





# Inyo-Mono IRWM Water Supply, Reliability, and Conservation Implementation Proposal

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## **Attachment 6. Program Preferences**

 <b>Program Preferences</b>  <b>Projects</b> 	Include regional projects/ programs	Integrate water management programs/ projects within hydrologic region	Resolve water-related conflicts	Attain Bay-Delta Objectives	Address critical water supply/ quality needs of DACs	Integrate water management & land use planning	Reduce reliance on Sacramento-San Joaquin Delta	Address Statewide priorities:	Drought preparedness	Use and reuse water more efficiently	Climate change response actions	Expand environmental stewardship	Practice integrated flood management	Protect surface and groundwater quality	Improve tribal water and natural resources	Ensure equitable distribution of benefits
Bishop Paiute Tribe Conservation Plans	X								X	X	X			X	X	
June Lake Uranium Removal Plant	X								X		X				X	
Amargosa Basin Water & DAC Project	X	X							X		X	X	X		X	
Big Pine Tribal Fire Hydrant Replacement Project	X								X		X			X	X	
Ridgecrest Cash-for-Grass Rebate Program	X								X	X	X		X			
Recycled Water for Projects in Big Pine	X	X	X			X				X	X				X	
Degree of Certainty	High	High	Med	n/a	No	Med	No		Hi	High	High	Med	No	Med	High	High
Magnitude and Breadth*	Reg	Reg	Reg	n/a	N/A	Local	N/A		Reg	Reg	Reg	Local	N/A	Local	Reg	Reg

\*Reg = Regional

**Note on contributing to attainment of objectives of CALFED Bay-Delta Program and reducing reliance on Sacramento-San Joaquin Delta Program Preferences:**

The water resources of the Inyo-Mono IRWM Region are not directly connected to the Bay-Delta system, so these program preferences do not apply to projects contained fully within the region.

**Human Right to Water**

The Inyo-Mono Regional Water Management Group is aware of the Human Right to Water Policy (AB 685) and recognizes its importance in ensuring access to safe, clean, and affordable water for everyone in California. As residents of a rural, sparsely populated region far away from the Central Valley and Sacramento with a large number of disadvantaged communities that rely on groundwater resources often contaminated with natural sources of uranium and arsenic, RWMG stakeholders appreciate the focus of California lawmakers on making water available to all Californians. As a way to begin incorporating the new policy into its planning process, the RWMG included the Human Right to Water in the scoring criteria for evaluating projects for this round of Implementation funding. Out of a possible total score of 44 points, the question regarding the Human Right to Water was worth 4 points, or just under 10 percent of the total score.

The following projects help to further the Human Right to Water policy in the Inyo-Mono IRWM region:

1. The Bishop Paiute Tribe water conservation planning project will consider the goals of affordable and accessible water when developing its conservation plans, and especially its rate structure analysis, for this tribal community, which is also a disadvantaged community.
2. The June Lake uranium treatment project will provide reliably clean and safe drinking water to residents and visitors of this small, rural community.
3. The long-term hydrologic monitoring ongoing and furthered through the Amargosa Basin project will help to ensure the continuation of reliable and accessible water for the severely disadvantaged community of Tecopa. The water resources of the Amargosa Basin are shared by many types of users, and it is important to understand how each application impacts the other users, including small desert communities.
4. Although not specifically articulated in AB685, the accessibility to water for firefighting capability is a critical human use. The fire hydrant replacement project on the Big Pine Paiute Reservation will improve the reliability of firefighting infrastructure of the Tribe, resulting in reduced loss of residential structures and impacted land, and decreased threats to human health and safety.
5. Through conserving water, the Ridgecrest Cash-for-Grass Program will help to ensure that safe and accessible water will be available for its customers into the future.

## Project 2. Bishop Paiute Tribe Domestic Water, Irrigation, and Wastewater Conservation Plans

### Implementing Agency: Bishop Paiute Tribe

This water conservation planning project addresses six Program Preferences and Statewide Priorities. They are listed below, along with a brief discussion of each.

- **Include regional projects or programs:** As part of the Inyo-Mono IRWM Phase II Plan, this project by definition is a regional project.
- **Drought preparedness:** By creating (and in the future implementing) plans to conserve water, the tribe will take a major step towards both adapting to the current drought and preparing for future drought. These plans will put practices into place that can be called upon in times of drought to alter behaviors and conserve water.
- **Use and reuse water more efficiently:** One aspect of these conservation plans will be to identify strategies to use water more efficiently in existing applications, thereby saving water for other applications, future use, or environmental needs.
- **Climate change response actions:** This project is an excellent example of a climate change response action/adaptation strategy. As the climate continues to change, further impacting the surface water and groundwater hydrology of the eastern Sierra, having proactive plans in place, such as this comprehensive conservation plan, will allow communities to respond more quickly and more flexibly to severe events like drought.
- **Improve tribal water and natural resources:** This conservation plan is a major step forward in helping Bishop Paiute Tribe to more proactively manage and conserve its limited water resources. Implementable actions created through this plan will give the tribe tools and options to use both on a regular basis and in times of water shortage.
- **Ensure equitable distribution of benefits:** Although the Bishop Paiute Tribe has access to resources that other water and land management agencies in the Inyo-Mono region do not, the tribe is still at a disadvantage in terms of representation in local communities and regional and state entities. The Inyo-Mono Regional Water Management Group has consistently sought to include tribes in its planning process, and indeed, ranked the two tribal projects #1 and #4 for this round of Implementation funding.

### Project 3: June Lake Public Utility District Uranium Removal Plant

#### Implementing Agency: June Lake Public Utility District

This ion exchange treatment plant project addresses four Program Preferences and Statewide Priorities. They are listed below, along with a brief discussion of each.

- **Include regional projects or programs:** As part of the Inyo-Mono IRWM Phase II Plan, this project by definition is a regional project.
- **Drought preparedness:** The increased uranium levels in surface water being drawn from June Lake are resulting from a drop in lake level because of the current drought and reduced streamflow. Thus, this project will both respond to the current drought and help to prepare for future drought by mitigating further impacts to water quality due to changes in lake level.
- **Climate change response actions:** This impact to water quality is perhaps the first of its kind documented in response to climate change in the Inyo-Mono IRWM region. As droughts become more frequent and perhaps more severe, it will be instructive for other water systems in the region and throughout the Sierra Nevada to learn from this project.
- **Ensure equitable distribution of benefits:** The June Lake PUD often falls through the cracks when it comes to financing infrastructure projects. Because it is a small community water system with a large percentage of seasonal residents, the PUD has a limited revenue source and limited means to build capital to fund its own projects. Yet because some of the population is relatively wealthy, June Lake is not a DAC and therefore tends to not rank highly in most of the Inyo-Mono RWMG's scoring processes. The fact that the project ranked third this time speaks to the RWMG's recognition that this system is facing an imminent need without many other potential sources of funding. Thus, this grant will provide an important project to a small community water system.

## Project 4: Amargosa Basin Water, Ecosystem Sustainability, and Disadvantaged Community Project

### Implementing Agency: Amargosa Conservancy

This Amargosa project addresses seven Program Preferences and Statewide Priorities. They are listed below, along with a brief discussion of each.

- **Include regional projects or programs:** As part of the Inyo-Mono IRWM Phase II Plan, this project by definition is a regional project.
- **Effectively integrate water management programs and projects within a hydrologic region:** Currently, many entities and organizations perform various types and scales of monitoring and research in the Amargosa River watershed. Although not comprehensive, this project will help bring several of these entities together into one collaborative effort to more efficiently and effectively collect and share information. Furthermore, the Amargosa Conservancy is increasingly becoming the hub of such data collection and information sharing efforts in the region.
- **Drought preparedness:** A deeper understanding of the status, location, amount, and quality of water resources in the Amargosa Basin, and their response to precipitation events, will allow the disadvantaged community of Tecopa to better understand how drought impacts the basin in general and plan for how future drought may impact their immediate water source.
- **Climate change response actions:** This project is the next step in working towards developing a comprehensive water management plan for the Tecopa area, which is key in preparing for and responding to climate change impacts in the region. Because there are still so many information gaps about water movement in the Amargosa Basin, additional data collection is necessary before more informed climate change planning can be undertaken.
- **Expand environmental stewardship:** Informed ecosystem stewardship is a key part of the livelihoods of Tecopa residents. The information gathered in this project will help Tecopa residents manage these ecosystems sustainably while using them to generate ecotourism revenue. This project will also aid in the development of the management plan for the stretch of the Amargosa River that has been designated as Wild and Scenic.
- **Protect surface water and groundwater quality:** The data collection and monitoring that will take place through this project will include elements of water quality in addition to water supply. In addition to understanding the amount of water flowing throughout the basin, it is necessary to know the quality of that water and how it changes both temporally and spatially. This information will be useful to Tecopa residents as they work to understand the groundwater and surface water resources upon which their community depends.
- **Ensure equitable distribution of benefits:** Due to the rural nature and distance from major population centers, the southeastern portion of Inyo County is often under-represented in the allocation of both County and State resources. The Inyo-Mono IRWM Program has worked hard to ensure that the community of Tecopa has had opportunity to access resources, and this project would be the next step in seeing the process through.

## Project 5: Big Pine Tribal Hydrant Replacement Project

### Implementing Agency: Big Pine Paiute Tribe of the Owens Valley

The Big Pine Paiute Tribe project addresses five Program Preferences and Statewide Priorities. They are listed below, along with a brief discussion of each.

- **Include regional projects or programs:** As part of the Inyo-Mono IRWM Phase II Plan, this project by definition is a regional project.
- **Drought preparedness:** In the Eastern Sierra region of California, fire (both wildfire and structural fires) is a common byproduct of drought. Too many communities are not adequately prepared to protect their structures against fire. This project resolves the issue for one Native American community in the Inyo-Mono region.
- **Climate change response actions:** Drought and fire are two very tangible impacts of climate change in the Inyo-Mono region. Replacing hydrants and strengthening the fire-fighting capabilities of the Big Pine Paiute Tribe is one immediate adaptation strategy that can be taken in response to climate change.
- **Improve tribal water and natural resources:** More reliably functioning fire hydrants will ensure adequate fire water capacity for fighting fires on the Reservation, thus improving overall water management for the Tribe. In addition, a reduction in catastrophic fires will reduce the number of structures and acreage of land burned on the Reservation, resulting in less property loss, less degraded habitat, and less erodible soils.
- **Ensure equitable distribution of benefits:** The Big Pine Paiute Tribe is both a federally-recognized tribe and part of a disadvantaged community. As such, the Tribe has historically had (1) less access to resources, (2) less representation in decision-making about distribution of resources and funding, and/or (3) less capacity to make use of resources. While this funding cannot solve all three problems, it helps to legitimize the importance of the Tribe's needs and the priority placed on those needs by the Inyo-Mono RWMG. The Inyo-Mono region has from its inception successfully engaged and involved tribes in all aspects of the Program to ensure equitable opportunities.

## Project 6: Ridgecrest Cash-for-Grass Landscape Rebate Incentive Program

### Implementing Agency: Indian Wells Valley Water District (IWWVD)

This landscaping incentive project addresses five Program Preferences and Statewide Priorities. They are listed below, along with a brief discussion of each.

- **Include regional projects or programs:** As part of the Inyo-Mono IRWM Phase II Plan, this project by definition is a regional project.
- **Drought preparedness:** This project is in both direct response to the current drought and in preparation for future drought. The purpose of the project is to reduce overall water use by customers of the Indian Wells Valley Water District in the hopes of stemming the overdraft of the valley's groundwater basin. Therefore, in future drought, drastic water-saving measures would not be needed.
- **Use and reuse water more efficiently:** IWWVD is encouraging the use of more water-efficient and desert-appropriate landscaping through a rebate incentive program. Lawn is not an appropriate landscape feature in Ridgecrest, which is in the Mojave Desert. IWWVD has been and continues to be a leader in promoting efficient use of water.
- **Climate change response actions:** Such projects to remove water-inefficient landscaping are excellent examples of climate change response actions and adaptation strategies. Again, drought is a tangible climate change impact in the Inyo-Mono region, and this project helps to protect Ridgecrest against water shortages resulting from drought.
- **Protect surface water and groundwater quality:** As water tables continue to fall in the Indian Wells Valley, it is thought that the water that will remain in the aquifer will be more saline and of generally lower quality. By conserving water and reducing the amount of groundwater used, higher-quality groundwater can be protected in the aquifer that can then be presumably recharged with runoff each winter.



## Project 7: Recycled Water for Restoration and Community Projects in Big Pine

### Implementing Agency: Inyo County

This feasibility study addresses seven Program Preferences and Statewide Priorities. They are listed below, along with a brief discussion of each.

- **Include regional projects or programs:** As part of the Inyo-Mono IRWM Phase II Plan, this project by definition is a regional project.
- **Effectively integrate water management programs and projects within a hydrologic region:** This project will bring together several programs and stakeholders for a common goal: bringing recycled water to agreed-upon projects in Big Pine. Currently, Inyo County Water Department, Los Angeles Department of Water and Power (LADWP), Big Pine CSD, and Big Pine Paiute Tribe each have their own water management objectives. This project will seek to integrate some of those objectives into a common project.
- **Resolve water-related conflicts:** This project is a result of the 100-year history of groundwater pumping and water exports from the Owens Valley, which has always been a controversial practice. The process of conducting this feasibility study will bring stakeholders with diverse views together and has the potential to quiet the conflict over mitigation projects in and around Big Pine.
- **Integrate water management and land use planning:** This project will explore the use of recycled water on various land parcels in and adjacent to Big Pine with various land use histories and futures. Land and water use will be considered in tandem within the feasibility study.
- **Use and reuse water more efficiently:** There are few water reuse projects in the Inyo-Mono IRWM region. The recycled water project that would result from this feasibility study would serve as an example for other communities and water systems in the region.
- **Climate change response actions:** Water reuse and recycling needs to be a climate change response strategy used in our semi-arid region, and this project can set the standard for this type of response action. This type of project is the next generation of adaptation strategy for the Inyo-Mono region and should become more commonly used in the future.
- **Ensure equitable distribution of benefits:** Both the town of Big Pine (represented in this project by the Big Pine Community Services District) and the Big Pine Paiute Tribe make up the Big Pine Census Designated Place, which is a Disadvantaged Community. Both of these entities are well represented in the Inyo-Mono IRWM planning process, and the RWMG chose to score this project highly so that these communities would benefit from Implementation funding.