quality).

In other areas, aquifers of poor-quality water underlie the high-quality aquifer currently being pumped. As groundwater levels continue to decline, underlying poorer-quality water may begin to mix with high-quality water, resulting in deterioration of the quality of the water supply. In many locations, portions of the aquifer have levels of arsenic and uranium higher than the current primary drinking water maximum contaminant limit (MCL) due to the granitic bedrock, requiring treatment prior to domestic use. In other areas, nitrogen and phosphate levels are elevated.

Resource Management Strategy	Evaluation Metric
Objective 2: Protect, preserve, restore, and enhance domestic and ecosystem water quality	
2.1 Protect and preserve water sources of current high quality	Number of high-quality water sources protected
2.2 Support achieving compliance with local, state, and federal water quality standards	Reduction in number of violations of water quality standards; number of efforts aimed at meeting progressively more stringent standards
2.3 Improve the quality of urban, agricultural, and wildland runoff and/or mitigate impacts of runoff to surface waters and groundwater	Improvements in water quality sampled at areas of concern
2.4 Support monitoring to better understand sources and causes of erosion, and, where feasible, reduce its impacts	Number of monitoring studies and programs undertaken
2.5 Promote alignment of water quality and water use	Identification and maintenance of appropriate water quality for specific use
2.6 Support appropriate recreational programs that minimize impacts to water quality	Number of water quality samples showing no impairment
2.7 Support efforts to understand, protect, and improve groundwater quality	Measured improvement in groundwater quality parameters

Objective 3: Provide Stewardship of Water Dependent Natural Resources

Across the region, interested parties stressed the value and importance of the natural environment for a variety of reasons, including, but not limited to, the health of native flora and fauna, providing a wide variety of recreation and tourism interests, and supporting a number of agricultural and grazing operations. The region is home to a variety of unique species of fish, wildlife and aquatic invertebrates, including a number of threatened and endangered plants and animals – for example, endangered Owens tui chub. Hot Creek and the Upper Owens River are two of the most productive and popular trout fisheries in California and, as a result, provide for world-class fishing which supports the local economy.

The protection and enhancement of natural habitats is a critical element in preserving and restoring regional flora and fauna and their habitats. Riparian woodlands, wetlands,

migration corridors, and wintering and summering grounds are recognized as critical, highly localized wildlife habitat. Increased recreational use in the region and localized development, particularly in areas outside of existing community areas, create potential impacts to the long-term sustainability of fish and wildlife populations and plant communities through degradation of habitat and resources and increased conflicts between wildlife and humans. Although not extremely prevalent in the Inyo-Mono region, invasive species can alter natural ecosystems by replacing native plant and animal communities and upsetting ecological processes. As an example, introduced trout have displaced native Lahontan cutthroat trout and amphibians in many parts of the northern watersheds of the region.

Many cross-cutting issues overlap with and link to the objectives for water quality and water supply. These cross-cutting issues serve as a reminder that the availability of high-quality water is essential to both human and natural communities.

Resource Management Strategy	Evaluation Metric
Objective 3: Provide stewardship of water dependent natural resources	
3.1 Protect, restore, and enhance natural processes, habitats, and threatened and endangered species, while providing opportunities for public access, education, and recreation where appropriate	Number of acres of project site and/or habitat being protected, restored, or enhanced, or number of species being protected
3.2 Support research and monitoring to better understand the impacts of water-related projects on environmental resources	Number of research and monitoring studies undertaken
3.3 Identify, develop, and enhance efforts to control invasive species	Number of acres or sites where invasive species are removed or prevented from establishing
3.4 Support dedication of riparian water rights for in-stream use	Amount of water set aside for in-stream use

Objective 4: Maintain and Enhance Water, Wastewater, Emergency Response, and Power Generation Infrastructure Efficiency and Reliability

Throughout the region, and in disadvantaged communities in particular, outdated water delivery equipment, lack of back-up generators, and/or antiquated piping present significant challenges to providing safe and reliable water supplies for both human consumption and fire protection, as well as wastewater treatment. Compounding this situation is the fact that much of the antiquated water infrastructure is in areas that experience extremely cold winters with significant snowfall; thus, the period of time during the year within which any construction and/or maintenance can occur is extremely limited. Moreover, many of these same areas are rural and do not have the technical, managerial, financial, and political capacity to effectively manage, maintain, and fund their water-related infrastructure and regulatory compliance matters.

Another concern is the energy and water use efficiency of both water treatment and delivery infrastructure and of power generating facilities. Since many of the areas within the region rely on old and/or inefficient equipment and motors to drive their groundwater pumping and water conveyance, a significant amount of energy is currently being wasted. Additionally, recent proposals for desert solar energy developments have generated concern about the water needed to help maintain their infrastructure. A better understanding of the energy and water intensity of various types of infrastructure in the region would help to improve efficiency and reduce greenhouse gas emissions.

Resource Management Strategy	Evaluation Metric
Objective 4: Maintain and enhance water, wastewater, emergency response and power generation infrastructure efficiency and reliability	
4.1 Promote rehabilitation and replacement of antiquated water and wastewater delivery and treatment facilities	Number of improvements made and/or amount of improved infrastructure, in appropriate units (e.g., linear feet of pipe replaced and/or repaired)
4.2 Promote and improve energy efficiency of water and wastewater systems and uses	Reduction in energy demand from water and wastewater systems
4.3 Support water use efficiency in power generating facilities	Reduction of water volume required by power generating facilities
4.4 Ensure adequate water supplies for fire protection and emergency response	Number of fire suppression systems meeting fire flow requirements
4.5 Provide resources for development and improvement of emergency response plans	Number of emergency response plans developed, updated, and implemented

Objective 5: Address Climate Variability and Reduce Greenhouse Gas Emissions

Since the inception of the Inyo-Mono IRWM Program, the information on climate change specific to the region has increased in both amount and quality. Model projections have also improved and show continued increased temperatures, longer summers, declines in snowpack, and changes in runoff and streamflow timing. Increased weather variability, as well as extreme events, are already being observed (e.g., the large winter of 2010-2011, the drought of 2012-2014). Scenarios indicate a higher reliance on groundwater as surface water availability becomes more unpredictable in order to maintain current levels of agricultural development and to accommodate population growth. Drier-than-average conditions may also result in an increase in the frequency of fires. Primary and secondary impacts caused by fires include damage to watersheds, changes in surface runoff and percolation, and economic impacts to the area (see Chapter 3 for a more in-depth discussion). Additionally, proposals for renewable energy production facilities, to be located in the desert, may have their own water demands and associated impacts to quantity and quality of groundwater resources.

Resource Management Strategy	Evaluation Metric
Objective 5: Address climate variability and reduce greenhouse gas emissions	
5.1 Increase understanding of the greenhouse gas emissions resulting from water operations and management, and support efforts to reduce water-related greenhouse gas emissions in the region	Number of greenhouse gas emissions inventories completed; reduction in water-related greenhouse gas emissions in Inyo-Mono region
5.2 Increase understanding of impacts of climate change on water supplies and water quality	Completion of vulnerability assessment and impacts analysis
5.3 Manage and modify water system operations to respond to increasing climate variability	Number of projects completed
5.4 Support efforts to diversify energy sources, that do not negatively impact water supply or quality, to move and treat water within the region in order to reduce greenhouse gas emissions	Number of research and development projects developed and/or implemented
5.5 Support assessment and mitigation of water-related impacts of renewable and non-renewable energy projects	Number of assessment studies and mitigation plans completed
5.6 Promote public education about climate change impacts and adaptation measures, particularly as they relate to water resources management in the region	Number of survey responses indicating gained understanding about potential climate change impacts
5.7 Develop and implement integrated drought preparedness measures	Number of drought preparedness activities developed and implemented
5.8 Support efforts to manage fuel loads in regional forests to reduce fire hazard	Number of acres treated; number of communities protected

Objective 6: Encourage Participation of Small and Disadvantaged Communities, Including Tribes, in IRWM Process to Identify and Work towards Meeting Their Needs

The RWMG's mission statement emphasizes the need for a consensus approach in water resources management within the region, and the vision statement emphasizes the need for a stakeholder-driven process. Maximizing stakeholder and community involvement and stewardship is essential to the success of the IRWM Plan. A vital part of stakeholder involvement is the inclusion of disadvantaged communities and Native American Indian tribes. Both types of stakeholders are prevalent in the Inyo-Mono region, and there has always been an emphasis on outreach to these communities throughout the existence of the IRWM Program.

Stakeholder involvement is a vital part of the IRWM planning process as a means to identify and address public interests and perceptions, address questions and issues, ensure that the Program and any proposed solutions are in keeping with public interests, and provide for public ownership and support of proposed solutions. The Inyo-Mono RWMG has maintained its

commitment to a bottom-up, stakeholder-driven process as its model to ensure successful and widely-supported projects and programs. Stakeholder involvement assists the Program in identifying areas where increased education, outreach, and capacity building are required.

Resource Management Strategy	Evaluation Metric
Objective 6: Encourage participation of small and disadvantaged communities, including tribes, in IRWM process to identify and work towards meeting their needs	
6.1 Provide technical, managerial, and financial assistance for tribal, DAC, and small water systems	Number of requests received; number of water systems assisted
6.2 Promote education and training programs for small water systems, schools, DACs, and tribes about water resource protection, pollution prevention, conservation, water quality, watershed health, and climate change	Number of lectures and/or materials developed and distributed; number of survey responses indicating gained understanding about water resources
6.3 Promote social resilience in DACs, small water systems, and tribes to more effectively respond to social, economic, or environmental disturbances impacting water-related resources	Number of lectures and/or materials developed and distributed; change in number and impact of social, economic, and environmental disturbances
6.4 Facilitate outreach to establish new relationships and build on existing relationships with stakeholders	Number of new contacts; additions to master IRWMP contact list

Objective 7: Promote Sustainable Stormwater and Floodplain Management that Enhances Flood Protection

The outreach conducted since completion of the Phase I Plan highlighted the flood related management challenges faced by a few communities in the region, including Ridgecrest, Mammoth Lakes, Coleville, and Fort Independence Indian Reservation. As is common in many areas, development in upper elevations and steep hillside areas exacerbates problems of stream instability, erosion, and flooding. A challenge somewhat unique to the Inyo-Mono area is the erosion and subsequent flooding experienced after wildfires, which in turn can impact the amount and quality of water supplies for human communities. Additionally, many areas are ill equipped to handle and direct high flows that result occasionally after extreme rain storms. In a few isolated situations, extensive damage to commercial businesses has resulted from extensive rain storms. In other areas, sediment management is needed to increase channel carrying capacity while also increasing habitat values. Addressing these challenging issues is made increasingly difficult by the fact that ownership of the various streams is mixed among private and public entities

The Inyo-Mono IRWM Program has undertaken three planning studies that help to address concerns about stormwater runoff and flooding in the region. These studies target three different watersheds in the region – West Walker, Mammoth Basin, and Oak Creek – all of

which have experienced fairly recent impacts of flooding resulting from large precipitation events.

Resource Management Strategy	Evaluation Metric
Objective 7: Promote sustainable stormwater and floodplain management that enhances flood protection	
7.1 Characterize current stormwater and flood management situations and challenges	Number of studies undertaken and reviewed
7.2 Promote region-wide integrated stormwater and flood management planning	Number of planning efforts undertaken and/or implemented
7.3 Improve existing stormwater and flood management infrastructure and operational procedures	Number of relevant stormwater and flood techniques/strategies implemented or facilities improved
7.4 Encourage integrated land use and water policies that promote sustainable development	Number of sustainable development policies adopted by various local and regional governments
7.5 Promote projects and practices to protect infrastructure and property from flood damage	Number of acres, buildings, or system elements protected as a result of projects
7.6 Integrate ecosystem enhancement, drainage control, and natural recharge into policy and planning documents, project review, and project implementation	Number of relevant projects constructed
7.7 Develop and implement education and outreach activities focused on stormwater and flood management matters	Number of lectures and/or materials developed and distributed; number of survey responses indicating gained understanding about flood management
7.8 Capture and manage stormwater runoff where feasible	Amount of stormwater runoff diverted from drainage system

Objective 8: Support Groundwater Monitoring, Management, and Mitigation in Cooperation with all Affected Parties

Water purveyors and individual homeowners throughout the Inyo-Mono region rely heavily on groundwater as a primary source of domestic and agricultural water. Many water users in the region have expressed serious concerns with both the quantity and quality of the groundwater on which they rely. Many parties expressed a growing desire to protect groundwater resources from pollution, degradation, and overdrafting as an important step towards improving water quality, water supply reliability, and habitat quality within the region. Furthermore, there is a need to better understand the current status and recent trends in groundwater quality and quantity, which will help regional entities respond to recent groundwater regulations.

Resource Management Strategy	Evaluation Metric
Objective 8: Support sound groundwater monitoring, management, and mitigation in cooperation with all affected parties	
8.1 Support and implement state-mandated groundwater and surface water monitoring requirements, and other groundwater monitoring efforts	Number and scale of monitoring and compliance efforts undertaken
8.2 Promote efforts to monitor, manage, and mitigate impacts of groundwater-dependent projects	Number of and scale monitoring efforts undertaken; reduction in adverse effects
8.3 Develop and support projects that mitigate for the effects of groundwater extraction	Number of mitigation efforts undertaken; reduction in adverse effects from extraction
8.4 Protect and improve the quality and quantity of stored groundwater supplies and recharge areas	Number of projects undertaken; improved water quality parameters; improvement in groundwater elevations over space and time
8.5 Promote conjunctive use projects	Increased reliability and increased elevation of groundwater
8.6 Identify existing gaps in groundwater and surface water quantity and quality information and undertake appropriate characterization studies	Number of studies initiated and/or completed; number of data gaps identified; number of data collected/assessed
8.7 Collect data and monitor groundwater and surface water supply variability	Number of research and monitoring studies undertaken; number of data contributed to State and federal databases
8.8 Promote efforts to manage and design groundwater projects so that future impacts requiring mitigation are avoided	Number of projects designed and/or changes in mitigation requirements

Prioritization of the IRWM Plan Objectives and Resource Management Strategies

The Inyo-Mono RWMG has determined that all objectives and corresponding resource management strategies are to be “co-equal” in terms of prioritization. However, the RWMG has also stated that there is explicit support for planning and implementing projects that benefit disadvantaged communities and tribes. The RWMG recognizes that by pursuing a wide range of projects that support the eight independent objectives, synergies among the various objectives will be enhanced and the end result will be in pursuit of the overarching mission. Since this Plan represents the region’s evolving IRWM efforts, the RWMG supports projects that advance any of the stated objectives. When implementing regional projects, project proponents will strive to meet and integrate as many objectives as possible while also recognizing that some objectives

may not be fully achieved. Furthermore, additional objectives may be considered in future revisions of the IRWM Plan.

Relationship to Proposition 84 Guidelines and California Water Plan Update 2009

The Inyo-Mono IRWM planning process has been developed and implemented with a consideration both of regional priorities and the Proposition 84 IRWM Plan Guidelines. The Inyo-Mono IRWM Plan is consistent with the intent of the Proposition 84 IRWM Grant Program: to encourage integrated regional strategies for management of water resources and to provide funding for projects that protect communities from drought, protect and improve water quality, and improve local water security by reducing dependency on imported water.

Furthermore, the Inyo-Mono IRWM Plan objectives and resource management strategies are consistent with the Proposition 84 Grant Program Preferences for proposals that:

- Include integrated projects with multiple benefits
- 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
- Address critical water supply or water quality needs of DACs within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC Section 5096.824 or Section 75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge
- Address Statewide priorities:
    - 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 Inyo-Mono IRWM Plan objectives and resource management strategies described above are also in line with statewide priorities set forth by the *California Water Plan* (2009 Update) and the Proposition 84 Guidelines.

The California Water Plan lays out a roadmap for water management through the year 2030. Where appropriate, these California Water Plan objectives have been applied in the Inyo-Mono IRWM planning process. The RWMG recognizes that various strategies are often connected to one another, as well as to other activities. As such, the IRWM Plan looks to find projects that

help diversify the water management portfolio for the region as well as create positive synergistic effects that aid in improving the overall water and environmental condition of the region and State. An analysis of the relationship between California Water Plan Update 2009 Resource Management Strategies and Inyo-Mono IRWM Plan RMS is shown in Table 7-2. This analysis will be updated once the California Water Plan Update 2013 has been publicly released.

Table 7-2. Relationship between CA Water Plan Update 2009 and Inyo-Mono IRWM Resource Management Strategies

Resource Management Strategies		
CA Water Plan Update 2009		**Inyo-Mono IRWM Plan**
Pillars	Resource Management Strategies	Resource Management Strategies addressed *Yes, No, Not Applicable* *(Identified from Table 7-1)*
Reduce water demand	1. Agriculture Water Use Efficiency	1. Yes
	2. Urban Water Use Efficiency	2. Yes
Improve Operational Efficiency and Transfers	1. Conveyance-Delta	1. Not Applicable
	2. Conveyance-Regional/local	2. Yes
	3. System Reoperation	3. Yes
	4. Water Transfers	4. Yes
Increase Water Supply	1. Conjunctive Management and Groundwater Storage	1. Yes
	2. Desalination	2. Yes
	3. Precipitation Enhancement	3. Yes
	4. Recycled Municipal Water	4. Yes
	5. Surface Storage-CALFED	5. Not Applicable
	6. Surface Storage-Regional/Local	6. Yes
Improved Water Quality	1. Drinking Water-Treatment and Distribution	1. Yes

Resource Management Strategies		
CA Water Plan Update 2009		**Inyo-Mono IRWM Plan**
Pillars	Resource Management Strategies	Resource Management Strategies addressed *Yes, No, Not Applicable* *(Identified from Table 7-1)*
	2. Groundwater Remediation/Aquifer Remediation	2. Yes
	3. Matching Quality to Use	3. Yes
	4. Pollution Prevention	4. Yes
	5. Salt and Salinity Management	5. Yes
	6. Urban Runoff Management	6. Yes
Improved Flood Management	1. Flood Risk Management	1. Yes
Practice Resources Stewardship	1. Agricultural Lands Stewardship	1. Yes
	2. Economic Incentive	2. Yes
	3. Ecosystem Restoration	3. Yes
	4. Forest Management	4. Yes
	5. Recharge Area Protection	5. Yes
	6. Water-Dependent Recreation	6. Yes
	7. Watershed Management	7. Yes
Other Strategies	1. Crop Idling for Water Transfers	1. Yes
	2. Dewvaporation or Atmospheric Pressure Desalination	2. No/Not Applicable
	3. Fog Collection	3. No
	4. Irrigated Land Retirement	4. Yes

Resource Management Strategies		
CA Water Plan Update 2009		**Inyo-Mono IRWM Plan**
Pillars	Resource Management Strategies	Resource Management Strategies addressed *Yes, No, Not Applicable* *(Identified from Table 7-1)*
	5. Rainfed Agriculture	5. Yes
	6. Waterbag Transport/ Storage Technology	6. No