

Proposed Project Long Form Instructions

Mojave Integrated Regional Water Management Plan

Please complete this project information long form as much as possible in its entirety for each separate project and submit to chuiner@mojavewater.org. The form is intended to be filled out electronically using Adobe Acrobat and then submitted via email but can be completed by hand and then mailed to Mojave Water Agency at the address shown on the https://www.mojavewater.org/irwmp/participate/ web page. Please note comment fields are not limited; text is preserved even if it does not appear on the form.

For questions or assistance in completing the form contact Lynne Chaimowitz via email at chuiner@mojavewater.org.

Sections 1, 2, & 3. Project Proponent, General Project Information, and Description

Please fill in all requested fields.

Project Location (Latitude and Longitude) – Can be approximated using Google Earth.

Project Location Description – Please include as much detail as possible.

Section 4. IRWM Plan Objectives Addressed

Information related to the proposed IRWM Plan objectives can be found in the Mojave IRWMP 2014, Table 4.2 at https://www.mojavewater.org/irwmp/water-management-plan/. Please see the list of objectives and the screening matrix on the website to help you determine how well your project addresses various criteria.

Section 5. Resource Management Strategies

A resource management strategy is a project, program, or policy that helps local agencies and governments manage their water and related resources. For example, urban water use efficiency is a strategy to reduce urban water use. A pricing policy or incentive for customers to reduce water use also is a strategy. New water storage to improve water supply, reliability, and quality is another strategy. (See Box 1-1 Resource Management Strategies and Management Objectives for alphabetical listings) (2009 California Water Plan). Further detailed descriptions of the Resource Management Strategies can be found in Volume 3 of the 2009 California Water Plan here: http://www.waterplan.water.ca.gov/cwpu2009/index.cfm. They are also included, along with three new strategies from the Draft 2013 California Water Plan, on the screening matrix.



Box 1-1 Resource Management Strategies and Management Objectives

Resource Management Strategy	Chapter No.	Management Objective
Agricultural Lands Stewardship	20	Practice Resource Stewardship
Agricultural Water Use Efficiency	2	Reduce Water Demand
Conjunctive Management and Groundwater Storage	8	Increase Water Supply
Conveyance—Delta	4	Improve Operational Efficiency and Transfers of Water
Conveyance—Regional/local	5	Improve Operational Efficiency and Transfers of Water
Desalination	9	Increase Water Supply
Drinking Water Treatment and Distribution	14	Improve Water Quality
Economic Incentives (Loans, Grants, Water Pricing)	21	Practice Resource Stewardship
Ecosystem Restoration	22	Practice Resource Stewardship
Flood Risk Management	28	Improve Flood Management
Forest Management	23	Practice Resource Stewardship
Groundwater Remediation/Aquifer Remediation	15	Improve Water Quality
Introduction	1	
Land Use Planning and Management	24	Practice Resource Stewardship
Matching Water Quality to Use	16	Improve Water Quality
Other Strategies	29	Objectives vary by strategy
Pollution Prevention	17	Improve Water Quality
Precipitation Enhancement	10	Increase Water Supply
Recharge Area Protection	25	Practice Resource Stewardship
Recycled Municipal Water	11	Increase Water Supply
Salt and Salinity Management	18	Improve Water Quality
Surface Storage—CALFED	12	Increase Water Supply
Surface Storage—Regional/Local	13	Increase Water Supply
System Reoperation	6	Improve Operational Efficiency and Transfers of Water
Urban Runoff Management	19	Improve Water Quality
Urban Water Use Efficiency	3	Reduce Water Demand
Water Transfers	7	Improve Operational Efficiency and Transfers of Water
Water-dependent Recreation	26	Practice Resource Stewardship
Watershed Management	27	Practice Resource Stewardship

Section 6. Project Readiness

For the Project Status, please check only one box to indicate the stage of development for the project. If your project has multiple phases in different stages, more than one box can be checked if appropriate and consistent with the project description.



If your project is ongoing, in the "Expected Completion Date" box, it is ok to indicate the current phase of the project and that it is ongoing (e.g. Conceptual Plan Development is on-going).

Examples of projects that do not include construction are implementation projects such as habitat protection, water use efficiency implementation measures, or public education. These projects do not have a design or construction drawing component to the project but could include phases for implementation or when certain measures or Best Management Practices (BMPs) such as washing machine rebates will be available to the public.

Section 7. Project Impacts and Benefits

The following provides examples of impacts and benefits; further discussion can be found in the Proposition 84 & Proposition 1E Integrated Regional Water Management Guidelines here: http://www.water.ca.gov/irwm/grants/docs/Guidelines/GL 2012 FINAL.pdf

WATER SUPPLY ENHANCEMENT

A program to increase water supply may include projects, such as:

- Rehabilitation of diversion structures
- Water supply pipelines and water systems
- Additional water system tie-ins/interconnections
- Construction of groundwater treatment and extraction facilities
- Conjunctive water management
- Aguifer storage and recovery
- New or upgrades to existing reservoirs
- Water storage facilities
- Production well construction

Possible impacts may include reduced in-stream flow, water quality degradation, habitat removal, species removal, flooding, loss of farmland, and construction related impacts. Some of the proposed projects may have impacts on communities, including DACs. If so, these impacts need to be discussed. If there are any EJ impacts, they should be addressed as well. Water supply benefits may be characterized as increased water supply or range in water supply (i.e. acre-feet per year). Other anticipated benefits, such as improved water quality, increased recreational opportunities, decreased reliance on imported water, reduced groundwater overdraft, creation of wetlands and riparian habitat, and decreased operational costs.

WATER QUALITY IMPROVEMENT

A program to improve water quality may include projects, such as:

- Building or upgrading wastewater treatment plants/technology
- Conversion of septic tanks to a sewer system
- Construction of new and updating collection, sewer, and interceptor sewer facilities
- Capture and treatment of stormwater/urban runoff, including the construction of rain gardens
- Construction of wetlands for water quality treatment
- Contaminant removal



Salinity management

Possible impacts may include construction related impacts including short-term, site-specific impacts related to site grading and construction, and long-term impacts associated with project operation. Construction- related impacts may include: traffic, noise, biological resources, water quality, public services and utilities, cultural resources, and aesthetics. Other impacts may include surface water and ocean habitat loss from new outflow locations, and waste discharge issues associated with brine management and brine disposal. Possible benefits from improved water quality projects may include increased water supply, improved aquatic and wetland species habitat and populations, increased cropland production, creation of wetlands and riparian habitat, improved recreation opportunities, and decreased treatment costs.

GROUNDWATER IMPROVEMENTS

Groundwater improvement programs may include projects to:

- Enhance conjunctive management and groundwater storage
- Stormwater/Urban Runoff
- Install groundwater recovery wells
- Construct new and/or rehabilitate surface water recharge spreading grounds
- Perform aquifer storage and recovery
- Improve groundwater monitoring
- Conduct hydrogeologic investigations
- Model groundwater

Possible impacts may include construction related effects, changes in water quality, increased contaminant transport, increased pumping, and in-stream flow reduction. Possible benefits may include improved flood protection, decreased reliance on imported water, reduced surface water use, reduced pumping costs, and decreased or prevention of groundwater overdraft.

WATER CONSERVATION AND REUSE

Water conservation and reuse programs may include projects to:

- Upgrade wastewater treatment facilities to recycle water
- Landowner and homeowner incentive programs, such as rebate programs
- Improve agricultural drainage water reuse or management
- Construct recycled water systems and pipelines
- Improve urban landscape water use efficiency

Possible impacts may include construction related effects, loss of drainage flow to downstream water users, in-stream flow loss, groundwater and surface water quality effects associated with recycled water use, and reduced groundwater recharge. Benefits could be increased water saving, efficient reuse of wastewater, costs savings from reduced purchases of imported water, and saving construction of water storage facilities, and increased nutrient levels for plant and crop use from use of reclaimed wastewater.



WATERSHED REHABILITATION

A watershed rehabilitation program may include projects to:

- Decommission abandoned roads?
- Enhance unimproved and county road systems for erosion control
- Restore sloughs and/or wetlands
- Manage Stormwater/Urban Runoff
- Conduct channel and riparian restoration and upland source control
- Sonduct stream stabilization and other sediment load reduction projects
- Implement Best Management Practices (BMPs), including forestry BMPs
- Reduce non-point source pollution

Possible impacts could be introduction of non-native plants for erosion control and temporary increased turbidity in streams due to construction or related activities, including revegetation and forest regeneration activities and prescribed fires (to reduce undesirable trees and vegetation, etc.). Benefits may include long-term sediment reduction and temperature improvements, reduced surface water nutrient and bacteria concentrations (improved water supply quality), improved fish and wildlife habitat and passage, and enhanced public safety and recreational opportunities.

HABITAT IMPROVEMENT

A habitat improvement program may include projects to:

- Augment stream flows
- Preserve existing habitat
- Remove invasive, non-native species
- Restore wetlands and upland habitat
- Protect ecological reserves

Possible impacts could include short-term, site-specific impacts related to site grading and construction, loss of agricultural land protection and urban uses and associate local revenue. Benefits may be reduced surface water nutrient and bacteria concentrations (improved water supply quality), enhanced fish habitat, increased opportunities for recreational hunting and viewing, increased numbers of native species, reduced flood risks, and education opportunities.

FLOOD MANAGEMENT

Flood management programs may include projects to:

- Improve levees systems (i.e. floodwalls, raising levee heights, setback levees, etc)
- Preserve floodplains
- Development drainage master plans
- Remove invasive species from stream channels to improve surface flow
- Improve stormwater collection, diversion, or capture
- 🦴 Improve infrastructure, including weir upgrades



Impacts may include short-term, site-specific impacts related to construction, land use restrictions, development moratoriums (with potential economic effects), and loss of riparian and/or wetland acreage. Benefits could include increased aquifer recharge, runoff reduction, improved surface water quality, natural resources preservation and restoration, reduced risk to life and property, and decreased flood insurance costs.

Section 8. Project Cost Estimate

Capital improvement costs should be how much the project would cost to construct or implement in 2013 dollars or escalated to 2013 dollars using the appropriate Engineering News Record (ENR) cost index and footnoted.