Attachment
2

Coachella Valley Integrated Regional Water Management

2014 IRWM Drought Solicitation Implementation Grant Proposal

Drought Impacts

Attachment 2 consists of the following items:

- ✓ **Drought Impacts and Funding Need.** This attachment includes a description of regional drought management impacts due to the 2014 Drought and anticipated impacts if drought or dry year conditions continue into 2015.
- ✓ **Water Conservation Measures.** To convey information about drought impacts on the region, this attachment contains a description of the water conservation measures or restrictions that have been implemented as a result of the 2014 Drought and anticipated actions that will be taken if drought or dry year conditions continue into 2015.

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Drought Impacts

Regional Setting

The Coachella Valley IRWM Region (refer to **Figure 3-1**) is chiefly the same boundary as the Whitewater River watershed boundary, also known as the Coachella Valley. The Coachella Valley climate is characterized by low precipitation and high summer daytime temperatures. Urban water supply for the Coachella Valley is primarily groundwater pumped from two sub-basins of the Coachella Valley Groundwater Basin: the Indio Sub-Basin and the Mission Creek Sub-Basin (refer to **Figure 1-1**). Each of the five water purveyors of the Region – Coachella Valley Water District (CVWD), Coachella Water Authority (CWA), Desert Water Agency (DWA), Indio Water Authority (IWA), and Mission Springs Water District (MSWD) – operates its own water distribution system. Groundwater is pumped from wells around the Region into the water purveyors' distribution systems.

Groundwater is the largest source of water supply for the Region. The Coachella Valley Groundwater Basin has an estimated storage capacity of 39 million acre-feet (AF) of water. Prior to 1949, groundwater levels steadily declined due to agricultural pumping. The Coachella branch of the All American Canal (Coachella Canal) was completed in 1949 and the first deliveries of Colorado River water to the Coachella Valley began in that year for agricultural irrigation. As a result, agricultural groundwater pumping was significantly reduced from 1950 to the early 1980s, and groundwater levels rose in the eastern Coachella Valley where water from the Coachella Canal is delivered. However, since the 1980s, groundwater pumping has increased and caused water levels in the eastern Coachella Valley to decline despite replenishing the groundwater basin with imported water. CVWD estimates the decrease in groundwater stored in the Coachella Valley Groundwater Basin for 1999 to be 137,000 AF, with a cumulative groundwater basin overdraft (when outflow from the basin exceeds inflow to the basin) of nearly 4.8 million AF between 1936 and 1999.[1]

Due to potentially significant consequences caused by groundwater basin overdraft that are described extensively in the Region's 2014 Integrated Regional Water Management (IRWM) Plan, the Region has developed water supplies to supplement and replenish groundwater supplies. CVWD and DWA are State Water Contractors and have obtained additional water supplies through the State Water Project (SWP), which is exchanged for Colorado River water via the Metropolitan Water District of Southern California's (MWD) Colorado River Aqueduct because there is no physical system available to directly deliver SWP supplies to the Region. In addition, CVWD is a signatory to the Quantification Settlement Agreement (QSA), which is a formal legal agreement that quantifies the amount of Colorado River water available to applicable parties, including CVWD. As such, CVWD receives Colorado River supply in accordance with the QSA via the Coachella Canal (Canal Water) for agricultural irrigation and other non-potable purposes.

Reduction of imported water supplies, including SWP supplies, has the potential to jeopardize the Region's groundwater management strategies and exacerbate groundwater overdraft conditions. The 2014 drought, therefore, has a direct impact on the Region as it has reduced SWP deliveries to 5% allocation across California, which reduces artificial recharge of the aquifer (groundwater basin replenishment) in the Region.

In addition to groundwater basin replenishment, water conservation is a major component of water management in the Region as overall water demands increase due to development, land use changes, and increased population. A significant focus of urban water conservation is to reduce water use for landscape irrigation, which accounts for a large percentage of overall water use due to the Region's arid climate. Additionally, substituting groundwater with surface water, recycled water, and imported water (source substitution) has been increasingly important for urban, golf, and agricultural users to reduce groundwater pumping.

In addition to water supply concerns, the Region must address water quality concerns due to the California Department of Public Health's (CDPH) recent release of a new MCL for chromium-6 (Cr^{6+}). Roughly half of the Region's current groundwater supply is out of compliance with drinking water standards due to the new Cr^{6+} MCL. The Cr^{6+} MCL has severely impacted current drinking water supplies

[1] Coachella Valley Water District (CVWD). 2002. *Coachella Valley Final Water Management Plan*.

and placed additional importance on conservation measures and source substitution to manage the Region's groundwater resources.

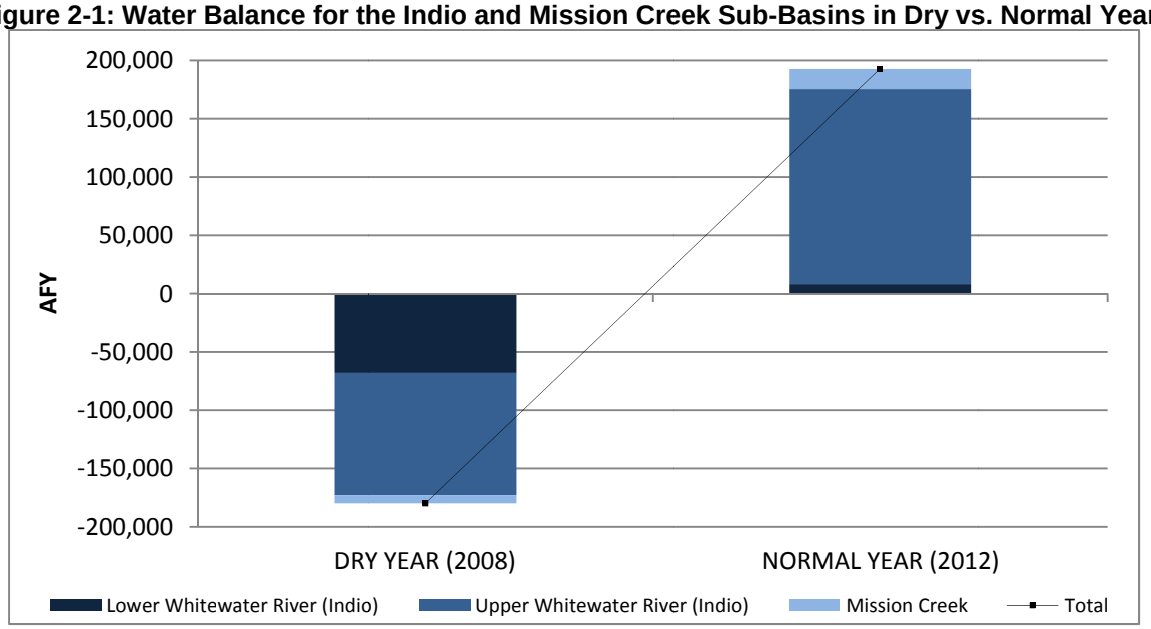
Groundwater Basin Overdraft

In drought years, the Region has experienced groundwater overdraft conditions (a negative water balance in the groundwater basin), which can be directly attributed to reduced groundwater basin replenishment. During the 2008 drought, Engineer Reports for the Whitewater River (Indio) and Mission Creek Sub-basins reported negative annual groundwater balances, or overdraft conditions (see **Figure 2-1**). Overall in 2008, the Region received 15,984 AF of water for groundwater basin replenishment from the SWP. This value represents approximately 3% of groundwater demands given that groundwater production and natural outflow from the Indio and Mission Creek groundwater basins exceeded 500,000 AF in 2008.[2]

In contrast, in normal year conditions, the Region has not experienced groundwater overdraft conditions as supported by a positive groundwater balance in such years. As shown in **Figure 2-1**, Engineer Reports show that during 2012 (a non-drought year), annual groundwater balances were positive for the Whitewater River and Mission Creek groundwater basins. The volume of water for groundwater basin replenishment in 2012 totaled 313,839 AF, which represents approximately 80% of the estimated 400,000 AF in production and natural outflow for that year.[3] **Figure 2-2** further supports the assertion that groundwater balance differences between drought and normal years are a direct result of the availability of imported water for groundwater basin replenishment. As seen in **Figure 2-2**, the replenishment amount (indicated in bright blue) accounts for a majority of the difference between the water balance in 2008 vs. 2012, with the other components of the groundwater balance remaining relatively stable.

Given the historic correlation between groundwater overdraft and reduced groundwater replenishment, and the fact that 2014 SWP deliveries are at 5% allocation, it is likely that the Region will encounter groundwater basin overdraft-related impacts by September 30, 2014.

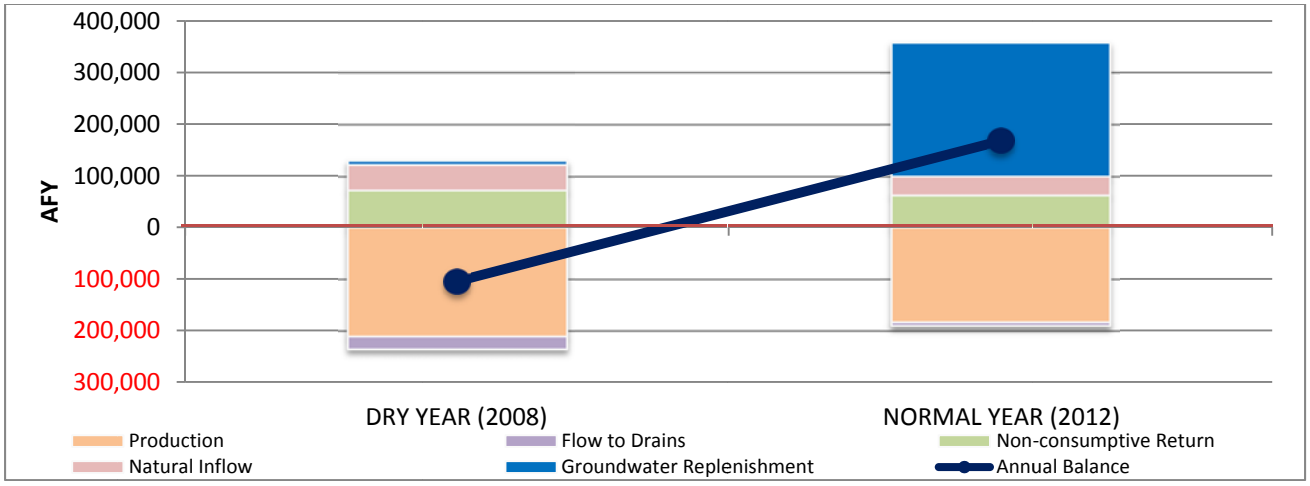
Figure 2-1: Water Balance for the Indio and Mission Creek Sub-Basins in Dry vs. Normal Years



[2] CVWD. 2009a. *Engineer's Report on Water Supply and Replenishment Assessment – Upper Whitewater River Subbasin Area of Benefit 2009-2010*, CVWD. 2009b. *Engineer's Report on Water Supply and Replenishment Assessment – Lower Whitewater River Subbasin Area of Benefit 2009-2010* and CVWD. 2009c. *Engineer's Report on Water Supply and Replenishment Assessment – Mission Creek Subbasin Area of Benefit 2009-2010*.

[3] CVWD. 2012a. *Engineer's Report on Water Supply and Replenishment Assessment – Upper Whitewater River Subbasin Area of Benefit 2012-2013*, CVWD. 2012a. *Engineer's Report on Water Supply and Replenishment Assessment – Lower Whitewater River Subbasin Area of Benefit 2012-2013*, and CVWD. 2012b. *Engineer's Report on Water Supply and Replenishment Assessment – Mission Creek Subbasin Area of Benefit 2012-2013*.

Figure 2-2: Water Balance for Upper Whitewater River (Indio) Sub-Basin in Dry vs. Normal Years



Drinking Water MCL Violations

Constituents of concern that are regulated through drinking water MCLs, including chromium, selenium, arsenic, and lead, are naturally occurring in the groundwater sub-basins of the Coachella Valley.[4] In 2014 CDPH released an MCL for Cr^{6+} of 10 parts per billion. This MCL is anticipated to substantially impact operations of water agencies within the Coachella Valley, and will require installation of costly water system improvements and water treatment facilities, to reduce Cr^{6+} concentrations.[5]

Approximately half of the Region's drinking water supply (groundwater) is now above MCL limits for Cr^{6+}, and prolonged drought conditions are anticipated to intensify the MCL concerns. Mapping of Cr^{6+}occurrence in groundwater in the Coachella Valley demonstrates that Cr^{6+} levels are highest along fault lines and in areas located away from the Region's recharge facilities (refer to **Figure 3-6**). Specifically, mapping shows that areas surrounding recharge facilities, such as the Thomas E. Levy Groundwater Replenishment Facility located in the eastern Coachella Valley, are the only areas within which Cr^{6+} does not exceed the newly-established MCL. This information shows that imported water used for groundwater basin replenishment, which does not contain Cr^{6+}, effectively dilutes Cr^{6+} concentrations within groundwater to levels below the regulatory limit. Due to the 2014 drought, SWP allocations are at 5%, which is a reduction of 314,000 AF from 2012.[6] Although some portions of the Region already exceed the MCL limits for Cr^{6+}, it is anticipated that as the drought persists and groundwater basin replenishment activities continue to decline, Cr^{6+} levels could increase in areas within the Region where the concentration is currently below the MCL. Given mapping data that shows a negative correlation between groundwater basin replenishment and Cr^{6+} concentration levels and the fact that 2014 SWP deliveries are at 5% allocation, it is likely that the Region will encounter Cr^{6+} MCL-related impacts resulting from the drought by September 30, 2014.

If drought conditions persist and additional areas in the Region begin to exceed the Cr^{6+} MCL, treatment and water system improvement costs will continue to increase. CVWD currently estimates that customers could see bills increase by approximately $50 per month as a result of the Cr^{6+} MCL based on existing groundwater basin conditions. If Cr^{6+} levels increase in other areas of the Coachella Valley, additional facilities would need to be constructed to comply with the MCL, and rate increases could impact additional residents within the Region.[7]

[4] Coachella Valley Regional Water Management Group (CVRWMG). 2014. *2014 Coachella Valley Integrated Regional Water Management (CVIRWM) Plan*.
[5] CVWD. 2014a. *New State Regulation Announced for Chromium-6*. April 15, 2014. Available at: http://www.cvwd.org/news/news230.php
[6] CVWD. 2014b. *State Increases State Water Project Allocation from 0 to 5%.* April 18, 2014. Available at: http://www.cvwd.org/news/news232.php.
[7] CVWD. 2014a. *New State Regulation Announced for Chromium-6*. April 15, 2014. Available at: http://www.cvwd.org/news/news230.php

Risk of Not Meeting Existing Drinking Water Demands

As a result of the Cr^{6+} MCL, the Region is at risk of not meeting existing drinking water demands. As previously mentioned, approximately half of the Region's current drinking water supply (groundwater) is now out of compliance with drinking water standards due to the new MCL standard for Cr^{6+}, which went into effect on July 1, 2014. The new regulation does not allow time after the date of effect for jurisdictions to comply, so agencies in the Coachella Valley that are affected by the regulation are not currently in compliance with the MCL.[8] While agencies will need to adjust operations and install additional treatment facilities to reduce Cr^{6+} levels, due to the tight compliance timeframe, it is anticipated that residents will continue to receive tap water that does not meet the MCL standards for Cr^{6+} through 2014 and continuing into 2015. To address drinking water quality concerns on an immediate basis, some users may purchase expensive residential water treatment equipment or purchase bottled water for drinking.

The Cr^{6+} MCL standard has a direct nexus with the drought, because there is evidence that groundwater basin replenishment reduces concentrations of Cr^{6+}. As a direct result of the drought and therefore reduced delivery of imported water used for groundwater basin replenishment, it is possible that additional areas of the Coachella Valley will be in violation of the Cr^{6+} MCL. Therefore, it is the Region already does and will continue to experience impacts associated with not meeting existing drinking water demands as a result of the drought.

Risk of Not Meeting Existing Agricultural Water Demands

Many Coachella Valley agricultural water users within CVWD's service area fall within Improvement District 1 (ID-1). These users can receive Canal Water from CVWD for agricultural irrigation.[9] Agricultural water users outside of the ID-1 boundary are not eligible to receive Canal Water from CVWD per CVWD's contract with the U.S. Bureau of Reclamation regarding use of the Coachella Canal.[10] Agricultural water users outside of the ID-1 boundary are therefore limited in their water supplies as they must depend solely upon local groundwater wells for agricultural irrigation.

As explained in the *2014 Coachella Valley IRWM Plan*, private agricultural groundwater wells (especially in the eastern Coachella Valley) are generally shallow and pump water from the semi-perched aquifer zone of the groundwater basin.[11] Wells located in the semi-perched aquifer zone are those that are at most risk of experiencing operational issues due to declining groundwater levels. Groundwater overdraft could cause shallow groundwater wells to run dry entirely, resulting in the loss of a water supply for some agricultural water users. Shallow groundwater wells that continue to operate with declining groundwater levels would require increased energy consumption to pump water from lower elevations. Both of these overdraft-related operational issues would have an impact on agricultural water users that rely solely on shallow groundwater wells and would likely put the Region at risk of not meeting existing agricultural water demands. Given the historic correlation between groundwater basin overdraft and reduced groundwater basin replenishment during drought years, and the fact that 2014 SWP deliveries are at 5% allocation, it is likely that the Region will encounter groundwater basin overdraft-related impacts, including a risk of not meeting existing agricultural water demands by September 30, 2014.

Risk of Not Meeting Ecosystem Water Demands

The Coachella Valley is an arid region that contains a variety of plant and animal species and habitats, which are largely adapted to withstand the Region's high temperatures, low rainfall conditions, and intermittent flash floods.[12] Despite the adaptability of the Region's ecosystems, there may be species or habitats that are affected by the drought. The Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP) addresses changing climate circumstances, including droughts, and acknowledges that drought conditions may adversely affect species and habitats if they cannot adapt to changing conditions. The Coachella Valley MSHCP identifies monitoring groundwater pumping as a priority to protecting various habitats and species in Coachella Valley. The Coachella Valley MSHCP acknowledges that

[8] CVWD. 2014c. *Chromium-6 Factsheet*. Available at: http://www.cvwd.org/about/docs/chromium_6_factsheet.pdf
[9] CVWD. 2010. *Coachella Valley Water Management Plan (CVWMP) 2010 Update*.
[10] CVWD. 2010. *CVWMP 2010 Update*.
[11] CVRWMG. 2014. *2014 CVIRWM Plan*.
[12] CVWD. 2011. *Subsequent Program Environmental Impact Report (EIR): CVWMP 2010 Update.*

impacts to species and habitat are not likely to occur in a drought that is less than three years in length, because historic rainfall data indicates that it is not uncommon for the Region to experience a one to two-year dry period.[13] Due to natural resilience to drought, it is not anticipated that ecosystem water demand impacts would happen in the Coachella Valley in 2014, but if the drought extends into 2015, it is possible that such impacts could occur.

Other Drought-Related Impacts

Land Subsidence

Another potential drought-related impact is that of land subsidence due to declining groundwater levels. Coachella Valley has experienced land subsidence that damaged homes in Indian Wells and in La Quinta.[14] According to a 2013 United States Geological Survey (USGS) report, land subsidence of 3.6 to 7.2 centimeters a year took place in various parts of the Coachella Valley between 2003 and 2005.[15] The USGS study calculated that the land subsidence rate from 2003 to 2005 was two to four times greater than the 1996 to 2000 rates, which coincides to a time period during which groundwater levels were declining. Recent information from the USGS demonstrates that groundwater basin replenishment, which declines in drought years, has a substantial effect on reducing subsidence. Specifically, information from DWA shows that rising land levels in portions of the Coachella Valley can be attributed to groundwater replenishment in those areas, which has stabilized groundwater levels.[16] Conversely, it can be inferred that in drought years, such as 2014 when replenishment activities are reduced due reduced deliveries of imported water sources, the likelihood of land subsidence could increase.

Given the historic correlation between land subsidence and reduced groundwater basin replenishment and the fact that 2014 SWP deliveries are at 5% allocation, it is likely that the Region will encounter land subsidence by September 30, 2014.

Energy Demand and Greenhouse Gas Emissions

In 2009, electrical energy demand for water management in the Coachella Valley was 211,130,000 kilowatt hours per year (kWhr/yr); it is estimated that groundwater pumping attributed to 93 percent of this overall demand (CVWD 2011). With increased conservation, continued groundwater basin replenishment with imported water, and increased recycled water use, energy consumption for groundwater pumping is projected to decrease to approximately 139,355,000 kWh/yr by 2020, which is a 29 percent reduction from 2009 levels.[17] During drought conditions when groundwater basin replenishment is reduced, groundwater levels will decline, requiring deeper wells, pumps capable of higher lifting, and therefore increased energy consumption to pump groundwater. Increased energy demand and new well construction could lead to significant economic impacts as well as and social costs associated with increased greenhouse gas emissions.

Given the direct nexus between energy demand associated with groundwater pumping and decreased groundwater levels due to drought conditions, it is likely that the Region will encounter groundwater basin overdraft-related impacts, including increased energy demands and greenhouse gas emissions by September 30, 2014.

[13] Coachella Valley Association of Governments (CVAG). 2007. *Final Recirculated Coachella Valley Multiple Species Habitat Conservation Plan.* September 2007. Available at: http://www.cvmshcp.org/Plan_Documents.htm
[14] Borchers. J et.al. 2014. *Land Subsidence from Groundwater Use in California*. California Water Foundation: April 2014. Available at: http://californiawaterfoundation.org/uploads/1398291778-Subsidencesummaryreport-FINAL.pdf.
[15] United States Geologic Survey (USGS). 2013. *Detection and Measurement of Land Subsidence Using Global Positioning System Surveying and Interferometric Synthetic Aperture Radar, Coachella Valley, California 1996-2005.* Version 2.0. June 2013.
[16] USGS. 2014. *Land Subsidence, Groundwater Levels, and Geology in the Coachella Valley, California, 1993-2010.* Available; http://pubs.usgs.gov/sir/2014/5075/
[17] CVWD. 2011. *Subsequent Program EIR: CVWMP 2010 Update.*

Water Conservation Measures

Description of Water Agencies

All five CVRWMG agencies recognize that water is a limited resource and water conservation and use efficiency should be aggressively pursued. Each agency implements a variety of irrigation and/or domestic water conservation measures, including landscape ordinances, water-efficient irrigation controls, water efficient plumbing, water-wise landscaping, conservation outreach and education, conservation pricing of water rates, and water audits. Water users can access programs through a regional water conservation program website (www.cvwatercounts.com) based on to their address and location in the Region. [18] Water conservation best management practices (also referred to as demand management measures or DMMs) that are set forth by the California Urban Water Conservation Council (CUWCC) and implemented by the CVRWMG agencies are provided below in **Table 2-1**.

Table 2-1: Best Management Practices implemented by CVRWMG Agencies

Best Management Practices (BMPs)		Implementing CVRWMG Agency:				
California Urban Water Conservation Council BMPs		CVWD	CWA	DWA	IWA	MSWD
1	Water Survey Program for Single-Family and Multi-Family Residential Customers	X	X		X	
2	Residential Plumbing Retrofit Program		X	X	X	X
3	System Water Audits, Leak Detection and Repair Program	X	X	X	X	X
4	Metering with Commodity Rates for all New Connections and Retrofit of Existing Connections Program	X	X	X	X	X
5	Large Landscape Conservation Programs and Incentives Program	X	X	X		X
6	High-Efficiency Washing Machine Rebate Program					
7	Public Information Program	X	X	X	X	X
8	School Education Program	X*	X	X	X	X
9	Conservation Programs for Commercial, Industrial, and Institutional Accounts Program	X	X	X		
10	Wholesale Agency Programs	N/A	N/A	N/A	N/A	N/A
11	Conservation Pricing Program	X	X		X	X
12	Water Conservation Coordinator Program	X	X		X	X
13	Water Waste Prohibition Program	X		X	X	X
14	Residential Ultra-Low-Flush Toilet Replacement Rebate Program	X	X	X		
Other (non-CUWCC) Conservation BMPs Implemented in the Region:						
Main line/equipment replacements to stop leaks		X	X	X	X	X
Have field employees watch for water waste and report water waste issues to customers		X	X	X	X	X
High bill investigations (sending letters to water customers whose water bills or water use spikes)		X	X	X	X	X
Installation of new meters to detect continual flow that is indicative of leaks		X	X	X	X	X
Monitor water levels within the reservoirs through a telemetry system and turn off wells when reservoir levels reach specific levels to prevent over-pumping and possibly overflowing the reservoirs		X	X	X	X	X
Daily visits to every operating facility to ensure that the system is operating correctly and to inspect the facilities for things such as leaking pipes		X	X	X	X	X
Groundwater replenishment activities		X	X	X	X	X
Planning efforts that address water conservation such as Urban Water Management Planning, Integrated Regional Water Management Planning, and General Planning		X	X	X	X	X

*CVWD's School Education Program serves CVWD, CWA, and IWA service areas

[18] CVRWMG. 2014. *2014 CVIRWM Plan*.

Resolutions

Current water conservation efforts by agencies and cities within the Region have focused on urban use, agricultural irrigation, and golf course irrigation. For example, Coachella Valley cities have adopted the Coachella Valley Landscape Ordinance (2009), conducted water audits, instituted rebate programs, implemented tiered pricing, and conducted public information and education programs. Many cities and agencies are signatory to the CUWCC Memorandum of Understanding (MOU) and are therefore members of the CUWCC, complying with all Best Management Practice targets outlined in the MOU that have been determined appropriate for the conditions within their service areas.

The following resolutions and additional measures have been taken by the five water purveyors to reduce water use in response to the 2014 drought:

- **Coachella Valley Water District** - CVWD passed a resolution on February 25, 2014 following the Governor's Drought Declaration that encourages all residents to do their fair share to reduce water consumption consistent with the state mandate for a 20 percent reduction in per capita water use statewide by 2020 (**Appendix 2-1**). This resolution constitutes a voluntary 20 percent water conservation measure that was implemented in direct response to the 2014 drought.
- **Desert Water Authority-** DWA passed a Resolution to Commit to Sustainable Management of Groundwater Resources and asked customers to help the Agency reduce overall use by 20% on April 15, 2014 (**Appendix 2-1**). This resolution constitutes a voluntary 20 percent water conservation measure that was implemented in direct response to the 2014 drought.
- **Indio Water Authority -** IWA passed a Resolution in support of the Wyland Mayor's Challenge for Water Conservation on April 1, 2014 and passed a Resolution to reduce water use by 20% on July 16, 2014 (**Appendix 2-1**). This resolution constitutes a voluntary 20 percent water conservation measure that was implemented in direct response to the 2014 drought.
- **Coachella Water Authority -** Although an official resolution to reduce water has not been adopted by CWA the agency has implemented programs to promote additional water conservation. CWA has programs to provide Outdoor Water Conservation Kits, toilet replacement, and turf removal rebates.
- **Mission Springs Water District -** Although an official resolution to reduce water has not been adopted by MSWD, the district has implemented programs to promote water conservation. MSWD adopted Water Efficient Landscaping Guidelines in 2009 and provides water saving tips and resources to their customers online. Additionally, MSWD has provided home conservation kits to over 3,000 middle school students in recent years as part of their ongoing "Water Wise" student education program. MSWD has incorporated tiered commodity pricing, including conservation pricing, since 1984.

Continued Drought

In their Urban Water Management Plans (UWMPs), all five water agencies outlined their Water Shortage Contingency Planning. All five UWMPs stress the importance of reducing groundwater pumping in dry years to offset reductions to imported water sources used for groundwater basin replenishment. However, during a prolonged multi-year drought, all five agencies are likely to experience lower groundwater levels without the ability to replenish the basin using SWP Exchange water or Colorado River water.

As such, continued drought conditions would likely result in additional groundwater overdraft if actions are not taken to reduce groundwater pumping and make additional sources of water available in the Region. The projects included within this Proposal would all provide in lieu recharge (groundwater basin replenishment) either by reducing groundwater pumping demands or by providing an alternative supply to groundwater pumping (recycled water). As such, these projects, which will be implemented by April 1, 2015, will provide groundwater overdraft relief and address all of the regional drought impacts that are currently being experienced in the Region.

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Appendix 2-1: Local Drought Resolutions

RESOLUTION NO. 2014-39

RESOLUTION OF THE BOARD OF DIRECTORS OF COACHELLA VALLEY WATER DISTRICT COMMENDING THOSE WHO HAVE REDUCED WATER USE AND SUPPORTING THE GOVERNOR'S EMPHASIS ON WATER CONSERVATION AS AN EFFECTIVE MEANS OF ADDRESSING ASPECTS OF THE ONGOING DROUGHT THROUGHOUT CALIFORNIA

WHEREAS, California is dealing with the worst drought in the state's history and the governor has called for "everyone in every part of the state to conserve water"; and

WHEREAS, the Directors of the Coachella Valley Water District (CVWD) commend local residents, business owners, homeowner associations and other CVWD water users who have contributed to a 20 percent reduction in domestic water consumption over the past 10 years, a goal consistent with a the state mandate for a 20 percent reduction in per capita water use statewide by 2020; and

WHEREAS, while many who work, live and play in the Coachella Valley have contributed greatly toward CVWD's ability to effectively manage the region's groundwater, current circumstances demonstrate that no area or entity can escape the effects of statewide drought; and

WHEREAS, consistent with the Governor's words of immediacy, "Right now it is imperative that we do everything possible to mitigate the effects of the drought"; and

WHEREAS, CVWD provides multiple resources to help residents, business owners, homeowner associations and others reduce water use, including but not limited to incentive and rebate programs, workshops, educational materials and staff assistance with water waste investigations and water audits.

NOW, THEREFORE, BE IT RESOLVED on this 25th day of February, 2014, that the Coachella Valley Water District Board of Directors call on those who do not yet conserve to do their fair share, and call upon those who have already taken steps to save water to investigate whether there are additional ways to conserve.

* * * * * * * * * * *

STATE OF CALIFORNIA)
COACHELLA VALLEY WATER DISTRICT) ss.
OFFICE OF THE SECRETARY)

I, JULIA FERNANDEZ, Secretary of the Board of Directors of the Coachella Valley Water District, DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 2014-39 adopted by the Board of Directors of said District at a regular meeting thereof duly held and convened on the 25th day of February, 2014, at which meeting a quorum of said Board was present and acting throughout. The Resolution was adopted by the following vote:

Ayes:	Four
Directors:	Powell, Pack, De Klotz, Livesay
Absent:	Nelson
Noes:	None

Dated this 25th day of February, 2014.

(SEAL)

Julia Fernandez
Board Secretary

COACHELLA VALLEY WATER DISTRICT

Board Action Item

Board Meeting Date: February 25, 2014

TO: Board of Directors

SUBJECT: Resolution regarding the Drought and Water Conservation

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Description and Location

This project consists of adopting a formal resolution on the drought and water conservation.

Purpose and Benefit of Project

The purpose of this Board action item is to recommend that the Board adopt a resolution commending those in the valley who have conserved water and supporting the Governor's call for greater water conservation as an effective means of addressing some aspects of the current statewide drought.

Procurement and Expenditures

There is no fiscal impact by approving the resolution.

Environmental Impact

☒ No, this item is not a "project" as defined by CEQA; therefore, approval does not require any CEQA action.
☐ Yes, see below.

Legal Review

☐ Reviewed by Counsel
☒ N/A

Fiscal Impact

There is no fiscal impact by approving the resolution.

Prior Authorizations

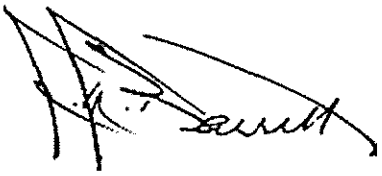
☐Yes, see attachment.
☒ N/A

Staff Recommendation

It is recommended that the Board of Directors adopt a resolution commending those in the valley who have conserved water and supporting the Governor's call for greater water conservation as an effective means of addressing some aspects of the current statewide drought.
See attached proposed resolution.

Prepared by: Jack Porrelli
Communication & Legislation Specialist

Submitted by: Heather Engel
Director, Communication & Legislation

Approved by: 

Jim Barrett
General Manager

Attachment/1/as

FILE: 0541.3, 0804.

PROJECT ID NO: N/A

RESOLUTION NO. 1088

A RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY CALLING FOR 20% VOLUNTARY WATER USAGE REDUCTION

WHEREAS, the State of California is experiencing record dry conditions, with 2013 being the driest year on record; and

WHEREAS, the Agency's Urban Water Management Plan (UWMP) contains water shortage contingency planning according to State Law 10632 and establishes stages of water use restrictions to be evoked during water supply emergencies according to Ordinance No. 45; and

WHEREAS, Ordinance No. 45 calls for voluntary 5% water use reductions under normal conditions: 10% mandatory water use reductions under a Water Supply Storage Alert; 20% mandatory conservation measures under a Water Shortage Warning and 50% mandatory water usage reduction during Water Shortage Emergency conditions; and

WHEREAS, Desert Water Agency has not hit a critical level of shortage where the Agency is unable to meet the demands of its customers, therefore will not be evoking Ordinance No. 45 mandates; however considers the current conditions of great concern; and

WHEREAS, the Desert Water Agency Board appreciates and acknowledges that Agency water usage has declined by 20% since 2007; and

WHEREAS, the Desert Water Agency has been responsibly managing the groundwater basin through long-term efforts to address overdraft for more than 50 years; and

WHEREAS, it is well-known that the majority of water use in the service area is used outdoors; and,

WHEREAS, on January 17, 2014 Governor Jerry Brown proclaimed a state of emergency to exist in the State of California due to current drought conditions and has asked all Californians to reduce their water usage by 20 percent; and

WHEREAS, the Governor's Proclamation of a State of Emergency highlighted the fact that "…extremely dry conditions have persisted since 2012 and may continue beyond this year and more regularly into the future", and

WHEREAS, the Board urges the State of California to move forward in completing the State Water Project including the addition of storage and conveyance facilities to increase system reliability, and

WHEREAS, the Board has determined that given all of the above described considerations, extra vigilant measures are necessary by the Agency and its customers until the current weather conditions have abated.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Desert Water Agency as follows:

Acknowledges the ongoing conservation efforts of customers and appreciates their contributions to conserving and preserving our available water supplies. Customers with very low water usage are encouraged to continue their efforts and look for ways to lower usage,

Asks all Agency customers to be judicious and prudent with every gallon of water used,

Is calling upon all customers to voluntarily assist the Agency in an effort to reduce water use agency-wide by 20%,

Asks all Agency customers to conduct their own, regular inspections of their outdoor irrigation,

Directs Staff to send a letter to all Agency customers advising them of the Board's call for the water usage reductions described above, asking for their cooperation and educating them on the top ten ways to save water,

Directs Staff to continue to have an active role in State Water Project Contract Extension negotiations and keep the Board involved,

Recognizes that weather conditions could change and intends to be agile in its approach and response to dealing with the drought and any changes in weather conditions.

Thanks Agency customers for their anticipated cooperation and fully understands that it will take all of us, customers, staff and the Board to successfully navigate this situation.

ADOPTED this 18th day of March 2014.

_____
James Cioffi, Vice President
Board of Directors

ATTEST:

_____
Joseph K. Stuart, Secretary-Treasurer
Board of Directors

RESOLUTION NO. 9694

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDIO, STATE OF CALIFORNIA, IN SUPPORT OF THE "WYLAND MAYOR'S CHALLENGE FOR WATER CONSERVATION"

WHEREAS, the city of Indio, and the State of California continue to explore ways to manage residential consumption of water and power, and to inspire its residents to care for our natural resources; and

WHEREAS, cities can engage in efforts to inspire their own communities, as well as their neighboring cities, to become better environmental stewards; and

WHEREAS, the third annual National Mayor's Challenge for Water Conservation presented by the Wyland Foundation and Toyota, with support from the U.S EPA's Office of Water, National League of Cities, U.S. Forest Service, The Toro Company, Wondergrove Kids, Bytelaunch, and WaterSmart Software is a healthy, non-profit competition for cleaner communities and a water use and pollution reduction competition between our cities; and

WHEREAS, with the encouragement of their Mayors, residents may register their participation in their city's Challenge, online, by making simple pledges to decrease their water use and to reduce pollution for the period of one year, thereby assisting their cities to apply State and Federal water conservation strategies and to target mandated reductions; and

WHEREAS, from April 1- 30, 2014, the City of Indio wishes to inspire its residents and its neighboring communities to take the "Wyland Mayor's Challenge for Water Conservation" by making a series of online pledges at www.mywaterpledge.com to reduce their impact on the environment and to see immediate savings in their water, trash, and electricity bills;

NOW, THEREFORE, THE CITY COUNCIL TO THE CITY OF INDIO OF THE STATE OF CALIFORNIA HEREBY FINDS, DETERMINES, RESOLVES, AND ORDERS AS FOLLOWS:

Section 1. The above recitals, and each of them, are true and correct.

Section 2. The City of Indio agrees and supports the "Wyland Mayor's Challenge for Water Conservation" emphasis.

Section 3. The program is to be implemented from April 1- 30, 2013, through a series of communication and outreach strategies, whether new or existing, to encourage Indio residents to take the conservation "Challenge."

Section 4. This resolution shall be effective immediately.

Section 5. The City Clerk shall certify to the adoption of this resolution.

PASSED, APPROVED AND ADOPTED this 1st day of April, 2014, by the following vote:

AYES: Holmes, Miller, Torres, Ramos Watson, Wilson
NOES: None

MICHAEL H. WILSON, MAYOR

ATTEST:

CYNTHIA HERNANDEZ, CMC
CITY CLERK

RESOLUTION NO. 2014-69

RESOLUTION OF THE INDIO WATER AUTHORITY, OF THE CITY OF INDIO, CALIFORNIA, CALLING FOR A COMMITMENT TO WATER CONSERVATION

WHEREAS, on January 17, 2014, Governor Jerry Brown proclaimed a state of emergency to exist in the State of California due to current drought conditions and has asked all Californians to reduce their water usage by 20 percent; and

WHEREAS, the Board of the Indio Water Authority held a public meeting on July 16, 2014, calling for a commitment to water conservation within the City of Indio and throughout the Coachella Valley.

WHEREAS, the Board of the Indio Water Authority has determined that given the above described considerations, extra vigilant measures are necessary by the Indio Water Authority to continue the sustainable management of the groundwater basin.

NOW, THEREFORE, BE IT RESOLVED BY THE INDIO WATER AUTHORITY AS FOLLOWS:

A. The Recitals set forth above are hereby incorporated into this Resolution as if fully set forth herein.

B. The Board of the Indio Water Authority is committed to sustainable groundwater management.

C. The Board of the Indio Water Authority acknowledges the ongoing conservation efforts of customers and appreciates their contributions to conserving and preserving our available water supplies, by reducing water consumption. Customers with very low water usage are encouraged to continue their efforts and look for ways to lower usage.

D. The Board of the Indio Water Authority asks all Indio Water Authority customers to be judicious and prudent with every gallon of water used.

E. The Board of the Indio Water Authority is calling upon all customers to voluntarily assist the Indio Water Authority in an effort to reduce water use agency-wide by 20 percent.

F. The Board of the Indio Water Authority asks all Indio Water Authority customers to conduct their own, regular inspections of their outdoor irrigation.

G. The Board of the Indio Water Authority recognizes that weather conditions could change and intends to be agile in its approach and response to dealing with the drought and any changes in weather conditions.

H. The Board of the Indio Water Authority thanks the Indio Water Authority customers for their anticipated cooperation and fully understands that it will take all of us, customers, staff and the Board to successfully navigate this situation.

PASSED, APPROVED, AND ADOPTED this 16th day of July 2014, by the following vote:

AYES: Holmes, Miller, Torres, Ramos Watson, Wilson
NOES: None

MICHAEL H. WILSON, PRESIDENT

ATTEST:

CYNTHIA HERNANDEZ, CMC
SECRETARY