



# KERN IRWMP

Integrated Regional Water Management Plan

## *Project Submittal Form*

To the extent possible this form should be electronically filled out and e-mailed to:  
[KernIRWMP@kcwa.com](mailto:KernIRWMP@kcwa.com).

### *Part 1. Lead Implementing Agency/Organizational Information*

**Please provide the following information regarding the project sponsor and proposed project.**

**Implementing Agency/ Organization / Individual:**

Kern County

**Agency / Organization / Individual Address:**

Engineering & Survey Services  
County Of Kern  
2700 M Street, Suite 570  
Bakersfield, CA 93301-2370

**Possible Partnering Agencies:**

Long Canyon Water Company, Rainbird Valley Mutual Water Company, Tradewinds Water Association, Inc., Bella Vista Mutual Water Company, South Fork Womens Club, Lake Isabella Kern River KOA Campground, Self-Help Enterprises, California Department of Public Health

**Name:**

Chuck Lackey

**Title:**

Director, Engineering & Survey Services

**Telephone:**

(661) 862-5095

**Fax:**

(661) 862-5101

**Email:**

chuckl@co.kern.ca.us

**Website:**

**Project Name:**

Weldon Regional Water Project

Either the latitude/longitude or a location description is required. To determine the latitude/longitude, use the closest address or intersection. If the project is linear, use the furthest upstream latitude/longitude.

Project Latitude:  Project Longitude:

<b>Location Description:</b>	Weldon area water systems south of the South Fork of the Kern River.
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**Regional Grouping: Identify the Regional Grouping your agency is located in, and the Regional Grouping your project is located in.**

<input type="checkbox"/> Agency <input type="checkbox"/> Project	Greater Bakersfield
<input checked="" type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County Water Agency
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern Fan
<input type="checkbox"/> Agency <input checked="" type="checkbox"/> Project	Kern River Valley
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Mountains/Foothills
<input type="checkbox"/> Agency <input type="checkbox"/> Project	North County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	South County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	West Side

**Project Cooperating Agency(ies)/Organization(s)/Individual(s):**

• Long Canyon Water Company (David Prince)
• Rainbird Valley Mutual Water Company (Marsha Kelp)
• Tradewinds Water Association, Inc. (Craig Sunderland)
• Bella Vista Mutual Water Company (Gerald Hyneman)
• South Fork Womens Club (Norma J. Reidel)
• Lake Isabella Kern River KOA Campground (Brian Cushman)
• Self-Help Enterprises (David A. Warner)
• California Department of Public Health, (Jesse Dhaliwal)

**Project Status (e.g., new, ongoing, expansion, new phase):**

Ongoing State Planning application/agreement is under review.
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*Part 2. Project Need*

**It is important to understand the need(s) or issue(s) that the proposed project will address and the benefits that it will provide. Information provided in this section defines the need(s) or issue(s) that the proposed project will address and will help to catalog existing need(s) or issue(s) in the Tulare Lake Basin Portion of Kern County Region.**

**Please provide a 1-2 paragraph description of the need(s) or problem(s) that the project will address. As applicable, discuss the water supply need, operational efficiency need, water quality need, or resource stewardship need (e.g. ecosystem restoration, floodplain management) need. Discuss critical impacts that will occur if the proposal is not implemented.**

**Five small water systems in the Weldon area have Uranium & Nitrate contaminated wells and/or lack a back-up water supply. The contamination of area water wells and the lack of an adequate water supply pose a serious health threat to residents of these disadvantaged communities (MHI \$22,857). Many communities have high water rates and are faced with increasing rates to treat their water for Uranium &/or Nitrate and hire adequately licensed operators. Development of a regional water supply will provide clean drinking water, help lower operational costs, provide a backup water supply and much needed licensed operators.**

*Part 3. Project Description*

A general description of the proposed project is needed. This section will provide information associated with the project concept, general project information, and readiness to proceed. It is recognized that much of the requested information may not be available for projects that are at a conceptual level of project development. We appreciate and need your ideas.

Please provide a 1-2 paragraph description of the project including the general project concept, what will be constructed/implemented, how the constructed project will function, and treatment methods, as appropriate.

**Planning, design and construction of new water well(s), 3 storage tanks, a 3.5 mile transmission system and 5 water system turnouts with meters and backflow devices to provide a regional clean water supply to disadvantaged community water systems in the Weldon area serving over 400 households and 1,000 people. A water treatment plant for Uranium &/or Nitrates might be installed, depending on the source water quality.**

**The Long Canyon Water Company is the applicant for \$500,000 in State Planning grant funds.**

**A new public district will be formed to own and operate the Weldon Regional Water System. This District will be the recipient of the State Construction grant funds to build the estimated \$4,000,000 Project.**

**The District will be run by an elected board from the area served by the regional water system. The system will have certified operators, a central water supply with storage tanks in each pressure zone. Area water systems will be connected by a turnout/meter/backflow setup that will allow the systems to interconnect and maintain their individual system operation. Some systems may choose to consolidate operations with the Regional water system.**

**If applicable, list surface water bodies and groundwater basins associated with the proposed project:**

•	South Fork of the Kern River
•	Lake Isabella
•	Tulare Lake Groundwater Basin
•	

**Please identify up to three available documents which contain information specific to the proposed project:**

•	State Revolving Loan Fund application
•	Weldon Engineering Reports
•	

Is the proposed project an element or phase of a regional or larger program?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, please identify the program	_____
Design life of the Project	<u>40 Years</u>
Proposed Construction/Implementation Start Date:	<u>2014</u>
Proposed Construction/Implementation Completion Date	<u>2015</u>
Ready for Construction Bid	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA

Item	Status (e.g., not initiated, in process, complete)	Date
Conceptual Plans	<u>Complete</u>	<u>02/28/2010</u> (mm/dd/yyyy)
Land Acquisition/ Easements	<u>Not initiated</u>	(mm/dd/yyyy)
Preliminary Plans	<u>Complete</u>	<u>02/28/2010</u> (mm/dd/yyyy)
CEQA/NEPA	<u>Not initiated</u>	(mm/dd/yyyy)
Permits	<u>Not initiated</u>	(mm/dd/yyyy)
Construction Drawings	<u>Not initiated</u>	(mm/dd/yyyy)

For projects that do not include construction, please briefly describe the project readiness-to proceed.

<p>The Planning Phase is ready to go. The SRF application and Scope of Work is under review and a Planning agreement is expected soon.</p>
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*Part 4. Project Benefits*

Please provide a 1-2 paragraph description of the benefit(s) that the project will address. Information provided will be used in the assessment of project benefits.

The Project will provide a regional clean water supply to 5 or more water systems in the Weldon area serving over 400 households with 1,000 people. Development of a regional water supply will provide clean drinking water, help lower operational costs, provide a backup water supply, much needed licensed operators and help coordinate regional water supplies in the area.

Please describe the dominant existing land use type for the proposed project location.

Rural uses: Ranching, residential, vacant land, roads

Please describe the dominant existing land use type for areas upstream and downstream of the proposed project location

Upstream: Rural uses: Ranching, residential, vacant land, roads

Downstream: Rural uses: Ranching, residential, vacant land, roads

Does the project address any known environmental justice issues?

Yes  No  Not Sure

Is the project located within or adjacent to a disadvantaged community?

Yes  No  Not Sure

Does the project include disadvantaged community participation?

Yes  No  Not Sure

If yes, please identify the group or organization: Weldon DAC water systems: Rainbird Valley MWC, Tradewinds WA, Long Canyon WC, & Bella Vista MWC. Self-Help Enterprises is working with these DACs to develop a regional water project & alternatives.

**Please provide the following project benefit information for all applicable components of the proposed project. Benefit categories include things such as water quality / flood management, water supply, and resource stewardship. PLEASE ATTEMPT TO SUPPLY ALL INFORMATION RELEVANT TO YOUR PROJECT. THIS INFORMATION WILL BE USED TO ANALYZE AND ASSESS PROJECT FOR FUTURE FUNDING.**

**WATER QUALITY BENEFITS / FLOOD MANAGEMENT BENEFITS**

<b>Water Quality Benefit Information</b>	
Treatment technologies* <b>*If used</b>	<u>Uranium and/or Nitrate treatment</u>
Design operational treatment capacity (million gallons/day)	<u>Estimated 0.2 MGD</u>
Targeted Contaminants (Check all that apply):	
<input type="checkbox"/> Chloride <input checked="" type="checkbox"/> Nitrogen Compounds <input type="checkbox"/> Coliform Bacteria <input checked="" type="checkbox"/> Other (describe): <u>Uranium</u>	
<b>Flood Management Benefit Information</b>	
Maximum volume of temporary storage of storm runoff (acre-feet)	_____
Maximum increased conveyance capacity (cubic feet/second)	_____
Estimated area benefiting from flood damage reduction (acres)	_____
Estimated level of flood protection resulting from project implementation	_____
Estimated annual value of flood damage reduction provided by project (\$/year)	_____
Acreage required for project implementation	_____

**WATER SUPPLY BENEFITS**

**Project information provided will help to quantify water supply benefits from enhanced local water supply or reduced potable water demand.**

Enhanced Water Supply or Demand Reduction Benefit Information			
<b>Source of Increased Supply or Demand Reduction</b>			
<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Groundwater treatment	<input type="checkbox"/> Increased surface water storage	
<input type="checkbox"/> Recycled water	<input type="checkbox"/> Conservation/ water use efficiency	<input type="checkbox"/> Ocean desalination	
<input type="checkbox"/> Transfer	<input type="checkbox"/> Other (describe): _____		
Type of enhanced supply or demand reduction: <u>Alternate clean water wells and/or treatment facilities</u>			
Annual Yield of Supply (acre-feet): <u>60</u>			
<b>Availability by Water-Year Type (acre-feet per year):</b>			
Average Year	<u>60</u>		
Dry Year	<u>60</u>		
Wet Year	<u>60</u>		
<b>Availability by Season (check all that apply):</b>			
<input checked="" type="checkbox"/> Summer	<input checked="" type="checkbox"/> Fall	<input checked="" type="checkbox"/> Spring	<input checked="" type="checkbox"/> Winter
<b>Does the project have the potential to displace demands on the Bay/Delta/Estuary?</b>			
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Not Sure	



**For projects that include detention and groundwater recharge, please complete the following: N/A**

How many acres of land drain into this detention basin? (acres)	_____
Detention Basin area (acres)	_____
Detention basin max. operational depth (ft.)	_____
% of basin covered by wetlands	_____
Soil type	_____
If other than infiltration, identify method (e.g., injection) and recharge (acre-feet/year)	_____
Estimated basin annual inflow (acre-feet/year)	_____
Estimated basin annual outflow (acre-feet/year)	_____

**RESOURCE STEWARDSHIP BENEFITS**

**Project information provided will help to quantify the benefits associated with projects related to resource stewardship and land management.**

Non-treatment wetland area (acres)	_____
Treatment wetland area (acres)	_____
Riparian habitat area (acres)	_____
Non-developed open space area (acres)	_____
Multiple use/ recreation area (acres) – additionally, select the type of multiple use / recreation and associated acres by type:	
Single Sport Athletics	_____
Multiple Sport Athletics Acres	_____
Other Recreation Acres	_____
Pedestrian Trail Acres	_____
Equestrian Trail Acres	_____
Other Passive Activity	_____
Other Acres (describe)	_____
Description	_____
Total Project area (acres)	_____

*Part 5. Project Cost Estimate*

**Project cost information is needed to assist in comparing benefits and cost. Additionally, knowledge of the project type and cost will assist in identifying funding sources for potential projects.**

**Please indicate the estimated costs of project implementation and associated funding source(s). These costs should include land purchase/easement, planning/design/engineering, construction/implementation, environmental compliance, administration, and contingency.**

<p><b>Approximate Total Cost</b> <i>(If project costs are variable, please include lower and upper range estimates.)</i></p>	<p><b>Planning/Design: \$500,000</b> <b>Construction: \$4,000,000</b></p>
<p><b>Funding Source</b> <i>(If multiple sources, list each source and the percent or amount funded by each)</i></p>	<p><b>State: Prop 84 and/or SRF Grant (80 – 99%)</b> <b>Federal: USDA (1 – 20%)</b></p>
<p><b>Funding Certainty &amp; Longevity</b></p>	<p><b>State: Prop 84 and/or SRF applications submitted Planning Grant being prepared. USDA: Application submittal will be based on State funding amount.</b></p>
<p><b>Operations &amp; Maintenance Cost</b> <i>(per year)</i></p>	<p><b>\$96,000 (estimate)</b></p>
<p><b>Operations &amp; Maintenance Funding Source(s)</b> <i>(i.e., annual budget, grant, etc. If multiple sources, list each source and the percent or amount funded by each.)</i></p>	<p><b>Water system users monthly bills</b></p>
<p><b>Operations &amp; Maintenance Funding Certainty</b> <i>(i.e., already included in organization's budget, contingent upon grant, etc.)</i></p>	<p><b>Contingent upon project construction</b></p>

**Part 6. Regional Objectives**

Indicate below whether the project meets any of the Kern IRWMP regional objectives. Where necessary/appropriate, please provide a brief explanation as to how the Project meets the regional objective.

Kern IRWMP Objectives	Does the project meet the objective?		Comments/Explanation
	Yes	No	
<b>Increase Water Supply (WS)</b>			
1. Through cooperation and collaboration with other regions restore water supplies to levels that will mitigate for water lost from the region and eliminate overdraft		No	
2. Pursue and implement cost effective water use efficiency programs	Yes		Metered usage & charge for water
3. Increase water storage capacity in the region by increasing recharge acreage and expanding groundwater banking programs before all prime recharge land has been developed		No	
4. Integrate management of water banking facilities to maximize conjunctive use over the planning horizon	Yes		Coordinate water irrigation & recharge with adjacent property owner
5. Increase/augment water supplies to meet region demands	Yes		Installation of 2 new wells and or water treatment facilities to replace and augment existing contaminated supplies and provide a needed back-up water supply.
<b>Improve Operational Efficiency (OE)</b>			
1. Increase transfers and exchanges flexibility over the planning horizon	Yes		Clean water availability through new wells and treatment.
2. Create tools to re-regulate water supplies within the region, including storage, storm flows, and operational flows over the planning horizon	Yes		Creation of regional water supplier and supply/storage & distribution system for area water systems.
3. Increase distribution efficiencies and reduce energy usage over the planning horizon		No	
4. Increase the use of alternate energy sources (e.g. solar)		No	
5. Replace aging infrastructure to reduce system water losses, improve operational efficiencies, and reduce service interruptions	Yes		New and clean water would be through new wells and treatment to replace and/or supplement existing old and or contaminated water supplies.
6. Increase the use of recycled water for direct reuse within the Kern Region		No	

7. Optimize local management of water resources to improve water supply reliability over the planning horizon	Yes	A locally owned and operated regional water supply will improve individual water systems' supplies
8. Increase pool of qualified candidates to operate water and wastewater systems	Yes	Ability to hire or contract with certified operators for System O & M. Regional operators available for individual system consultation/operation.
<b>Improve Water Quality (WQ)</b>		
1. Monitor and/or manage headwaters/areas of origin, natural streams, and recharge areas to prevent or mitigate contamination	No	
2. Identify and preserve prime recharge areas in the Kern fan area and other areas	No	
3. Improve water quality for disadvantaged communities and the watershed over the planning horizon	Yes	The Project would directly benefit four DAC water systems.
4. Continue to provide drinking water that meets or exceeds water quality standards; and support efforts to attain appropriate standards throughout the planning horizon	Yes	The Regional Project would provide clean drinking water to DAC systems and enable them to obtain clean affordable drinking water.
5. Maximize the use of lesser quality water for appropriate uses (landscaping, certain ag crops, "aesthetic" projects) throughout the planning horizon	No	
6. Coordinate and enhance aquatic pest control efforts from this point forward	No	
<b>Promote Land Use Planning and Resource Stewardship (LU)</b>		
1. Promote stewardship of the Kern River by applying appropriate measures in various reaches of the river from this point forward	No	
2. Encourage the removal of non-native invasive plant species that affect water quality, reliability, and operations	No	
3. Identify and promote the regeneration and restoration of native riparian habitat	No	
4. Coordinate agricultural and urban water suppliers to more effectively address land use planning issues from this point forward	Yes	Work with agricultural owners of local water rights to coordinate regional use.
5. Improve the linkage between land use planning and water supply in the region throughout the planning horizon	Yes	Work with agricultural owners of local water rights to coordinate regional use.
6. Increase educational opportunities to improve public awareness of water supply, conservation, and water quality issues throughout the planning horizon	Yes	Water project development will require local systems and users to understand local water contamination, metered rates, costs, operations. The Project will also hold community meetings to review Project costs and alternatives and seek user & system input on rates and project development.

7. Improve and coordinate integrated land use planning to support stewardship of environmental resources, such as the Kern River and Kern Fan, and integrate with habitat conservation plans and other ongoing planning efforts from this point forward	No	
8. Preserve and improve ecosystem/watershed health throughout the planning horizon	No	
<b>Improve Regional Flood Management (FM)</b>		
1. Improve regional flood management by addressing preparedness, response, and post flood actions throughout the planning horizon	No	
2. Reduce the effects of poor quality runoff throughout the planning horizon	No	
3. Identify and promote innovative flood management projects to protect vulnerable areas	No	
4. Plan new developments to minimize flood impacts from this point forward	No	



# KERN IRWMP

Integrated Regional Water Management Plan

## *Project Submittal Form*

To the extent possible this form should be electronically filled out and e-mailed to:

[KernIRWMP@kcwa.com](mailto:KernIRWMP@kcwa.com).

### **Part 1. Lead Implementing Agency/Organizational Information**

Please provide the following information regarding the project sponsor and proposed project.

**Implementing Agency/ Organization / Individual:**

Tübatulabal Tribal Water Board

**Agency / Organization / Individual Address:**

P.O. Box 226, Lake Isabella, CA

**Possible Partnering Agencies:**

Tübatulabal Tribal Water Board, Tribal Allotment Heirs, Southern CA Edison, US Bureau of Indian Affairs, US Corps of Engineers, and US Indian Health Services

**Name:**

Dr. Donna Miranda-Begay

**Title:**

Tribal Chairwoman

**Telephone:**

760-379-4590

**Fax:**

760-379-4592

**Email:**

drbegay@aol.com

**Website:**

www.tubat.org

**Project Name:**

Phase II Safe Drinking Water and Tribal Allotments Community Water Systems

Either the latitude/longitude or a location description is required. To determine the latitude/longitude, use the closest address or intersection. If the project is linear, use the furthest upstream latitude/longitude.

Project Latitude: 

35° 42' 13.86" (42.231') N
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Project Longitude: 

118°17' 35.58" (17.593') W
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<b>Location Description:</b>	Miranda Allotment (IND 14) - USGS 7.5-minute Weldon quadrangle topographic map shows the general area. The turnoff to the site is at the intersection of Highway 178 and Fay Ranch Road near Weldon in Kern County.
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**Regional Grouping: Identify the Regional Grouping your agency is located in, and the Regional Grouping your project is located in.**

<input type="checkbox"/> Agency <input type="checkbox"/> Project	Greater Bakersfield
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County Water Agency
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern Fan
X <input type="checkbox"/> Agency    X <input type="checkbox"/> Project	Kern River Valley
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Mountains/Foothills
<input type="checkbox"/> Agency <input type="checkbox"/> Project	North County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	South County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	West Side

**Project Cooperating Agency(ies)/Organization(s)/Individual(s):**

• Tübatulabal Tribal Water Board
• Tribal Allotment Heirs
• Southern CA Edison
• US Bureau of Indian Affairs
• US Indian Health Services
•

**Project Status (e.g., new, ongoing, expansion, new phase):**

New Phase
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## **Part 2. Project Need**

**It is important to understand the need(s) or issue(s) that the proposed project will address and the benefits that it will provide. Information provided in this section defines the need(s) or issue(s) that the proposed project will address and will help to catalog existing need(s) or issue(s) in the Tulare Lake Basin Portion of Kern County Region.**

**Please provide a 1-2 paragraph description of the need(s) or problem(s) that the project will address. As applicable, discuss the water supply need, operational efficiency need, water quality need, or resource stewardship need (e.g. ecosystem restoration, floodplain management) need. Discuss critical impacts that will occur if the proposal is not implemented.**

Phase I of the Miranda Allotment Expanded Water System project is underway. U.S. Indian Health Services has provided \$221,000 funding for additional water tanks, water pump station, and residential water lines. This phase will begin mid February 2012 – bid awarded in January 2012.

Phase II for this project is not funded – these are the needs for Phase II:

**Testing for quality drinking water** must be made at the residential site – filtering and water quality monitoring systems must be installed for each of the 20 residential sites

**Electricity expansion and new water pump station** is required to help pump water to the west side of the 160 acre Tribal allotment.

**New water diversion values** are required for new irrigation options for community use area.

**New fire hydrants** need to be installed to Phase I system – this will help with fire hazard and fire-fighting.

**Assessment of potential Flood areas** on this Tribal Allotment (160 acres).

**Water System Planning** for Community Use area





### **Part 3. Project Description**

A general description of the proposed project is needed. This section will provide information associated with the project concept, general project information, and readiness to proceed. It is recognized that much of the requested information may not be available for projects that are at a conceptual level of project development. We appreciate and need your ideas.

Please provide a 1-2 paragraph description of the project including the general project concept, what will be constructed/implemented, how the constructed project will function, and treatment methods, as appropriate.

It is expected that Phase I of the Miranda Water Project will be completed by July 2012. New water tanks, residential water lines, and water pump station on the East side of the Miranda Tribal allotment (160 acres) will be completed. As a result, Phase II of the Miranda Water project needs must be addressed to ensure quality drinking water, fire-fighting water management, full property access to new water system, assessing potential seasonal flooding areas, and improved community use area water access. These needs will have to address long-term community access to water, safe-drinking water, sustainability of water system, emergency management to address potential fire hazards, flood management education and preparedness, and integrated water management planning.

**If applicable, list surface water bodies and groundwater basins associated with the proposed project:**

•	Fay Creek Water Shed
•	Miranda Allotment Water Springs
•	
•	

**Please identify up to three available documents which contain information specific to the proposed project:**

•	US Indian Health Service Phase II draft description of Miranda water project
•	Tübatulabal Tribal Water Board – draft notes and layout of required Phase II Miranda Water Project.
•	

<b>Is the proposed project an element or phase of a regional or larger program?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>If yes, please identify the program</b>	_____
<b>Design life of the Project</b>	<u>July – August 2012</u>
<b>Proposed Construction/Implementation Start Date:</b>	<u>October 2012</u>
<b>Proposed Construction/Implementation Completion Date</b>	<u>January 2013</u>
<b>Ready for Construction Bid</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA

Item	Status (e.g., not initiated, in process, complete)	Date	
Conceptual Plans	in process	<u>6/15/2012</u>	(mm/dd/yyyy)
Land Acquisition/ Easements	<u>Complete</u>	<u>N / A</u>	(mm/dd/yyyy)
Preliminary Plans	in process	<u>7/15/2012</u>	(mm/dd/yyyy)
CEQA/NEPA	not initiated	<u>9/1/2012</u>	(mm/dd/yyyy)
Permits	<u>Not Required</u>	<u>N / A</u>	(mm/dd/yyyy)
Construction Drawings	not initiated	<u>8/15/2012</u>	(mm/dd/yyyy)

For projects that do not include construction, please briefly describe the project readiness-to proceed.

## **Part 4. Project Benefits**

**Please provide a 1-2 paragraph description of the benefit(s) that the project will address. Information provided will be used in the assessment of project benefits.**

This Phase II Safe Drinking Water and Tribal Allotments Community Water Systems for the Miranda Tribal Allotment will improve Phase I's water delivery, improve quality safe-drinking water, provide require electrical utilities for water pumping needs for West side of this allotment (160 acres), new access to water for community use area, flood management assessment, and new fire management ability – public safety. This allotment community has 17 Tribal families residing on this property. Currently, not all families have direct access to safe quality drinking water, water for gardens, or water for fire-fighting. Most housing is sub-standard with 30 year or older mobile homes. Original 10,000 gallon water tank and limited water lines for 8 families were installed in 1970s. This aging water system is getting new piping, water tanks, and water pump station (Phase I) with the help of U.S. Indian Health Services and the Tübatulabal Tribal Water Board. However, additional funding is required to help with construction costs of new water pump station, electrical lines, safe-drinking water monitoring, water system for community use area, and new fire hydrants (Phase II).

The key benefits for Phase II of the Miranda Water Project will be extended access to quality drinking water for entire Miranda Allotment community, community use area, fire-management and public safety, ensuring safe-drinking water, underserve community will have water for their homes and gardens, flood management and preparedness, and community decision making and improved understanding of an integrated water system.

**Please describe the dominant existing land use type for the proposed project location.**

**Residential and pre-historic Tübatulabal village site “yitiiyamup” (warm springs) – currently lands held in trust by the U.S. Government. Tribe is not federally recognized, thus this land base is not eligible for US Bureau of Indian Affairs and other federal funding.**

**Please describe the dominant existing land use type for areas upstream and downstream of the proposed project location**

Upstream: Dome Wilderness – US BLM Lands just north and east of this property

Downstream: CA Fish and Game / Kern River Preserve (Audubon) lands

**Does the project address any known environmental justice issues?**

<input checked="" type="checkbox"/> <b>X Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>Not Sure</b>
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<b>Is the project located within or adjacent to a disadvantaged community?</b>		
<input type="checkbox"/> <b>X Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>Not Sure</b>

<b>Does the project include disadvantaged community participation?</b>		
<input type="checkbox"/> <b>X Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>Not Sure</b>
<b>If yes, please identify the group or organization:</b> <u>Miranda Allotment Residents (most earn below \$10,000 annually and are elderly)</u>		

**Please provide the following project benefit information for all applicable components of the proposed project. Benefit categories include things such as water quality / flood management, water supply, and resource stewardship. PLEASE ATTEMPT TO SUPPLY ALL INFORMATION RELEVANT TO YOUR PROJECT. THIS INFORMATION WILL BE USED TO ANALYZE AND ASSESS PROJECT FOR FUTURE FUNDING.**

**WATER QUALITY BENEFITS / FLOOD MANAGEMENT BENEFITS**

<b>Water Quality Benefit Information</b>	
Treatment technologies	<u>Water Quality Testing and Monitoring – at residential sites</u>
Design operational treatment capacity (million gallons/day)	<u>Until Phase I is completed, the water capacity is not known. However, a 10,000 gallon water tank does exist on this property and constantly full with spring water.</u>
Targeted Contaminants (Check all that apply):	
<input type="checkbox"/> X Chloride <input type="checkbox"/> X Nitrogen Compounds <input type="checkbox"/> X Coliform Bacteria <input type="checkbox"/> X Other (describe): <u>Arsenic, Calcium, Sulfur</u>	
<b>Flood Management Benefit Information</b>	
Maximum volume of temporary storage of storm runoff (acre-feet)	<u>By June 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Maximum increased conveyance capacity (cubic feet/second)	<u>By June 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Estimated area benefiting from flood damage reduction (acres)	<u>By June 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Estimated level of flood protection resulting from project implementation	<u>By June 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Estimated annual value of flood damage reduction provided by project (\$/year)	<u>By June 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Acreage required for project implementation	<u>By June 2012, this information will be known – estimated time frame for completion of Phase I.</u>

**WATER SUPPLY BENEFITS**

**Project information provided will help to quantify water supply benefits from enhanced local water supply or reduced potable water demand.**

<b>Enhanced Water Supply or Demand Reduction Benefit Information</b>	
<b>Source of Increased Supply or Demand Reduction</b>	
<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Groundwater treatment
<input type="checkbox"/> Recycled water	<input checked="" type="checkbox"/> Conservation/ water use efficiency
<input type="checkbox"/> Transfer	<input type="checkbox"/> Other (describe): _____
<input type="checkbox"/> Increased surface water storage <input type="checkbox"/> Ocean desalination	
Type of enhanced supply or demand reduction: <u>Phase II will prove to enhance water supply</u>	
Annual Yield of Supply (acre-feet): <u>By June 2012, this information will be known – estimated time frame for completion of Phase I.</u>	
<b>Availability by Water-Year Type (acre-feet per year):</b>	
Average Year	<u>By June 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Dry Year	<u>Dry or wet years prove to be consistent in water supply (underground spring)</u>
Wet Year	<u>Dry or wet years prove to be consistent in water supply (underground spring)</u>
<b>Availability by Season (check all that apply):</b>	
<input checked="" type="checkbox"/> Summer	<input checked="" type="checkbox"/> Fall
<input checked="" type="checkbox"/> Spring	<input checked="" type="checkbox"/> Winter
<b>Does the project have the potential to displace demands on the Bay/Delta/Estuary?</b>	
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<input type="checkbox"/> Not Sure	



**For projects that include detention and groundwater recharge, please complete the following:**

How many acres of land drain into this detention basin? (acres)	_____
Detention Basin area (acres)	_____
Detention basin max. operational depth (ft.)	_____
% of basin covered by wetlands	_____
Soil type	_____
If other than infiltration, identify method (e.g., injection) and recharge (acre-feet/year)	_____
Estimated basin annual inflow (acre-feet/year)	_____
Estimated basin annual outflow (acre-feet/year)	_____

**RESOURCE STEWARDSHIP BENEFITS**

**Project information provided will help to quantify the benefits associated with projects related to resource stewardship and land management.**

Non-treatment wetland area (acres)	<u>30</u> *
Treatment wetland area (acres)	<u>20</u> *
Riparian habitat area (acres)	<u>20</u>
Non-developed open space area (acres)	<u>10</u> *
Multiple use/ recreation area (acres) – additionally, select the type of multiple use / recreation and associated acres by type:	
Single Sport Athletics	<u>5</u> *
Multiple Sport Athletics Acres	<u>10</u> *
Other Recreation Acres	_____
Pedestrian Trail Acres	<u>5</u> *
Equestrian Trail Acres	<u>20</u> *
Other Passive Activity	<u>5</u> *
Other Acres (describe)	<u>10 – Ceremonial / Pow-wow area</u> *
Description	_____
Total Project area (acres)	<u>110</u> (* Project Area – Phase II)

## **Part 5. Project Cost Estimate**

Project cost information is needed to assist in comparing benefits and cost. Additionally, knowledge of the project type and cost will assist in identifying funding sources for potential projects.

Please indicate the estimated costs of project implementation and associated funding source(s). These costs should include land purchase/easement, planning/design/engineering, construction/implementation, environmental compliance, administration, and contingency.

<b>Approximate Total Cost</b> <i>(If project costs are variable, please include lower and upper range estimates.)</i>	<b>\$75,000 - \$150,000</b>
<b>Funding Source</b> <i>(If multiple sources, list each source and the percent or amount funded by each)</i>	<b>State IRWMP 100%</b>
<b>Funding Certainty &amp; Longevity</b>	<b>50% chance and probability of getting funded and funds being distribute timely.</b>
<b>Operations &amp; Maintenance Cost</b> <i>(per year)</i>	<b>\$5,000 - \$10,000</b>
<b>Operations &amp; Maintenance Funding Source(s)</b> <i>(i.e., annual budget, grant, etc. If multiple sources, list each source and the percent or amount funded by each.)</i>	<b>Fund Raising, Residents Water fees, Rural Community Grants, Tribe is working on becoming federally recognized – if federally recognized, funding will be 100% federally funded for maintenance.</b>
<b>Operations &amp; Maintenance Funding Certainty</b> <i>(i.e., already included in organization's budget, contingent upon grant, etc.)</i>	<b>90% sure of getting funds to keep Phase II sustainable.  100% Resident fees will be provided.</b>

## Part 6. Regional Objectives

Indicate below whether the project meets any of the Kern IRWMP regional objectives. Where necessary/appropriate, please provide a brief explanation as to how the Project meets the regional objective.

Kern IRWMP Objectives	Does the project meet the objective?		Comments/Explanation
	Yes	No	
<b>Increase Water Supply (WS)</b>			
1. Through cooperation and collaboration with other regions restore water supplies to levels that will mitigate for water lost from the region and eliminate overdraft	X		This project will ensure that water from the Fay Creek Water Shed / Miranda Water springs will be effectively collected and used to help sustain Miranda Allotment Community.
2. Pursue and implement cost effective water use efficiency programs	X		See this objective's comment 1.
3. Increase water storage capacity in the region by increasing recharge acreage and expanding groundwater banking programs before all prime recharge land has been developed		X	
4. Integrate management of water banking facilities to maximize conjunctive use over the planning horizon		X	
5. Increase/augment water supplies to meet region demands	X		Additional residential, community area and agricultural use of stored water.
<b>Improve Operational Efficiency (OE)</b>			
1. Increase transfers and exchanges flexibility over the planning horizon		X	
2. Create tools to re-regulate water supplies within the region, including storage, storm flows, and operational flows over the planning horizon		X	
3. Increase distribution efficiencies and reduce energy usage over the planning horizon	X		Pumping costs will be reduced by extending water lines to community use area – this area currently does not have water access.
4. Increase the use of alternate energy sources (e.g. solar)		X	
5. Replace aging infrastructure to reduce system water losses, improve operational efficiencies, and reduce service interruptions	X		Currently, old pipes are degrading and new diversion pipes values will help with future water line failures, reducing water loss.
6. Increase the use of recycled water for direct reuse within the Kern Region		X	
7. Optimize local management of water resources to improve water supply reliability over the planning horizon	X		Water supply will greatly improve for west side of this property and for community use area.

8. Increase pool of qualified candidates to operate water and wastewater systems	X	Tribal Water Board will be getting certified in a variety of water certification programs for rural communities.
<b>Improve Water Quality (WQ)</b>		
1. Monitor and/or manage headwaters/areas of origin, natural streams, and recharge areas to prevent or mitigate contamination	X	This project's water source is Fay Creek water shed. This water comes from the Sequoia Forest and Dome Wilderness areas – headwaters sources.
2. Identify and preserve prime recharge areas in the Kern fan area and other areas	X	
3. Improve water quality for disadvantaged communities and the watershed over the planning horizon	X	Most of the residents at the Miranda allotment earn under \$10,000 a year and are elderly. Due to non-federally recognized status – this Tribal community does not qualify for U.S. Bureau of Indian Affairs and other Federal funding.
4. Continue to provide drinking water that meets or exceeds water quality standards; and support efforts to attain appropriate standards throughout the planning horizon	X	This project includes water testing and monitoring systems for the residential sites.
5. Maximize the use of lesser quality water for appropriate uses (landscaping, certain ag crops, “aesthetic” projects) throughout the planning horizon	X	Both residential and landscape uses of water will be provided by this project. Also, agriculture and livestock needs will be addressed with this project.
6. Coordinate and enhance aquatic pest control efforts from this point forward	X	Water monitoring systems will also include testing of biological / aquatic pest presence.
<b>Promote Land Use Planning and Resource Stewardship (LU)</b>		
1. Promote stewardship of the Kern River by applying appropriate measures in various reaches of the river from this point forward	X	Tübatulabal people are water people – the term “pal” or “pah” relate to water. Tübatulabal Tribe has three bands in their Tribe: Bakalanchi, Palegewan, and Pahkanapul. Kern River waters are sacred to the Tübatulabal people – beyond stewardship; these waters also have a cultural meaning.
2. Encourage the removal of non-native invasive plant species that affect water quality, reliability, and operations	X	Yes... we will certainly address this issue while constructing and working on this project.
3. Identify and promote the regeneration and restoration of native riparian habitat	X	Yes... we will certainly address this issue while constructing and working on this project
4. Coordinate agricultural and urban water suppliers to more effectively address land use planning issues from this point forward	X	Residents on the Miranda allotment will have agricultural waters – planning for the use of this type of water use will be made with the allotment heirs, US BIA – Pacific Office / Forestry Unit.
5. Improve the linkage between land use planning and water supply in the region throughout the planning horizon	X	More dialog will occur with allotment residents and heirs regarding land use planning and water supply – this occurs in Tribal Membership meetings, Tribal Water Board meetings, local conference, Training,

		and Newsletter.
6. Increase educational opportunities to improve public awareness of water supply, conservation, and water quality issues throughout the planning horizon	X	See this objective's comment 5 – water supply, conservation, and water quality issues will also be addressed.
7. Improve and coordinate integrated land use planning to support stewardship of environmental resources, such as the Kern River and Kern Fan, and integrate with habitat conservation plans and other ongoing planning efforts from this point forward	X	We will continue to work with US Forest Service, US BLM, CA Fish and Game, and Kern River Preserve (Audubon) regarding integrated land use and planning.
8. Preserve and improve ecosystem/watershed health throughout the planning horizon	X	The impact of our water systems considers the immediate to long-term impact of the ecosystem. Through NEPA process the ecosystem is also protected on Tribal Allotment Lands.
<b>Improve Regional Flood Management (FM)</b>		
1. Improve regional flood management by addressing preparedness, response, and post flood actions throughout the planning horizon	X	Flood Assessment has never been conducted for this property – much is to be learned and gained in conducting a Flood Management and Preparedness Assessment.
2. Reduce the effects of poor quality runoff throughout the planning horizon	X	See this objective's comment 1.
3. Identify and promote innovative flood management projects to protect vulnerable areas	X	See this objective's comment 1.
4. Plan new developments to minimize flood impacts from this point forward	X	See this objective's comment 1.



# KERN IRWMP

Integrated Regional Water Management Plan

## *Project Submittal Form*

To the extent possible this form should be electronically filled out and e-mailed to:

[KernIRWMP@kcwa.com](mailto:KernIRWMP@kcwa.com).

### **Part 1. Lead Implementing Agency/Organizational Information**

Please provide the following information regarding the project sponsor and proposed project.

**Implementing Agency/ Organization / Individual:**

Tübatulabal Tribal Water Board

**Agency / Organization / Individual Address:**

P.O. Box 226, Lake Isabella, CA

**Possible Partnering Agencies:**

Tübatulabal Tribal Water Board, Tribal Allotment Heirs, Southern CA Edison, US Bureau of Indian Affairs, US Corps of Engineers, and US Indian Health Services

**Name:**

Dr. Donna Miranda-Begay

**Title:**

Tribal Chairwoman

**Telephone:**

760-379-4590

**Fax:**

760-379-4592

**Email:**

drbegay@aol.com

**Website:**

www.tubat.org

**Project Name:**

Phase II Safe Drinking Water and Community Use Area – WhiteBlanket Allotment

**Either the latitude/longitude or a location description is required. To determine the latitude/longitude, use the closest address or intersection. If the project is linear, use the furthest upstream latitude/longitude.**

**Project Latitude:**

**Project Longitude:**

<b>Location Description:</b>	WhiteBlanket Allotment (IND 20) – Onyx, CA. The turnoff to the site is at the intersection of Highway 178 and WhiteBlanket Road (4-1/2 miles east of Onyx).  S/2 NW/4 - Section 25, Township 25S, Range 35E, MDBM W/2 SW/4 - Section 25, Township 25S, Range 35E, MDBM
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**Regional Grouping: Identify the Regional Grouping your agency is located in, and the Regional Grouping your project is located in.**

<input type="checkbox"/> Agency <input type="checkbox"/> Project	Greater Bakersfield
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County Water Agency
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern Fan
X <input type="checkbox"/> Agency    X <input type="checkbox"/> Project	Kern River Valley
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Mountains/Foothills
<input type="checkbox"/> Agency <input type="checkbox"/> Project	North County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	South County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	West Side

**Project Cooperating Agency(ies)/Organization(s)/Individual(s):**

• Tubatulabal Tribal Water Board
• Tribal Allotment Heirs
• Southern CA Edison
• US Bureau of Indian Affairs
• US Indian Health Services
• US Corps of Engineers

**Project Status (e.g., new, ongoing, expansion, new phase):**

New Phase
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## **Part 2. Project Need**

**It is important to understand the need(s) or issue(s) that the proposed project will address and the benefits that it will provide. Information provided in this section defines the need(s) or issue(s) that the proposed project will address and will help to catalog existing need(s) or issue(s) in the Tulare Lake Basin Portion of Kern County Region.**

**Please provide a 1-2 paragraph description of the need(s) or problem(s) that the project will address. As applicable, discuss the water supply need, operational efficiency need, water quality need, or resource stewardship need (e.g. ecosystem restoration, floodplain management) need. Discuss critical impacts that will occur if the proposal is not implemented.**

Phase I of the WhiteBlanket Allotment Community Water System project is underway. U.S. Indian Health Services has provided \$340,000 funding for new water tanks, water pump station, and residential water lines. This phase began in January 2011 – bid awarded in July 2011.

Phase II for this project is not funded – these are the needs for Phase II:

**Testing for quality drinking water** must be made at the residential site – filtering and water quality monitoring systems must be installed for each of the 24 residential sites (4 existing sites and 20 new sites)

**Electricity expansion and new water pump station** is required to help pump water to the west side of the 160 acre Tribal allotment.

**New water diversion values** are required for community use area (arbor and cultural area).

**New fire hydrants** need to be installed to Phase I system – this will help with fire hazard and fire-fighting.

**Assessment of potential Flood areas** on this Tribal Allotment (160 acres).

**Water System Planning** for Community Use area



### **Part 3. Project Description**

A general description of the proposed project is needed. This section will provide information associated with the project concept, general project information, and readiness to proceed. It is recognized that much of the requested information may not be available for projects that are at a conceptual level of project development. We appreciate and need your ideas.

Please provide a 1-2 paragraph description of the project including the general project concept, what will be constructed/implemented, how the constructed project will function, and treatment methods, as appropriate.

It is expected that Phase I of the WhiteBlanket Water project will be completed by August 2012. New water tanks, residential water lines, and water pump station on the East side of the WhiteBlanket Tribal allotment (160 acres) will be completed. As a result, Phase II of the WhiteBlanket Water project needs must be addressed to ensure quality drinking water, fire-fighting water management, full property access to new water system, assessing potential seasonal flooding areas, and improved community use area water access. These needs will have to address long-term community access to water, safe-drinking water, sustainability of water system, emergency management to address potential fire hazards, flood management education and preparedness, and integrated water management planning.

**If applicable, list surface water bodies and groundwater basins associated with the proposed project:**

• South Fork of Kern River
• Onyx Area Water Basin – headwaters from US Forest Service Sequoia Lands
•
•

**Please identify up to three available documents which contain information specific to the proposed project:**

• Tübatulabal Tribal Water Board – draft notes and layout of required Phase II WhiteBlanket Water Project.
•
•

<b>Is the proposed project an element or phase of a regional or larger program?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>If yes, please identify the program</b>	_____
<b>Design life of the Project</b>	<u>September 2012</u>
<b>Proposed Construction/Implementation Start Date:</b>	<u>November 2012</u>
<b>Proposed Construction/Implementation Completion Date</b>	<u>February 2013</u>
<b>Ready for Construction Bid</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA

Item	Status (e.g., not initiated, in process, complete)	Date	
Conceptual Plans	not initiated	<u>9/1/2012</u>	(mm/dd/yyyy)
Land Acquisition/ Easements	<u>Complete</u>	<u>N / A</u>	(mm/dd/yyyy)
Preliminary Plans	not initiated	<u>10/1/2012</u>	(mm/dd/yyyy)
CEQA/NEPA	not initiated	<u>9/1/2012</u>	(mm/dd/yyyy)
Permits	<u>Not Required</u>	<u>N / A</u>	(mm/dd/yyyy)
Construction Drawings	not initiated	<u>11/1/2012</u>	(mm/dd/yyyy)

For projects that do not include construction, please briefly describe the project readiness-to proceed.

## Part 4. Project Benefits

Please provide a 1-2 paragraph description of the benefit(s) that the project will address. Information provided will be used in the assessment of project benefits.

This Phase II Safe Drinking Water and Tribal Allotments Community Water Systems for the WhiteBlanket Tribal Allotment will improve Phase I's water delivery, improve quality safe-drinking water, provide require electrical utilities for water pumping needs for West side of this allotment (160 acres), new access to water for community use area, flood management assessment, and new fire management ability – public safety. This allotment community has 4 Tribal families residing on this property. However, there are 20 Tribal families who plan to return to their allotment based on water and utility access. Currently, these allotment families have no direct access to safe quality drinking water, water for gardens, or water for fire-fighting. There is 1 water well that provides water for three families. It is expected that US Indian Health Services will complete Phase I WhiteBlanket water project (new piping, water tanks, and water pump station). However, additional funding is required to help with construction costs of new electrical lines, safe-drinking water monitoring, water system for community use area, flood management assessment, and new fire hydrants (Phase II).

The key benefits for Phase II of the WhiteBlanket Water Project will be extended access to quality drinking water for entire WhiteBlanket Allotment community, community use area, fire-management and public safety, ensuring safe-drinking water, underserve community will have water for their homes and gardens, flood management and preparedness, and community decision making and improved understanding of an integrated water system.

Please describe the dominant existing land use type for the proposed project location.

Residential and pre-historic Tübatulabal village site “uulupalap” – currently lands held in trust by the U.S. Government. Tribe is not federally recognized, thus this land base is not eligible for US Bureau of Indian Affairs and other federal funding.

Please describe the dominant existing land use type for areas upstream and downstream of the proposed project location

Upstream: Dome Wilderness – US BLM and USFS Lands just north and east of this property

Downstream: CA Fish and Game / Kern River Preserve (Audubon) lands and US Corps of Engineer – Lake Isabella Dam and Reservoir

Does the project address any known environmental justice issues?

X Yes  No  Not Sure

Is the project located within or adjacent to a disadvantaged community?

X Yes  No  Not Sure

Does the project include disadvantaged community participation?

X Yes  No  Not Sure

If yes, please identify the group or organization: WhiteBlanket Allotment Residents (most earn below \$10,000 annually and are elderly)

**Please provide the following project benefit information for all applicable components of the proposed project. Benefit categories include things such as water quality / flood management, water supply, and resource stewardship. PLEASE ATTEMPT TO SUPPLY ALL INFORMATION RELEVANT TO YOUR PROJECT. THIS INFORMATION WILL BE USED TO ANALYZE AND ASSESS PROJECT FOR FUTURE FUNDING.**

**WATER QUALITY BENEFITS / FLOOD MANAGEMENT BENEFITS**

<b>Water Quality Benefit Information</b>	
Treatment technologies	<u>Water Quality Testing and Monitoring – at residential sites</u>
Design operational treatment capacity (million gallons/day)	<u>Until Phase I is completed, the water capacity is not known. However, a 15,000 gallon water tank will exist on this property.</u>
Targeted Contaminants (Check all that apply):	
<input type="checkbox"/> X Chloride <input checked="" type="checkbox"/> X Nitrogen Compounds <input checked="" type="checkbox"/> X Coliform Bacteria <input checked="" type="checkbox"/> X Other (describe): <u>Arsenic, Calcium, Sulfur</u> Very high levels of arsenic have been detected.	
<b>Flood Management Benefit Information</b>	
Maximum volume of temporary storage of storm runoff (acre-feet)	<u>By September 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Maximum increased conveyance capacity (cubic feet/second)	<u>By September r 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Estimated area benefiting from flood damage reduction (acres)	<u>By September 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Estimated level of flood protection resulting from project implementation	<u>By September 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Estimated annual value of flood damage reduction provided by project (\$/year)	<u>By September 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Acreage required for project implementation	<u>By September 2012, this information will be known – estimated time frame for completion of Phase I.</u>

**WATER SUPPLY BENEFITS**

**Project information provided will help to quantify water supply benefits from enhanced local water supply or reduced potable water demand.**

<b>Enhanced Water Supply or Demand Reduction Benefit Information</b>	
<b>Source of Increased Supply or Demand Reduction</b>	
<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Groundwater treatment
<input type="checkbox"/> Recycled water	<input checked="" type="checkbox"/> Conservation/ water use efficiency
<input type="checkbox"/> Transfer	<input type="checkbox"/> Other (describe): _____
<input type="checkbox"/> Increased surface water storage <input type="checkbox"/> Ocean desalination	
Type of enhanced supply or demand reduction: <u>Phase II will prove to enhance water supply</u>	
Annual Yield of Supply (acre-feet): <u>By September 2012, this information will be known – estimated time frame for completion of Phase I.</u>	
<b>Availability by Water-Year Type (acre-feet per year):</b>	
Average Year	<u>By September 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Dry Year	<u>By September 2012, this information will be known – estimated time frame for completion of Phase I.</u>
Wet Year	<u>By September 2012, this information will be known – estimated time frame for completion of Phase I.</u>
<b>Availability by Season (check all that apply):</b>	
<input checked="" type="checkbox"/> Summer	<input checked="" type="checkbox"/> Fall
<input type="checkbox"/> Spring	<input type="checkbox"/> Winter
<b>Does the project have the potential to displace demands on the Bay/Delta/Estuary?</b>	
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<input type="checkbox"/> Not Sure	

**For projects that include detention and groundwater recharge, please complete the following:**

How many acres of land drain into this detention basin? (acres)	_____
Detention Basin area (acres)	_____
Detention basin max. operational depth (ft.)	_____
% of basin covered by wetlands	_____
Soil type	_____
If other than infiltration, identify method (e.g., injection) and recharge (acre-feet/year)	_____
Estimated basin annual inflow (acre-feet/year)	_____
Estimated basin annual outflow (acre-feet/year)	_____

**RESOURCE STEWARDSHIP BENEFITS**

**Project information provided will help to quantify the benefits associated with projects related to resource stewardship and land management.**

Non-treatment wetland area (acres)	<u>20</u> *
Treatment wetland area (acres)	_____
Riparian habitat area (acres)	<u>20</u>
Non-developed open space area (acres)	_____
Multiple use/ recreation area (acres) – additionally, select the type of multiple use / recreation and associated acres by type:	
Single Sport Athletics	_____
Multiple Sport Athletics Acres	
Other Recreation Acres	_____
Pedestrian Trail Acres	<u>20</u> *
Equestrian Trail Acres	<u>40</u> *
Other Passive Activity	<u>5</u> *
Other Acres (describe)	<u>10 – Ceremonial / Pow-wow area *</u>
Description	_____
Total Project area (acres)	<u>115 (* Project Area – Phase II)</u>

## **Part 5. Project Cost Estimate**

Project cost information is needed to assist in comparing benefits and cost. Additionally, knowledge of the project type and cost will assist in identifying funding sources for potential projects.

Please indicate the estimated costs of project implementation and associated funding source(s). These costs should include land purchase/easement, planning/design/engineering, construction/implementation, environmental compliance, administration, and contingency.

<b>Approximate Total Cost</b> <i>(If project costs are variable, please include lower and upper range estimates.)</i>	<b>\$125,000 - \$175,000</b>
<b>Funding Source</b> <i>(If multiple sources, list each source and the percent or amount funded by each)</i>	<b>State IRWMP 100%</b>
<b>Funding Certainty &amp; Longevity</b>	<b>50% chance and probability of getting funded and funds being distribute timely.</b>
<b>Operations &amp; Maintenance Cost</b> <i>(per year)</i>	<b>\$8,000 - \$15,000</b>
<b>Operations &amp; Maintenance Funding Source(s)</b> <i>(i.e., annual budget, grant, etc. If multiple sources, list each source and the percent or amount funded by each.)</i>	<b>Fund Raising, Residents Water fees, Rural Community Grants, Tribe is working on becoming federally recognized – if federally recognized, funding will be 100% federally funded for maintenance.</b>
<b>Operations &amp; Maintenance Funding Certainty</b> <i>(i.e., already included in organization's budget, contingent upon grant, etc.)</i>	<b>90% sure of getting funds to keep Phase II sustainable.  100% Resident fees will be provided.</b>



**Part 6. Regional Objectives**

Indicate below whether the project meets any of the Kern IRWMP regional objectives. Where necessary/appropriate, please provide a brief explanation as to how the Project meets the regional objective.

Kern IRWMP Objectives	Does the project meet the objective?		Comments/Explanation
	Yes	No	
<b>Increase Water Supply (WS)</b>			
1. Through cooperation and collaboration with other regions restore water supplies to levels that will mitigate for water lost from the region and eliminate overdraft	X		This project will ensure that water from the South Fork of Kern River underground water will be effectively collected and used to help sustain WhiteBlanket Allotment Community.
2. Pursue and implement cost effective water use efficiency programs	X		See this objective’s comment 1.
3. Increase water storage capacity in the region by increasing recharge acreage and expanding groundwater banking programs before all prime recharge land has been developed		X	
4. Integrate management of water banking facilities to maximize conjunctive use over the planning horizon		X	
5. Increase/augment water supplies to meet region demands	X		Additional residential, community area and agricultural use of stored water.
<b>Improve Operational Efficiency (OE)</b>			
1. Increase transfers and exchanges flexibility over the planning horizon		X	
2. Create tools to re-regulate water supplies within the region, including storage, storm flows, and operational flows over the planning horizon		X	
3. Increase distribution efficiencies and reduce energy usage over the planning horizon	X		Pumping costs will be reduced by extending water lines to community use area – this area currently does not have water access. Currently, water trucks are used to haul water to these areas.
4. Increase the use of alternate energy sources (e.g. solar)		X	
5. Replace aging infrastructure to reduce system water losses, improve operational efficiencies, and reduce service interruptions	X		Replace small water well – improved water source but requires removal of high arsenic in water source.
6. Increase the use of recycled water for direct reuse within the Kern Region		X	

7. Optimize local management of water resources to improve water supply reliability over the planning horizon	X	Water supply will greatly improve for west side of this property and for community use area.
8. Increase pool of qualified candidates to operate water and wastewater systems	X	Tribal Water Board will be getting certified in a variety of water certification programs for rural communities.
<b>Improve Water Quality (WQ)</b>		
1. Monitor and/or manage headwaters/areas of origin, natural streams, and recharge areas to prevent or mitigate contamination	X	This project's water source is South Fork of Kern River underground water. This water comes from the Sequoia Forest and Dome Wilderness areas – headwaters sources.
2. Identify and preserve prime recharge areas in the Kern fan area and other areas	X	
3. Improve water quality for disadvantaged communities and the watershed over the planning horizon	X	Most of the residents at the WhiteBlanket allotment earn under \$10,000 a year and are elderly. Due to non-federally recognized status – this Tribal community does not qualify for U.S. Bureau of Indian Affairs and other Federal funding.
4. Continue to provide drinking water that meets or exceeds water quality standards; and support efforts to attain appropriate standards throughout the planning horizon	X	This project includes water testing and monitoring systems for the residential sites.
5. Maximize the use of lesser quality water for appropriate uses (landscaping, certain ag crops, “aesthetic” projects) throughout the planning horizon	X	Both residential and landscape uses of water will be provided by this project. Also, agriculture and livestock needs will be addressed with this project.
6. Coordinate and enhance aquatic pest control efforts from this point forward	X	Water monitoring systems will also include testing of biological / aquatic pest presence.
<b>Promote Land Use Planning and Resource Stewardship (LU)</b>		
1. Promote stewardship of the Kern River by applying appropriate measures in various reaches of the river from this point forward	X	Tübatulabal people are water people – the term “pal” or “pah” relate to water. Tübatulabal Tribe has three bands in their Tribe: Bakalanchi, Palegewan, and Pahkanapul. Kern River waters are sacred to the Tübatulabal people – beyond stewardship; these waters also have a cultural meaning.
2. Encourage the removal of non-native invasive plant species that affect water quality, reliability, and operations	X	Yes... we will certainly address this issue while constructing and working on this project.
3. Identify and promote the regeneration and restoration of native riparian habitat	X	Yes... we will certainly address this issue while constructing and working on this project
4. Coordinate agricultural and urban water suppliers to more effectively address land use planning issues from this point forward	X	Residents on the WhiteBlanket allotment will have agricultural waters – planning for the use of this type of water use will be made with the allotment heirs, US BIA – Pacific Office / Forestry Unit.

5. Improve the linkage between land use planning and water supply in the region throughout the planning horizon	X	More dialog will occur with allotment residents and heirs regarding land use planning and water supply – this occurs in Tribal Membership meetings, Tribal Water Board meetings, local conference, Training, and Newsletter.
6. Increase educational opportunities to improve public awareness of water supply, conservation, and water quality issues throughout the planning horizon	X	See this objective’s comment 5 – water supply, conservation, and water quality issues will also be addressed.
7. Improve and coordinate integrated land use planning to support stewardship of environmental resources, such as the Kern River and Kern Fan, and integrate with habitat conservation plans and other ongoing planning efforts from this point forward	X	We will continue to work with US Forest Service, US BLM, US Corps of Engineers, CA Fish and Game and Kern River Preserve (Audubon) regarding integrated land use and planning.
8. Preserve and improve ecosystem/watershed health throughout the planning horizon	X	The impact of our water systems considers the immediate to long-term impact of the ecosystem. Through NEPA process the ecosystem is also protected on Tribal Allotment Lands.
<b>Improve Regional Flood Management (FM)</b>		
1. Improve regional flood management by addressing preparedness, response, and post flood actions throughout the planning horizon	X	Flood Assessment has never been conducted for this property – much is to be learned and gained in conducting a Flood Management and Preparedness Assessment.
2. Reduce the effects of poor quality runoff throughout the planning horizon	X	See this objective’s comment 1.
3. Identify and promote innovative flood management projects to protect vulnerable areas	X	See this objective’s comment 1.
4. Plan new developments to minimize flood impacts from this point forward	X	See this objective’s comment 1.



# KERN IRWMP

Integrated Regional Water Management Plan

## *Project Submittal Form*

To the extent possible this form should be electronically filled out and e-mailed to:

[KernIRWMP@kcwa.com](mailto:KernIRWMP@kcwa.com).

### *Part 1. Lead Implementing Agency/Organizational Information*

**Please provide the following information regarding the project sponsor and proposed project.**

**Implementing Agency/ Organization / Individual:**

Desert Mountain Resource Conservation and Development Council

**Agency / Organization / Individual Address:**

1259 East Ridgecrest Blvd., Suite 7  
Ridgecrest, CA 93555

**Possible Partnering Agencies:**

Kern River Preserve, Audubon  
Weldon, CA 93283

**Name:**

Robert Robinson

**Title:**

Upper Kern River Watershed Coordinator

**Telephone:**

760.549.2131

**Fax:**

0000

**Email:**

brobinson@iwvisp.com

**Website:**

www.desertmountainrcandd.org/

**Project Name:**

Eradication of Invasive Weeds in Kern River Valley and Walker Basin

**Either the latitude/longitude or a location description is required. To determine the latitude/longitude, use the closest address or intersection. If the project is linear, use the furthest upstream latitude/longitude.**

**Project Latitude:**

**Project Longitude:**

<b>Location Description:</b>	South Fork, North Fork Kern River, Kern River Valley and Walkers Basin, previously treated and some new infestations of invasive plant species.
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**Regional Grouping: Identify the Regional Grouping your agency is located in, and the Regional Grouping your project is located in.**

<input type="checkbox"/> Agency <input type="checkbox"/> Project	Greater Bakersfield
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County Water Agency
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern Fan
<input checked="" type="checkbox"/> Agency <input checked="" type="checkbox"/> Project	Kern River Valley
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Mountains/Foothills
<input type="checkbox"/> Agency <input type="checkbox"/> Project	North County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	South County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	West Side

**Project Cooperating Agency(ies)/Organization(s)/Individual(s):**

<ul style="list-style-type: none"> <li>• California Dept. Fish and Game, Canebrake Wildlife Reserve</li> </ul>
<ul style="list-style-type: none"> <li>• Kern River Preserve, Audubon</li> </ul>
<ul style="list-style-type: none"> <li>• Renewable Resources Group, Onyx Ranch</li> </ul>
<ul style="list-style-type: none"> <li>• Parker Ranch</li> </ul>

**Project Status (e.g., new, ongoing, expansion, new phase):**

New phase of an ongoing activity
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## *Part 2. Project Need*

**It is important to understand the need(s) or issue(s) that the proposed project will address and the benefits that it will provide. Information provided in this section defines the need(s) or issue(s) that the proposed project will address and will help to catalog existing need(s) or issue(s) in the Tulare Lake Basin Portion of Kern County Region.**

**Please provide a 1-2 paragraph description of the need(s) or problem(s) that the project will address. As applicable, discuss the water supply need, operational efficiency need, water quality need, or resource stewardship need (e.g. ecosystem restoration, floodplain management) need. Discuss critical impacts that will occur if the proposal is not implemented.**

The invasive species of plants, Tamarisk, Russian-olive, Arundo and Yellow Star Thistle dramatically. Purple Loosestrife, Perennial Pepperweed and Tree of Heaven have not naturalized but will require consistent treatment of all known populations to prevent them from doing so. The populations of all of the species have been reduced significantly but require continued treatment to keep them under control. For the past 25+ years there has been a concerted effort to treat these infestations. Tamarisk, Yellow Star Thistle and Russian-olive have been reduced over 95% in the South Fork River riparian area. These have been removed by hand, with herbicides and with backhoes, some with the assistance of grants and the remainder by volunteers and land owners.

The remainder of the of invasive species have been treated with the assistance of two grants, Desert Mountain RC&D (DMRC&D) received an 18 month grant from Department of Food and Agriculture, July 1, 2007- December 31, 2009 to treat purple loosestrife along the South Fork Kern River, and Eastern Kern RCD received a 2 year, January 1, 2010 to December 31, 2011, Department of Food and Agriculture, ARRA grant to treat several varieties of invasive weeds throughout the Kern River Valley and Walkers Basin.

The successful eradication of these invasive requires diligence. The areas treated over the past two years were treated two and some as much as four times. A year without treatment provides the opportunity to reestablish. These invasive species have no natural enemies and displace the rich variety of native species with this single species that doesn't support the native fauna dependent on the native plants.

A rich healthy native plant population naturally treats agricultural return flows before they reenter the watershed runoff and are conveyed to downstream users for agricultural, industrial, groundwater recharge and municipal needs. Water is the region's most precious commodity and protecting the quality by protecting the integrity of riparian areas is much more cost effective than treatment.

A significant portion of the areas with invasive weed problems are in the flood plain of the North and South Fork Kern Rivers. Healthy stands of native vegetation recover quickly following flood events and serve to stabilize the soils reducing the time turbid waters are conveyed to downstream users.

Purple Loosestrife establishes in wetland areas with a large bulbous root displacing and out competing all other native plant species. Biological controls need a stable water level which is a condition that doesn't exist. This plant was introduced by home gardeners. Watershed Coordinator is working to educate homeowners and the nurserymen on how to identify and avoid invasive plants.

Perennial Pepperweed was brought in with hay imported from outside of the Kern River Valley and Walker Basin. It has shown up on several rancher's meadows. This is not a forage plant and displaces native meadow perennials. For the past two years the known areas were treated 2 to 4 times each year by contractor.

Tree of Heaven is treated by cutting and treating the stumps. The bulk of these trees are located along ditches and are extending out from old homestead sites along the South and North Forks Kern River. Repeated treatment is proving effective.

Other species of invasive plants will be treated as they are identified and funding is available. Following flood events, the affected areas will be checked periodically for invasive plant species.

### *Part 3. Project Description*

**A general description of the proposed project is needed. This section will provide information associated with the project concept, general project information, and readiness to proceed. It is recognized that much of the requested information may not be available for projects that are at a conceptual level of project development. We appreciate and need your ideas.**

**Please provide a 1-2 paragraph description of the project including the general project concept, what will be constructed/implemented, how the constructed project will function, and treatment methods, as appropriate.**

The Kern River Valley and Walkers Basin have a variety of invasive and noxious weeds. Kern River Preserve, Audubon land manager has been actively eradicating several species for the past 25+ years along the South and North Forks of the Kern River on private, state and Federal lands. Desert Mountain RC&D (DMRC&D) received an 18 month grant from Department of Food and Agriculture, July 1, 2007- December 31, 2009 to treat purple loosestrife along the South Fork Kern River. Partners were California Department of Fish and Game, Audubon, Eastern Kern RCD and private land owners. Eastern Kern RCD received a 2 year, January 1, 2010 to December 31, 2011, Department of Food and Agriculture, ARRA grant to treat several varieties of invasive weeds throughout the Kern River Valley and Walkers Basin. With both of these grant projects, project funded employees and volunteers treated weeds with backpack sprayers. A contractor treated weeds with a vehicle mounted spray unit. The results are promising but without follow up the infestations will reestablish themselves. The local ranchers are active participants in the program and are benefactors of to the program's success. As a long term active participant in this activity, DMRC&D has established partnerships with stakeholders and agencies in the community. DMRC&D and Kern River Preserve posses much of the needed equipment for backpack spraying, vehicle mounted spraying is contracted. The DMRC&D Watershed Coordinator has been working along with other resource professionals on a Cal-IPC WeedMapper mapping project to include invasive weed locations in Kern County.

This project will need minimal preparation. The bulk of the equipment, supervisory personnel, participant agencies and stakeholders and fiscal agent (DMRC&D) are ready to treat weeds. All that is needed is funding. Costs will include the replacement of equipment as needed, labor, mileage, contractor for truck mounted spraying and licensed supervision and training and non-restricted herbicides. An alternative that would save money in the long run would be to train personnel to become a licensed applicator and purchase a dedicated vehicle for application to large areas. DMRC&D will need indirect for fiscal accounting and reporting.

**If applicable, list surface water bodies and groundwater basins associated with the proposed project:**



• South and North Forks Kern River
•
•
•

**Please identify up to three available documents which contain information specific to the proposed project:**

• CDFA / USFS ARRA final Comprehensive Final Report available from DM RC&D Watershed Coordinator
• Cal-IPC CalWeedMapper web site includes invasive plant mapping for this area
•

Cal-IPC is proud to announce that CalWeedMapper

<b>Is the proposed project an element or phase of a regional or larger program?</b>	X Yes <input type="checkbox"/> No
<b>If yes, please identify the program</b>	<u>Ongoing eradication of invasive plant species using mechanical removal, hand removal and treatment with herbicides using truck mounted sprayers and a team with backpack sprayers as appropriate.</u>
<b>Design life of the Project</b>	<u>Eradication and ongoing maintenance</u>
<b>Proposed Construction/Implementation Start Date:</b>	<u>This project is ongoing, invasive plants are resilient and eradication require diligent and perseverance and commitment.</u>
<b>Proposed Construction/Implementation Completion Date</b>	<u>Eradication and ongoing maintenance</u>
<b>Ready for Construction Bid</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA

Item	Status (e.g., not initiated, in process, complete)	Date
Conceptual Plans	N/A	(mm/dd/yyyy)
Land Acquisition/ Easements	N/A	(mm/dd/yyyy)
Preliminary Plans	N/A	(mm/dd/yyyy)
CEQA/NEPA	N/A	(mm/dd/yyyy)
Permits	N/A	(mm/dd/yyyy)
Construction Drawings	N/A	(mm/dd/yyyy)

**For projects that do not include construction, please briefly describe the project readiness-to proceed.**

This is an invasive weed eradication project that has been previously funded on two other occasions. This project will need minimal preparation. The bulk of the equipment was purchased under the previous grants. Supervisory personnel are provided by Kern River Preserve and licensed contractor. Participant agencies, stakeholders and fiscal agent (DMRC&D) are ready to treat weeds. All that is needed is funding. Costs will include the replacement of equipment as needed, labor, mileage, licensed contractor for truck mounted spraying and licensed supervision and training and non-restricted herbicides. DMRC&D will need indirect for fiscal accounting and reporting.

*Part 4. Project Benefits*

**Please provide a 1-2 paragraph description of the benefit(s) that the project will address.**

**Information provided will be used in the assessment of project benefits.**

The list of invasive species treated is as follows, Tamarisk, Russian-olive, Arundo, Purple Loosestrife, Perennial Pepperweed, Yellow Star Thistle and Tree of Heaven. Infestations of these species reduce productivity of farm and grazing lands. Many of these species consume large amounts of water displacing while rendering the lands they inhabit nonproductive. The ongoing eradication efforts over the past 25+ years have reduced populations of Tamarisk, Russian-olive, Arundo and Yellow Star Thistle dramatically. Purple Loosestrife, Perennial Pepperweed and Tree of Heaven have not naturalized but will require consistent treatment of all known populations to prevent them from doing so. The agencies, US Forest Service, US Bureau of Land Management, USDA NRCS, California Department of Fish and Game, Resource Conservation Districts, private conservancy land managers and stakeholders all agree that we have the opportunity to prevent the large scale infestations of some of these species other communities and watersheds are finding it, not only expensive but near impossible to eradicate.

**Please describe the dominant existing land use type for the proposed project location.**

Agriculture, livestock grazing, farming, wildlife and riparian forest preserve

**Please describe the dominant existing land use type for areas upstream and downstream of the proposed project location**

Upstream: Watershed, source water, recreation, wilderness

Downstream: Agriculture, irrigation, water banking, storage, municipal

**Does the project address any known environmental justice issues?**

Yes  No  Not Sure

**Is the project located within or adjacent to a disadvantaged community?**

Yes  No  Not Sure

<b>Does the project include disadvantaged community participation?</b>		
<input checked="" type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>Not Sure</b>
<b>If yes, please identify the group or organization:</b> ranch hands, homeowners, tribal members, community members and local workers employed to eradicate weeds.		

**Please provide the following project benefit information for all applicable components of the proposed project. Benefit categories include things such as water quality / flood management, water supply, and resource stewardship. PLEASE ATTEMPT TO SUPPLY ALL INFORMATION RELEVANT TO YOUR PROJECT. THIS INFORMATION WILL BE USED TO ANALYZE AND ASSESS PROJECT FOR FUTURE FUNDING.**

**WATER QUALITY BENEFITS / FLOOD MANAGEMENT BENEFITS**

<b>Water Quality Benefit Information</b>	
Treatment technologies	Agricultural return flows passing through diverse stands of native vegetation prior to reentering the river flows renders higher quality water than waters passing through a single dominate invasive species. Arundo and Tamarisk use a lot of water with almost no benefit to wildlife habitat agricultural values. These plants have been shown to create dense thickets on flood plains adding to flooding problems as well as increasing the fire hazard. Passive treatment of agricultural irrigation return flows is shown to be both effective and inexpensive.
Design operational treatment capacity (million gallons/day)	<u>N/A</u>
Targeted Contaminants (Check all that apply):	
<input type="checkbox"/> Chloride                              X Nitrogen Compounds                              X Coliform Bacteria X Other (describe): <u>Agricultural irrigation waste</u> <u>water by-products</u>	
<b>Flood Management Benefit Information</b>	
Maximum volume of temporary storage of storm runoff (acre-feet)	<u>N/A</u>
Maximum increased conveyance capacity (cubic feet/second)	<u>N/A</u>
Estimated area benefiting from flood damage reduction (acres)	<u>N/A</u>
Estimated level of flood protection resulting from project implementation	<u>N/A</u>
Estimated annual value of flood damage reduction provided by project (\$/year)	<u>N/A</u>
Acreeage required for project implementation	<u>N/A</u>

**WATER SUPPLY BENEFITS**

**Project information provided will help to quantify water supply benefits from enhanced local water supply or reduced potable water demand.**

Enhanced Water Supply or Demand Reduction Benefit Information		
<b>Source of Increased Supply or Demand Reduction</b>		
<input type="checkbox"/> Groundwater	<input type="checkbox"/> Groundwater treatment	<input type="checkbox"/> Increased surface water storage
<input type="checkbox"/> Recycled water	<input type="checkbox"/> Conservation/ water use efficiency	<input type="checkbox"/> Ocean desalination
<input type="checkbox"/> Transfer	<input type="checkbox"/> Other (describe): <u>N/A</u>	
Type of enhanced supply or demand reduction: <u>N/A</u>		
Annual Yield of Supply (acre-feet): <u>N/A</u>		
<b>Availability by Water-Year Type (acre-feet per year):</b>		
Average Year	<u>N/A</u>	
Dry Year	<u>N/A</u>	
Wet Year	<u>N/A</u>	
<b>Availability by Season (check all that apply):</b>		
<input type="checkbox"/> Summer	<input type="checkbox"/> Fall	<input type="checkbox"/> Spring <input type="checkbox"/> Winter
<b>Does the project have the potential to displace demands on the Bay/Delta/Estuary?</b>		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	X Not Sure

**For projects that include detention and groundwater recharge, please complete the following:**

How many acres of land drain into this detention basin? (acres)	<u>N/A</u>
Detention Basin area (acres)	<u>N/A</u>
Detention basin max. operational depth (ft.)	<u>N/A</u>
% of basin covered by wetlands	<u>N/A</u>
Soil type	<u>N/A</u>
If other than infiltration, identify method (e.g., injection) and recharge (acre-feet/year)	<u>N/A</u>
Estimated basin annual inflow (acre-feet/year)	<u>N/A</u>
Estimated basin annual outflow (acre-feet/year)	<u>N/A</u>

**RESOURCE STEWARDSHIP BENEFITS**

**Project information provided will help to quantify the benefits associated with projects related to resource stewardship and land management.**

Non-treatment wetland area (acres)	<u>4,854</u>
Treatment wetland area (acres)	<u>4,854</u>
Riparian habitat area (acres)	<u>2,533 in Kern IRWM / 2,500 in Southern Sierra IRWM</u>
Non-developed open space area (acres)	<u>All undeveloped areas Kern River Valley and Walkers Basin</u>
Multiple use/ recreation area (acres) – additionally, select the type of multiple use / recreation and associated acres by type:	
Single Sport Athletics	<u>Sports fields at 3 elementary and 1 high school, Rodeo grounds and 2 County baseball fields</u>
Multiple Sport Athletics Acres	<u>35 acres</u>
Other Recreation Acres	<u>Thousands, Lake Isabella, Kern River, Hunting, Bird Watching, Fishing, Biking etc.</u>
Pedestrian Trail Acres	<u>266 acres, 42 miles X ¼ acre (50') wide</u>
Equestrian Trail Acres	<u>171 acres, 27 miles X ¼ acre (50') wide</u>
Other Passive Activity	<u>Observing fauna and flora, ie. bird watching etc.</u>
Other Acres (describe)	<u>265 miles OHV trails</u>
Description _____	
Total Project area (acres)	<u>Invasive Weed Eradication is a region wide project</u>

*Part 5. Project Cost Estimate*

**Project cost information is needed to assist in comparing benefits and cost. Additionally, knowledge of the project type and cost will assist in identifying funding sources for potential projects.**

**Please indicate the estimated costs of project implementation and associated funding source(s). These costs should include land purchase/easement, planning/design/engineering, construction/implementation, environmental compliance, administration, and contingency.**

<p><b>Approximate Total Cost</b> <i>(If project costs are variable, please include lower and upper range estimates.)</i></p>	<p><b>Option #1:</b> \$50,000 with existing equipment and replacement as needed <b>Option #2:</b> \$65,000 purchasing vehicle mounted spraying equipment and training personnel to become a licensed applicator</p>
<p><b>Funding Source</b> <i>(If multiple sources, list each source and the percent or amount funded by each)</i></p>	<p><b>Natural Resource /Agricultural Preservation Grants</b></p>
<p><b>Funding Certainty &amp; Longevity</b></p>	<p><b>2 to 4 year funding cycles are needed to prevent the reestablishment of invasive plants in areas with reduced numbers from repeated treatments. Previous 2 year grant ended 12-2011.</b></p>
<p><b>Operations &amp; Maintenance Cost</b> <i>(per year)</i></p>	<p><b>Option #1:</b> \$25,000 with existing equipment and replacement as needed <b>Option #2:</b> \$38,000 first year purchasing vehicle mounted spraying equipment with existing equipment and replacement as needed and training personnel to become a licensed applicator \$27,000 second year and thereafter with existing equipment and replacement as needed.</p>
<p><b>Operations &amp; Maintenance Funding Source(s)</b> <i>(i.e., annual budget, grant, etc. If multiple sources, list each source and the percent or amount funded by each.)</i></p>	<p><b>Grants and volunteers.</b></p>
<p><b>Operations &amp; Maintenance Funding Certainty</b> <i>(i.e., already included in organization's budget, contingent upon grant, etc.)</i></p>	<p><b>Desert Mountain RC&amp;D Council will establish a line of credit upon award of a grant to fund this project.</b></p>



**Part 6. Regional Objectives**

Indicate below whether the project meets any of the Kern IRWMP regional objectives. Where necessary/appropriate, please provide a brief explanation as to how the Project meets the regional objective.

Kern IRWMP Objectives	Does the project meet the objective?		Comments/Explanation
	Yes	No	
<b>Increase Water Supply (WS)</b>			
1. Through cooperation and collaboration with other regions restore water supplies to levels that will mitigate for water lost from the region and eliminate overdraft		No	
2. Pursue and implement cost effective water use efficiency programs		No	
3. Increase water storage capacity in the region by increasing recharge acreage and expanding groundwater banking programs before all prime recharge land has been developed		No	
4. Integrate management of water banking facilities to maximize conjunctive use over the planning horizon		No	
5. Increase/augment water supplies to meet region demands		No	
<b>Improve Operational Efficiency (OE)</b>			
1. Increase transfers and exchanges flexibility over the planning horizon		No	
2. Create tools to re-regulate water supplies within the region, including storage, storm flows, and operational flows over the planning horizon		No	
3. Increase distribution efficiencies and reduce energy usage over the planning horizon		No	
4. Increase the use of alternate energy sources (e.g. solar)		No	
5. Replace aging infrastructure to reduce system water losses, improve operational efficiencies, and reduce service interruptions		No	
6. Increase the use of recycled water for direct reuse within the Kern Region		No	
7. Optimize local management of water resources to improve water supply reliability over the planning horizon		No	

8. Increase pool of qualified candidates to operate water and wastewater systems	No	
<b>Improve Water Quality (WQ)</b>		
1. Monitor and/or manage headwaters/areas of origin, natural streams, and recharge areas to prevent or mitigate contamination	Yes	
2. Identify and preserve prime recharge areas in the Kern fan area and other areas	No	
3. Improve water quality for disadvantaged communities and the watershed over the planning horizon	Yes	Continued treatment of invasive plant species preserving and restoring biodiversity of native species in wetlands and on range lands.
4. Continue to provide drinking water that meets or exceeds water quality standards; and support efforts to attain appropriate standards throughout the planning horizon	Yes	Continued treatment of invasive plant species preserving and restoring biodiversity of native species in wetlands filtering the return flows from agricultural activities back to Lake Isabella, drinking water source for Bakersfield.
5. Maximize the use of lesser quality water for appropriate uses (landscaping, certain ag crops, “aesthetic” projects) throughout the planning horizon	Yes	Removal of invasive plant species means recaptured ag return flows will not introduce unwanted invasive plant seed and rizons onto previously uninfected fields.
6. Coordinate and enhance aquatic pest control efforts from this point forward	Yes	Continue working with ranchers to maintain healthy populations of weevils and beetles introduced by CDF&G to control purple loosestrife
<b>Promote Land Use Planning and Resource Stewardship (LU)</b>		
1. Promote stewardship of the Kern River by applying appropriate measures in various reaches of the river from this point forward	Yes	To date previous invasive weed control measures have effectively prevented most varieties from naturalizing. Some species, Tree of heaven, pepper weed and purple loosestrife are dangerously close to becoming so. This project will entail a cooperative effort with the USFS, BLM and Southern Sierra IRWM planning area.
2. Encourage the removal of non-native invasive plant species that affect water quality, reliability, and operations	Yes	That is the project goal.
3. Identify and promote the regeneration and restoration of native riparian habitat	Yes	The project goal is to protect, preserve and enhance bio-diversity of the native fauna and flora.
4. Coordinate agricultural and urban water suppliers to more effectively address land use planning issues from this point forward	Yes	Improve the quality of agricultural return flows treated for urban use downstream.
5. Improve the linkage between land use planning and water supply in the region throughout the planning horizon	Yes	Education of stakeholders; ranchers, property owners and visitors to prevent reintroduction of invasive plants from nurseries, stock hay from outside the valley, on equipment, boats and vehicles. Visitors bring only weed free hay for back country use.

<p>6. Increase educational opportunities to improve public awareness of water supply, conservation, and water quality issues throughout the planning horizon</p>	<p>Yes</p>	<p>Desert Mountain Resource Conservation and Development Council (DMRC&amp;D), Upper Kern River Watershed Coordinator (WSC) provides public education information at most public events and activities in the Kern River Valley regarding water quality and quantity topics. WSC conducts 2 water efficient, firewise native plant sales and irrigation efficiency workshops a year to make these plants available and encourage water conservation. Invasive plant awareness is highlighted in literature and educational activities.</p>
<p>7. Improve and coordinate integrated land use planning to support stewardship of environmental resources, such as the Kern River and Kern Fan, and integrate with habitat conservation plans and other ongoing planning efforts from this point forward</p>	<p>Yes</p>	<p>Kern River Preserve, Audubon, Canebrake Ecological Reserve, CDF&amp;G, South Fork Wild Life area USFS and Wetland Reserve Program conservation easement, NRCS are all actively working with ranchers and property owners along the rivers and with wetlands to restore, preserve and protect these areas as parts of a larger management unit.</p>
<p>8. Preserve and improve ecosystem/watershed health throughout the planning horizon</p>	<p>Yes</p>	<p>Stakeholders involved with the task of addressing invasive weed control are dedicated to preventing reestablishment of weed populations treated throughout the past years. Previous successes are ongoing and will reverse without continued diligence.</p>
<p><b>Improve Regional Flood Management (FM)</b></p>		
<p>1. Improve regional flood management by addressing preparedness, response, and post flood actions throughout the planning horizon</p>	<p>Yes</p>	<p>Fast moving floods remove the native vegetation and are places opportunistic invasive plants find it easy to become established. Monitoring such areas is a priority.</p>
<p>2. Reduce the effects of poor quality runoff throughout the planning horizon</p>	<p>Yes</p>	<p>Healthy, diverse native vegetation in wetland buffer areas improve agricultural irrigation return flows for the downstream users, municipal and agricultural.</p>
<p>3. Identify and promote innovative flood management projects to protect vulnerable areas</p>	<p>No</p>	
<p>4. Plan new developments to minimize flood impacts from this point forward</p>	<p>Yes</p>	<p>Dense Stands of non-native Tamarisk and Arundo can have large negative impacts on flooding by forming dense thickets that redirect flows and clog culverts.</p>



# KERN IRWMP

Integrated Regional Water Management Plan

## *Project Submittal Form*

To the extent possible this form should be electronically filled out and e-mailed to:

[KernIRWMP@kcwa.com](mailto:KernIRWMP@kcwa.com).

### **Part 1. Lead Implementing Agency/Organizational Information**

Please provide the following information regarding the project sponsor and proposed project.

#### **Implementing Agency/ Organization / Individual:**

Self-Help Enterprises/ Long Canyon Water Company

#### **Agency / Organization / Individual Address:**

Self-Help Enterprise      Long Canyon Water Company  
 8445 W. Elowin Ct.      7908 Calle Torcido  
 P.O. Box 6520      Bakersfield, CA 93309  
 Visalia, CA 93290

#### **Possible Partnering Agencies:**

Long Canyon Water Company, Rainbird Valley Mutual Water Company, Tradewinds Water Association, Inc., Bella Vista Mutual Water Company, Lake Isabella Kern River KOA Campground, Sierra Vista Restaurant Self-Help Enterprises, California Department of Public Health

#### **Name:**

Armando Murrieta

#### **Title:**

Community Development Specialist

#### **Telephone:**

(559)802-1684

#### **Fax:**

(559)651-3634

#### **Email:**

armandom@selfhelpenterprises.org

#### **Website:**

www.selfhelpenterprises.org

#### **Project Name:**

Weldon Water Supply Project

Either the latitude/longitude or a location description is required. To determine the latitude/longitude, use the closest address or intersection. If the project is linear, use the furthest upstream latitude/longitude.

Project Latitude:  Project Longitude:

<b>Location Description:</b>	Weldon area water systems south of the South Fork of the Kern River.
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**Regional Grouping: Identify the Regional Grouping your agency is located in, and the Regional Grouping your project is located in.**

<input type="checkbox"/> Agency <input type="checkbox"/> Project	Greater Bakersfield
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern County Water Agency
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Kern Fan
<input checked="" type="checkbox"/> Agency <input type="checkbox"/> Project	Kern River Valley
<input type="checkbox"/> Agency <input type="checkbox"/> Project	Mountains/Foothills
<input type="checkbox"/> Agency <input type="checkbox"/> Project	North County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	South County
<input type="checkbox"/> Agency <input type="checkbox"/> Project	West Side

**Project Cooperating Agency(ies)/Organization(s)/Individual(s):**

• Long Canyon Water Company (David Prince)
• Rainbird Valley Mutual Water Company (Susan Marches)
• Tradewinds Water Association, Inc. (Craig Sunderland)
• Bella Vista Mutual Water Company (Don Hyneman)
• Lake Isabella Kern River KOA Campground (Brian Cushman)
• Self-Help Enterprises (Armando Murrieta)
• SWRCB Division of Drinking Water, (Jesse Dhaliwal)

**Project Status (e.g., new, ongoing, expansion, new phase):**

Ongoing
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## **Part 2. Project Need**

**It is important to understand the need(s) or issue(s) that the proposed project will address and the benefits that it will provide. Information provided in this section defines the need(s) or issue(s) that the proposed project will address and will help to catalog existing need(s) or issue(s) in the Tulare Lake Basin Portion of Kern County Region.**

**Please provide a 1-2 paragraph description of the need(s) or problem(s) that the project will address. As applicable, discuss the water supply need, operational efficiency need, water quality need, or resource stewardship need (e.g. ecosystem restoration, floodplain management) need. Discuss critical impacts that will occur if the proposal is not implemented.**

Five small water systems in the Weldon area have Uranium & Nitrate contaminated wells and/or lack a back-up water supply. The contamination of area water wells and the lack of an adequate water supply pose a serious health threat to residents of these disadvantaged communities (MHI \$35,431). Many communities have high water rates and are faced with increasing rates to treat their water for Uranium &/or Nitrate and hire adequately licensed operators. Development of a regional water supply will provide clean drinking water, help lower operational costs, provide a backup water supply and much needed licensed operators.

Currently, the project has completed 90% of the plans and specs and the CEQA is 95% completed. A new district is being formed through LAFCo. The application should be submitted no later than April 30, 2019.

One major problem that the project faces is the expiration of a land purchase agreement for one of the well sites. The purchase agreement expires 06-05-2020 and we estimate that funds to purchase the land will not be granted until 2022. We are asking for \$345,550 dollars to purchase the land to secure the property and to build the production well. If the land acquisition and well development does not happen, the area's water systems will not have a source of clean drinking water. This portion of the greater project will play a significant part in getting clean water to this SDAC.

Funding to complete the rest of the project will, most likely, come from Prop.1, SWRCB SRF, Prop. 68, SB 200 The Safe and Affordable Drinking Water fund, and USDA.

### **Part 3. Project Description**

A general description of the proposed project is needed. This section will provide information associated with the project concept, general project information, and readiness to proceed. It is recognized that much of the requested information may not be available for projects that are at a conceptual level of project development. We appreciate and need your ideas.

Please provide a 1-2 paragraph description of the project including the general project concept, what will be constructed/implemented, how the constructed project will function, and treatment methods, as appropriate.

Currently the, greater, proposed project is in jeopardy of losing a wellsite and we are asking Kern County IRWMP for funds to purchase the land where the wellsite will be located and to construct the production well that will be located on that land. The project has until 06/05/2020 to purchase the wellsite, if we do not purchase and construct the well, the Weldon community will lose its clean source of drinking water. The next two paragraphs outline the greater regional water project.

A new public district will be formed to own and operate the Weldon Regional Water System. The project will include the drilling, construction, and equipping of two new municipal water wells. Both wells will be equipped with a chemical feed pump for chlorination of the raw groundwater in order to maintain a free chlorine residual of  $\pm 0.5$  ppm in the water system. Furthermore, the well equipping piping will be designed to facilitate the addition of a water treatment system for the removal of iron and manganese from the raw groundwater should treatment be necessary in order to meet the secondary MCL standards.

This alternative also includes the construction of  $\pm 34,675$  LF of 12" C900 PVC piping to convey water from the two new wells to the two 750,000 gallon storage tanks and six existing water systems. In addition, approximately 26,525 LF of 6" C900 PVC piping will be installed to replace the aging infrastructure of existing water systems that are more than 30 years old including the piping, valving, and appurtenances for the Long Canyon Water Company, Rainbird Mutual Water Company, and the Bella Vista Mutual Water Company water systems. This alternative utilizes Tradewinds Water Association's existing water distribution system with the exception of the existing storage tanks and booster station. These will not be incorporated as part of the new regional water system. This alternative includes the construction of two 750,000 gallon welded steel AWWA D100 water storage tanks and a booster station to pump water into the Bella Vista MWC system. This project is being proposed so that the six existing systems can disconnect the existing wells that have water quality violations from their water systems.

**If applicable, list surface water bodies and groundwater basins associated with the proposed project:**

•	South Fork of the Kern River
•	Lake Isabella
•	Tulare Lake Groundwater Basin

Please identify up to three available documents which contain information specific to the proposed project:

•	Municipal Service Review
•	Weldon Engineering Reports
•	Feasibility Study
Is the proposed project an element or phase of a regional or larger program?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, please identify the program	<u>The Weldon Regional Water Project</u>
Design life of the Project	<u>70 Years</u>
Proposed Construction/Implementation Start Date:	<u>2020</u>
Proposed Construction/Implementation Completion Date	<u>2025</u>
Ready for Construction Bid	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA

Item	Status (e.g., not initiated, in process, complete)	Date
Conceptual Plans	<u>Complete</u>	(02/28/2010)
Land Acquisition/ Easements	<u>Not initiated</u>	(mm/dd/yyyy)
Preliminary Plans	<u>Complete</u>	(02/28/2010)
CEQA/NEPA	<u>In Process</u>	(mm/dd/yyyy)
Permits	<u>Not initiated</u>	(01/01/2024)
Construction Drawings	<u>In Process</u>	(mm/dd/yyyy)

For projects that do not include construction, please briefly describe the project readiness-to proceed.

<p><b>Land Acquisition and Well Construction</b>  Land acquisition is ready to start. The Purchase agreement is in place and the Well plans and specs are complete and the CEQA for the Well site is also complete, but we are waiting for a couple cultural clearances, for the regional project, before the Draft NMD will be complete.</p> <p><b>Regional Project</b>  Once CEQA is complete, SHE will submit the LAFCo application and go through the special district formation. Once the district is formed, we will move forward and apply for available State and Federal funding.</p>
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## Part 4. Project Benefits

Please provide a 1-2 paragraph description of the benefit(s) that the project will address.

Information provided will be used in the assessment of project benefits.

By purchasing the needed land and constructing the wellsite, the Weldon community will have a viable, clean water supply that will provide clean water for 400 houses and 1,000 people. If the wellsite is not purchased and constructed, it is possible that the Weldon community will lose their access to clean drinking water.

Please describe the dominant existing land use type for the proposed project location.

Rural uses: Ranching, residential, vacant land, roads

Please describe the dominant existing land use type for areas upstream and downstream of the proposed project location

Upstream: Rural uses: Ranching, residential, vacant land, roads

Downstream: Rural uses: Ranching, residential, vacant land, roads

Does the project address any known environmental justice issues?

Yes  No  Not Sure

Is the project located within or adjacent to a disadvantaged community?

Yes  No  Not Sure

Does the project include disadvantaged community participation?

Yes  No  Not Sure

If yes, please identify the group or organization: Weldon DAC water systems: Rainbird Valley Mutual Water Company, Tradewinds Water Association, Long Canyon Water Company, & Bella Vista Mutual Water Company. Self-Help Enterprises is working with these DACs to develop the regional water project.

**Please provide the following project benefit information for all applicable components of the proposed project. Benefit categories include things such as water quality / flood management, water supply, and resource stewardship. PLEASE ATTEMPT TO SUPPLY ALL INFORMATION RELEVANT TO YOUR PROJECT. THIS INFORMATION WILL BE USED TO ANALYZE AND ASSESS PROJECT FOR FUTURE FUNDING.**

**WATER QUALITY BENEFITS / FLOOD MANAGEMENT BENEFITS**

<b>Water Quality Benefit Information</b>	
Treatment technologies* <b>*If used</b>	Chlorination and treatment for the removal of iron and manganese, if necessary.
Design operational treatment capacity (million gallons/day)	Estimated 0.2 MGD
Targeted Contaminants (Check all that apply):	
<input type="checkbox"/> Chloride <input checked="" type="checkbox"/> Nitrogen Compounds <input type="checkbox"/> Coliform Bacteria <input checked="" type="checkbox"/> Other (describe): <u>Uranium</u>	
<b>Flood Management Benefit Information</b>	
Maximum volume of temporary storage of storm runoff (acre-feet)	_____
Maximum increased conveyance capacity (cubic feet/second)	_____
Estimated area benefiting from flood damage reduction (acres)	_____
Estimated level of flood protection resulting from project implementation	_____
Estimated annual value of flood damage reduction provided by project (\$/year)	_____
Acreage required for project implementation	_____

**WATER SUPPLY BENEFITS**

**Project information provided will help to quantify water supply benefits from enhanced local water supply or reduced potable water demand.**

Enhanced Water Supply or Demand Reduction Benefit Information			
<b>Source of Increased Supply or Demand Reduction</b>			
<input checked="" type="checkbox"/> Groundwater	<input type="checkbox"/> Groundwater treatment	<input type="checkbox"/> Increased surface water storage	
<input type="checkbox"/> Recycled water	<input checked="" type="checkbox"/> Conservation/ water use efficiency	<input type="checkbox"/> Ocean desalination	
<input type="checkbox"/> Transfer	<input type="checkbox"/> Other (describe): _____		
Type of enhanced supply or demand reduction: <u>Future alternate clean water wells and/or treatment facilities.</u>			
Annual Yield of Supply (acre-feet): <u>60</u> (Future yield)			
<b>Availability by Water-Year Type (acre-feet per year):</b>			
Average Year	<u>60</u>		
Dry Year	<u>60</u>		
Wet Year	<u>60</u>		
<b>Availability by Season (check all that apply):</b>			
<input checked="" type="checkbox"/> Summer	<input checked="" type="checkbox"/> Fall	<input checked="" type="checkbox"/> Spring	<input checked="" type="checkbox"/> Winter
<b>Does the project have the potential to displace demands on the Bay/Delta/Estuary?</b>			
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Not Sure	

**For projects that include detention and groundwater recharge, please complete the following: N/A**

How many acres of land drain into this detention basin? (acres)	_____
Detention Basin area (acres)	_____
Detention basin max. operational depth (ft.)	_____
% of basin covered by wetlands	_____
Soil type	_____
If other than infiltration, identify method (e.g., injection) and recharge (acre-feet/year)	_____
Estimated basin annual inflow (acre-feet/year)	_____
Estimated basin annual outflow (acre-feet/year)	_____

**RESOURCE STEWARDSHIP BENEFITS**

**Project information provided will help to quantify the benefits associated with projects related to resource stewardship and land management.**

Non-treatment wetland area (acres)	_____
Treatment wetland area (acres)	_____
Riparian habitat area (acres)	_____
Non-developed open space area (acres)	_____
Multiple use/ recreation area (acres) – additionally, select the type of multiple use / recreation and associated acres by type:	
Single Sport Athletics	_____
Multiple Sport Athletics Acres	_____
Other Recreation Acres	_____
Pedestrian Trail Acres	_____
Equestrian Trail Acres	_____
Other Passive Activity	_____
Other Acres (describe)	_____
Description	_____
Total Project area (acres)	_____

## **Part 5. Project Cost Estimate**

Project cost information is needed to assist in comparing benefits and cost. Additionally, knowledge of the project type and cost will assist in identifying funding sources for potential projects.

Please indicate the estimated costs of project implementation and associated funding source(s). These costs should include land purchase/easement, planning/design/engineering, construction/implementation, environmental compliance, administration, and contingency.

<b>Approximate Total Cost</b> <i>(If project costs are variable, please include lower and upper range estimates.)</i>	Estimated Total construction cost: \$350,550 Dollars
<b>Funding Source</b> <i>(If multiple sources, list each source and the percent or amount funded by each)</i>	IRWM-
<b>Funding Certainty &amp; Longevity</b>	
<b>Operations &amp; Maintenance Cost</b> <i>(per year)</i>	
<b>Operations &amp; Maintenance Funding Source(s)</b> <i>(i.e., annual budget, grant, etc. If multiple sources, list each source and the percent or amount funded by each.)</i>	<b>Water system users monthly bills</b>
<b>Operations &amp; Maintenance Funding Certainty</b> <i>(i.e., already included in organization's budget, contingent upon grant, etc.)</i>	<b>Contingent upon project construction</b>

**Part 6. Regional Objectives**

Indicate below whether the project meets any of the Kern IRWMP regional objectives. Where necessary/appropriate, please provide a brief explanation as to how the Project meets the regional objective.

Kern IRWMP Objectives	Does the project meet the objective?		Comments/Explanation
	Yes	No	
<b>Increase Water Supply (WS)</b>			
1. Through cooperation and collaboration with other regions restore water supplies to levels that will mitigate for water lost from the region and eliminate overdraft		No	
2. Pursue and implement cost effective water use efficiency programs		No	
3. Increase water storage capacity in the region by increasing recharge acreage and expanding groundwater banking programs before all prime recharge land has been developed		No	
4. Integrate management of water banking facilities to maximize conjunctive use over the planning horizon		No	
5. Increase/augment water supplies to meet region demands	Yes		The wellsite purchase and construction will provide the needed clean water to the Weldon community
<b>Improve Operational Efficiency (OE)</b>			
1. Increase transfers and exchanges flexibility over the planning horizon	Yes		Clean water availability through new wells and treatment.
2. Create tools to re-regulate water supplies within the region, including storage, storm flows, and operational flows over the planning horizon	Yes		Creation of regional water supplier and supply/storage & distribution system for area water systems.
3. Increase distribution efficiencies and reduce energy usage over the planning horizon		No	
4. Increase the use of alternate energy sources (e.g. solar)		No	
5. Replace aging infrastructure to reduce system water losses, improve operational efficiencies, and reduce service interruptions	Yes		New and clean water would be through new wells and treatment to replace and/or supplement existing old and or contaminated water supplies.
6. Increase the use of recycled water for direct reuse within the Kern Region		No	
7. Optimize local management of water resources to improve water supply reliability over the planning horizon		No	The future regional project will create a locally owned and operated regional water

		supply that will improve individual water systems' supply
8. Increase pool of qualified candidates to operate water and wastewater systems	No	The future Regional project will create the ability to hire or contract with certified operators for System O&M.
<b>Improve Water Quality (WQ)</b>		
1. Monitor and/or manage headwaters/areas of origin, natural streams, and recharge areas to prevent or mitigate contamination	No	
2. Identify and preserve prime recharge areas in the Kern fan area and other areas	No	
3. Improve water quality for disadvantaged communities and the watershed over the planning horizon	Yes	The Project would directly benefit four DAC water systems.
4. Continue to provide drinking water that meets or exceeds water quality standards; and support efforts to attain appropriate standards throughout the planning horizon	Yes	The production well will meet all water quality standards and once the regional project is complete it will provide water to a DAC
5. Maximize the use of lesser quality water for appropriate uses (landscaping, certain ag crops, "aesthetic" projects) throughout the planning horizon	No	
6. Coordinate and enhance aquatic pest control efforts from this point forward	No	
<b>Promote Land Use Planning and Resource Stewardship (LU)</b>		
1. Promote stewardship of the Kern River by applying appropriate measures in various reaches of the river from this point forward	No	
2. Encourage the removal of non-native invasive plant species that affect water quality, reliability, and operations	No	
3. Identify and promote the regeneration and restoration of native riparian habitat	No	
4. Coordinate agricultural and urban water suppliers to more effectively address land use planning issues from this point forward	Yes	Work with agricultural owners of local water rights to coordinate regional use.
5. Improve the linkage between land use planning and water supply in the region throughout the planning horizon	Yes	Work with agricultural owners of local water rights to coordinate regional use.
6. Increase educational opportunities to improve public awareness of water supply, conservation, and water quality issues throughout the planning horizon	Yes	Water project development will require local systems and users to understand local water contamination, metered rates, costs, operations. The Project will also hold community meetings to review Project costs and alternatives and seek user & system input on rates and project development.

7. Improve and coordinate integrated land use planning to support stewardship of environmental resources, such as the Kern River and Kern Fan, and integrate with habitat conservation plans and other ongoing planning efforts from this point forward	No	
8. Preserve and improve ecosystem/watershed health throughout the planning horizon	No	
<b>Improve Regional Flood Management (FM)</b>		
1. Improve regional flood management by addressing preparedness, response, and post flood actions throughout the planning horizon	No	
2. Reduce the effects of poor quality runoff throughout the planning horizon	No	
3. Identify and promote innovative flood management projects to protect vulnerable areas	No	
4. Plan new developments to minimize flood impacts from this point forward	No	