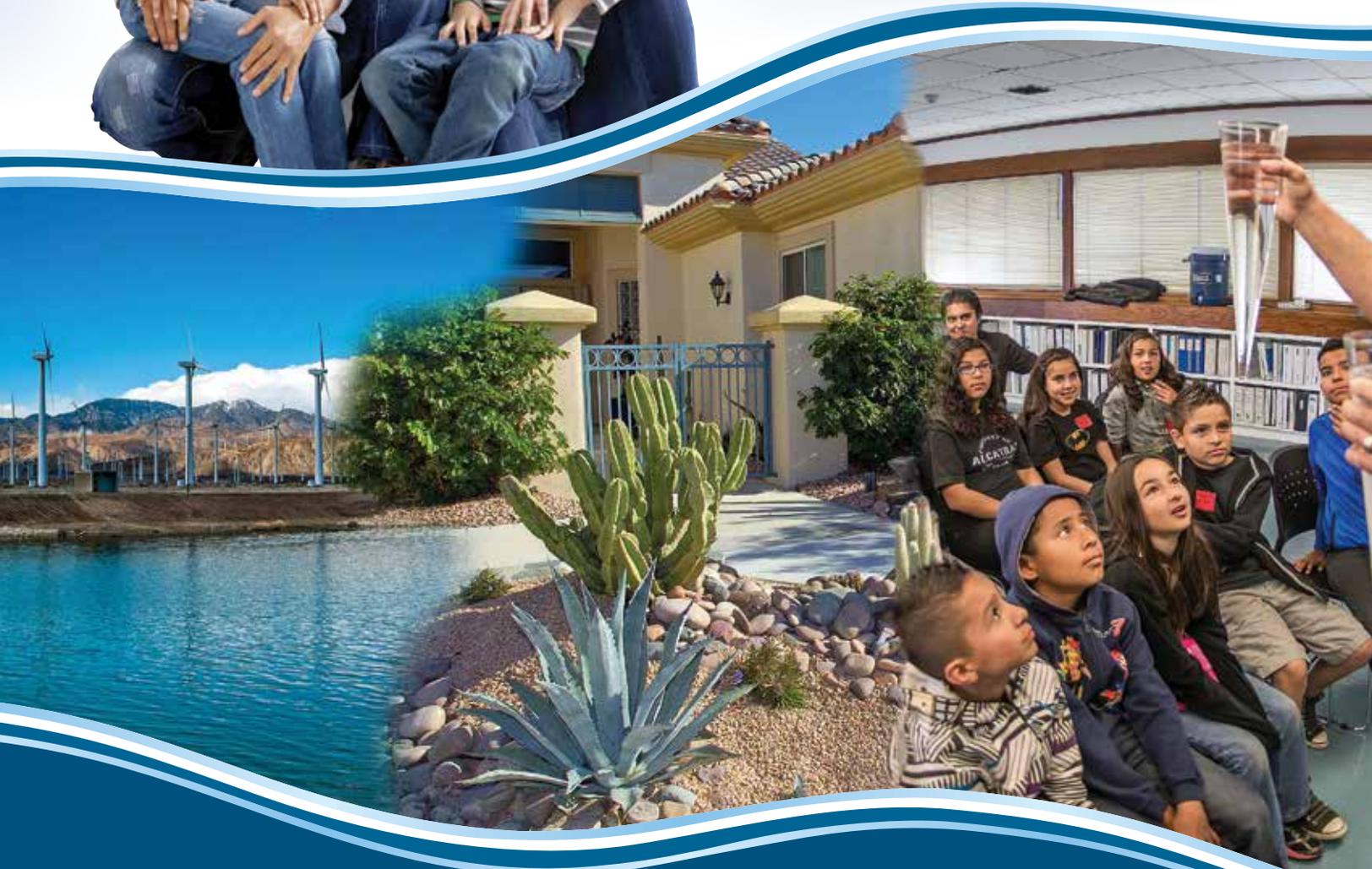




# Coachella Valley Water District

## 2013-14 Annual Review



Inside:  
Groundwater  
Replenishment program  
reduces aquifer overdraft

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Water Quality Report  
provides details about  
CVWD's drinking water

*Pages 6-9*

Grants help fund drinking  
water and sewer projects  
in rural areas

*Page 10*

Making every drop count since 1918

## Board of Directors

**John Powell, Jr.**  
President, Division 3

**Franz De Klotz**  
Vice President, Division 1

**Ed Pack**  
Director, Division 2

**Peter Nelson**  
Director, Division 4

**Debi Livesay**  
Director, Division 5

## Senior Administration

**Jim Barrett**  
General Manager

**Robert Cheng**  
Assistant General Manager

**Julia Fernandez**  
Board Secretary

## Directors

**Raul Aguirre**  
Director of Service

**Steve Bigley**  
Director of Environmental Services

**Heather Engel**  
Director of Communication & Conservation

**Dan Farris**  
Director of Operations

**Kay Godbey**  
Director of Finance

**Mark Johnson**  
Director of Engineering

**Heidi Keeran**  
Director of Human Resources

**Luis Maciel**  
Director of Information Systems

**Javier Miranda**  
Director of Trades & Support

## Contact Us

### Payment Address

P.O. Box 5000  
Coachella, CA 92236

### Correspondence Address

P.O. Box 1058  
Coachella, CA 92236

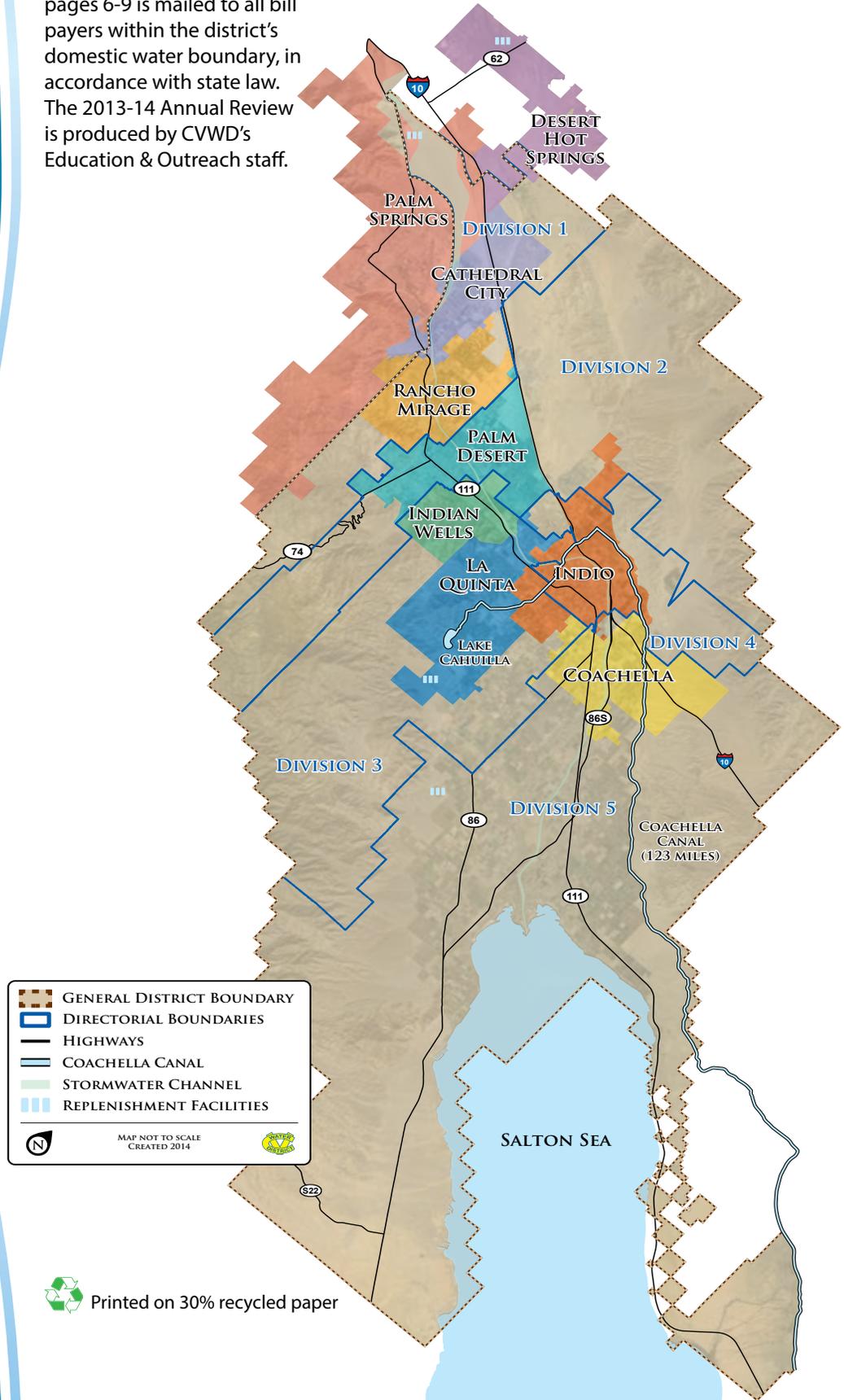
### Offices

75-515 & 75-525 Hovley Lane East  
Palm Desert  
85-995 Avenue 52  
Coachella

**Established in 1918**, the Coachella Valley Water District is a government agency run by a five-member Board of Directors, elected to represent the five divisions within CVWD's service area. The directors serve four-year terms.

**Board meetings are open to the public** and generally held on the second and fourth Tuesday of each month at 9 a.m. at district offices. The first meeting of the month is typically held in Palm Desert and the second is held in Coachella. To confirm meeting details, call the water district or view the meeting agenda on the website.

**The Water Quality Report** on pages 6-9 is mailed to all bill payers within the district's domestic water boundary, in accordance with state law. The 2013-14 Annual Review is produced by CVWD's Education & Outreach staff.



# Message from the General Manager

It's been a busy and exciting year for Coachella Valley Water District. We've celebrated many successes and been faced with new challenges.

One of our greatest success stories is the continued progress toward eliminating overdraft of the aquifer. Well monitoring shows the Thomas E. Levy Groundwater Replenishment Facility in south La Quinta is contributing to rising groundwater levels in the east valley. A recent USGS report showed the rising groundwater levels are further contributing to a decrease in subsidence rates.

In the mid-Valley, where groundwater levels continue to drop, CVWD is aggressively moving forward with plans to bring nonpotable recycled water and Colorado River water to golf courses to reduce demand on the aquifer. CVWD completed the first phase of the Mid-Valley Pipeline in 2007, bringing Colorado River water to golf courses in Palm Desert and Rancho Mirage to supplement the recycled water supply that was being fully utilized most of the year.

Today, 45 golf courses in CVWD's service boundary are using a nonpotable supply and 48 golf courses have been identified as future nonpotable water users. I'm happy to report that three of those courses are scheduled to make the switch this summer.

The *Coachella Valley Water Management Plan* outlines several other strategies and projects to help eliminate overdraft. A status report presented in May 2014 showed that if we continue to implement the many facets of the long-term plan as projected, the Coachella Valley will stop overdrafting the aquifer in the year 2021.

The biggest potential obstacle to meeting this goal is the statewide drought. The Coachella Valley is fortunate to have the aquifer to store a large supply of high quality water for generations to come, so statewide drought doesn't have a direct impact on the region. However, CVWD and Desert Water Agency of Palm Springs rely on imported State Water Project water to replenish the aquifer in the west end of the valley. This year, the agencies expect to receive only 5% of their entitled imported supply. Crucial to improving this allocation of water is the implementation of the Bay Delta Conservation Plan in northern California. Support of this project, although geographically distant from our valley, is one of our highest priorities.

The status of the aquifer is important to the viability of the entire Coachella Valley. While CVWD is charged with managing the groundwater, the water belongs to everyone in the valley and we must all take responsibility. Thankfully, increased public awareness has contributed to valley residents and businesses doing their part to help conserve. Between 2004 and 2012, total domestic water use dropped by 17%, despite an increase in population.

The other big challenge facing CVWD and its customers is the new state standard for chromium-6, which naturally exists in areas of the Coachella Valley due to erosion of local sediments that contain chromium. The California Department of Public Health set the standard at 10 parts per billion, while the tap water delivered by CVWD ranges from 0-21 ppb. Studies are currently underway to determine the most cost-effective way to comply with the new standards, but preliminary estimates indicate it will be extremely costly. You can learn more about it on page 5 of this document.

Despite these challenges, rest assured that we continue to have many successes in providing high quality drinking water at a reasonable price, maintaining a sustainable water supply and working to eliminate overdraft of the aquifer.

Sincerely,



Jim Barrett  
General Manager



## CVWD Mission Statement

To meet the water-related needs of the people through dedicated employees, providing high quality water at a reasonable cost.

## We have many new ways to connect!

This year, CVWD expanded the ways you can interact with the district. Customers now can get news from the district delivered directly to their email addresses by signing up for one or more of several e-notification lists.

The district this year also launched a Facebook page. You can "like" our page to follow our posts on everything from upcoming events to Water Wise tips of the month, to the latest news announcements from the district.

These new methods join others that were launched in the past few years to make it easier for customers to manage their accounts and stay up to date on district news.

## Stay connected!



**Main switchboard**  
(760) 398-2651

**Customer Service**  
(760) 391-9600

**Fax**  
(760) 398-3711

**Web sites**  
[www.cvwd.org](http://www.cvwd.org)  
[www.waterfun4kids.org](http://www.waterfun4kids.org)

## Groundwater facts

Aquifer overdraft occurs when more water is used over a period of years than can be replaced by natural or artificial means.

**315,683 af** — Amount of reported groundwater used in the Coachella Valley in 2013. All drinking water supplied by CVWD comes from the aquifer.

**64,190 af** — Amount of imported water replenished by CVWD and DWA in 2013

**62,000 af** — Average annual amount of water naturally replenished by rain and snow melt

**3.22 million af** — Water replenished by CVWD and DWA since 1973

**39 million af** — Estimated capacity of Coachella Valley's groundwater basin (first 1,000 feet)

**3** — Number of groundwater replenishment facilities in the Coachella Valley.

*af = acre-feet; 1 acre-foot equals 325,851 gallons*



In October 2013, CVWD and DWA celebrated the completion of the Whitewater Groundwater Replenishment Facility Improvement project. The improvements, which will save ratepayers approximately \$500,000 a year, increased the Whitewater Groundwater Replenishment Facility's capacity to receive water for replenishing groundwater supplies by 100 cubic feet per second — or 66 million gallons per day.

## Groundwater replenishment programs protect aquifer

The Coachella Valley Water District (CVWD) and Desert Water Agency have jointly replenished more than 3.2 million acre-feet (1 trillion gallons) of imported water into the aquifer, to date.

This effort is part of a strategy to eliminate aquifer overdraft through these actions:

- Increase the amount of imported water used for groundwater replenishment.
- Continue to provide alternative water sources, such as Colorado River water and recycled water, to large irrigation users, including farms and golf courses.
- Continue to promote wise water use and conservation through such methods as landscape rebates and other conservation programs.

This commitment goes back to CVWD's formation in 1918 when one of its first actions was to build ponds at Whitewater to capture natural run-off from the mountains to help replenish the aquifer. The two agencies also recognized a need to supplement natural replenishment with imported water.

The agencies expanded the Whitewater Groundwater Replenishment Facility and became two of the original 29 State Water Project Contractors to obtain imported water from the Sierra Nevada snowpack, to jointly replenish the aquifer in the west valley.

The agencies started with a combined 61,200 acre-feet allocation per year. Additional purchases were made over the years and today the agencies have a joint allocation of 194,100 acre-feet per year.

In the east valley, CVWD operates an additional replenishment facility that has shown great success since it became fully operational in 2009.

A recent U.S. Geological Survey study recorded groundwater levels rising near the replenishment facility and the rate of subsidence being reduced and reversed in some areas.

Unfortunately, statewide drought and legal decisions often restrict the amount of allocation that is actually received. The Department of Water Resources is estimating only 5 percent of allocations will be delivered in 2014, although that estimate could change.

# District uses workshops, education to promote water conservation

In the Coachella Valley, about 80 percent of water is used outside the home, making outdoor conservation programs associated with landscaping a top priority for the district.

This year, a free Water Wise Leak Workshop was hosted for homeowners who want to learn more about finding and fixing wasteful leaks. This workshop was created to promote the U.S. Environmental Protection Agency's Fix a Leak Week, a national campaign designed to raise awareness of how wasteful common leaks can be.

Leaks can account for more than 200 gallons of water wasted per day. An average leak can add significantly to customers' monthly water bills.

The evening workshop included a fair where vendors and Coachella Valley Water District staff answered questions and demonstrated products for use in homes, pools and landscaping to save water. In addition, a presentation was given on the top 10 indoor and outdoor leaks.

The district also continues to offer free Water Management Seminars for Landscape Professionals in English and

Spanish at its administration building in Palm Desert.

These seminars are designed to help local landscapers learn to properly irrigate and manage their client's lawns and gardens in this arid, hot climate. Seminar curriculum provides technical and practical information to help landscape professionals achieve those goals without wasting water.

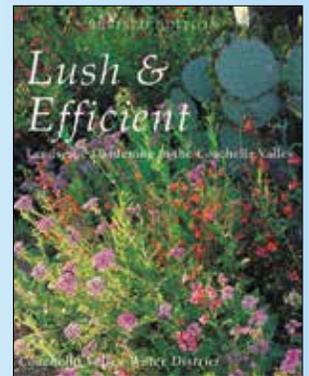
New this year, the seminar curriculum was revised with new topics including why water is important, low flow irrigation and secrets to a successful irrigation system. New presenters were also introduced into the program.

Educators from Ewing Irrigation gave presentations to landscape professionals from more than 50 local landscaping companies, homeowners' associations, nurseries and cities. Ewing Irrigation is a national landscape and irrigation supplier, which supports healthy water-efficient environments.

For more information about Water Management Seminars for Landscape Professionals visit [www.cvwd.org](http://www.cvwd.org) or call (760) 398-2651.

## Conservation resources

CVWD offers a variety of resources to help you manage your water use. The resources include guides to gardening with desert-friendly plants and tips on finding and fixing leaks at your home. There are even instructional videos on everything from how to read your water bill to how to detect leaks in and around the home. You will find these resources on the district's website at [www.cvwd.org](http://www.cvwd.org).



At 160 pages, *Lush & Efficient Landscape Gardening in the Coachella Valley* is packed with photos and information.

Cost is \$15.

You can order publications using the postcard inside this *Annual Review* or online at [www.cvwd.org](http://www.cvwd.org)

Some conservation tips:

- ◆ Check your toilet for leaks and fix them. A running toilet can waste more than 2,000 gallons of water per day

- ◆ Use a water-efficient showerhead. They can save you up to 750 gallons per month.

- ◆ Remember to water your landscaping in the early morning or evening hours to minimize loss through evaporation, especially when temperatures are high.



At the district's first-ever Fix a Leak Workshop, attendees were able to talk to a range of experts from the district and from various vendors.

## Recycled Water facts

CVWD owns and operates six wastewater reclamation plants capable of treating 18 million gallons of wastewater for recycled water use per day.

Three of the district's six wastewater reclamation plants deliver nonpotable water to 19 customers, mostly golf courses, for irrigation.

Colorado River water from the Coachella Canal supplements the recycled water supply at the wastewater reclamation plants as irrigation demands exceed the recycled water treatment capacity.

**16,829 af** — Amount of Colorado River water delivered for golf course irrigation in 2013.

**12,687 af** — Amount of recycled water delivered for golf course irrigation in 2013.

### Is recycled water regulated?

Yes. The treatment, delivery and use of recycled water is strictly regulated by state agencies.

### What are the benefits of recycled water?

Using recycled water for irrigation reduces demand on our precious aquifer. In addition, the supply of wastewater isn't affected by drought.

**Recognition** — The California Water Environment Association's regional chapter named CVWD's largest wastewater reclamation plant as Plant of the Year. CVWD also received awards for Collection Systems of the Year, Supervisor of the Year, Collection System Person of the Year, Public Education Person of the Year, P3S Person of the Year (source control), Mechanical Technician Person of the Year, and Laboratory Person of the Year.

*af = acre-feet; 1 acre-foot equals 325,851 gallons;*



Non-potable water is now used to irrigate many Coachella Valley golf courses, including this one in Indian Wells.

## More golf courses use recycled and imported water for irrigation

This summer, three more golf courses will join the ranks of those irrigating with Colorado River water or a combination of canal and recycled water instead of precious groundwater. Valleywide, 51 golf courses use recycled or imported water for irrigation.

Coachella Valley Water District (CVWD) has aggressively stepped up its efforts to get golf courses to convert their water deliveries to canal or non-potable water.

For example, in the 2010 *Water Management Plan*, golf courses in the Coachella Valley were asked to reduce water use by 10% and they have committed to the challenge. To help facilitate communication between the golf and water industry, leaders from both sides recently formed the Golf and Water Task Force.

Participants of the task force meet on a monthly basis to talk about current and possible future actions regarding the use of nonpotable water for golf course irrigation and other conservation measures.

There are currently 16½ courses in

the mid-valley area using non-potable water, which is either recycled water alone, canal water only or a combination of recycled water and canal water that is delivered to one of the district's water reclamation plants for blending.

Last year, 16,829 acre-feet of canal water was delivered to golf courses for irrigation purposes and 12,687 acre-feet of nonpotable water was utilized on golf courses instead of groundwater.

This represents a savings of 29,516 acre-feet of groundwater, more than enough water to serve more than 30,000 homes and businesses.

In fact, fourteen additional courses are planned to be converted away from the use of groundwater by the end of 2017.

"Golf courses and other properties that use non-potable water for irrigation are helping to reduce overdraft of the aquifer, said Olivia Bennett, nonpotable water operations manager. "Conserving groundwater ensures that future generations will be able to benefit from the aquifer that is critical to the Coachella Valley."

# New chromium-6 rule will be expensive undertaking for valley

The California Department of Public Health has announced a new regulation for chromium-6 at 10 parts per billion (ppb). About half of the Coachella Valley Water District's (CVWD) wells are impacted by the new regulation of chromium-6, which is a mineral that occurs naturally in portions of the valley's aquifer, the source of your drinking water.

Chromium-6 poses no immediate health risks. The state is regulating chromium-6 because of potential, long-term health concerns based on high doses. Coachella Valley residents can continue to drink, cook with and use tap water as our team identifies and implements the most efficient, cost-effective compliance plan. The tap water supplied by CVWD has always complied with the state standard for all forms of chromium at 50 ppb and the federal standard at 100 ppb.

The Coachella Valley will be one of the most financially impacted areas in the state as a result of this regulation, the first of its type in the nation. While studies are still under way, complying with this regulation is expected to require the most costly public works project in the history of the valley. This could mean service

charge increases for CVWD customers from \$7 to approximately \$50 a month per household.

The CVWD Board of Directors will decide how best to fund the needed improvements and implement gradual rate increases. Customers will have an opportunity to be involved in the district's rate increase process at public workshops, which will be announced at a later date.

The new regulation level, equal to about 10 drops in 10,000 gallons, is expected to go into effect on July 1. CVWD is working with state and local representatives on legislation that would provide a reasonable amount of time to build the needed infrastructure. It is possible that if a compliance period is not granted, for the very first time CVWD will have to notify customers that drinking water does not meet all regulations.

As regulations evolve, CVWD is committed to meeting all new standards set by the state and federal government. CVWD also will continue to keep customers informed about these regulations and their impacts.



Ion exchange technology, like this currently used to remove arsenic and chromium from drinking water, is one possible approach to meeting the new state rule.

## Voters weigh in on board election process

CVWD's Board of Directors approved a map that establishes new boundaries for the district's five divisions.

Voters in the June 2014 Consolidated Primary Election approved Measure D, which changes the manner in which CVWD board members are elected. Instead of being elected at-large by all registered voters within the district boundaries, the board members will be elected only by the voters within their division. Candidates for the board must reside within the boundaries of the division they wish to represent.

Under the new process, the law requires that divisions be drawn based on nearly equal distribution of population.

Previously, the divisions were drawn to be nearly equal in acreage.

CVWD formed an advisory committee of community representatives to help create the new map that could be approved by the Registrar of Voters in time for the November 2014 election. The seats representing divisions 1, 3 and 5 are up for election in November. Directors serve four-year terms.

Across California in recent years, advocates of the by-division process have been questioning whether the at-large election method is in compliance with the California Voting Rights Act of 2001. When local attorneys brought the issue to the attention of CVWD's Board of Directors, the board placed Measure D on the Consolidated Primary Election ballot.

## For more detailed information:

To receive a summary of the district's source water assessments or additional water quality data or clarification, call the district's Water Quality Section at (760) 398-2651.

Complete copies of source water assessments may be viewed at the Coachella Valley Water District, 85-995 Avenue 52, Coachella, CA 92236.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien. También puede llamar al distrito de agua al número de teléfono (760) 398-2651.

## For answers to common drinking water questions

CVWD's brochure, *Tap Water You Can Trust*, answers common questions about tap water including fluoridation, water softening and more.

Order this free publication using the postcard inside this annual review or online at [www.cvwd.org](http://www.cvwd.org)



# 2014 Domestic Water Quality Report

Coachella Valley Water District is committed to delivering high quality drinking water that meets stringent government standards. This annual report documents that the water served to all CVWD water users (obtained from wells drilled into the Coachella Valley's vast groundwater basin) meets state (California Department of Public Health) and federal (U.S. Environmental Protection Agency) drinking water quality standards.

CVWD is tasked with ensuring that drinking water standards are met. Highly trained employees monitor the water systems and collect drinking water samples that are tested at the district's state-certified laboratory. A few specialized tests are performed by other certified laboratories. In addition to the detected constituents listed in the table on pages 8-9, CVWD's Water Quality staff monitors for more than 100 other regulated and unregulated chemicals that are not detected during this monitoring.

CVWD is governed by a locally elected, five-member board of directors who normally meet in public session at 9 a.m., on the second and fourth Tuesdays of each month. Meeting locations rotate between the district's Coachella office at Avenue 52 & Highway 111 and the Steve Robbins Administration Building at 75-515 Hovley Lane East in Palm Desert. Call the district to confirm meeting time, date and location.

## The following report is written and provided in accordance with California Department of Public Health requirements:

While all of CVWD's domestic water supply meets state and federal standards, drinking water supplied to some service areas does contain low levels of naturally occurring arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. All drinking water delivered by CVWD last year, complied with the 10 microgram per liter (ug/L) maximum contaminant level (MCL).

Radon is a naturally occurring, radioactive gas — a byproduct of uranium — that originates underground but is found in the air. Radon moves from the ground into homes primarily through cracks and holes in their foundations. While most radon enters the home through soil, radon from tap water typically is less than two percent of the radon in indoor air.

The U.S. Environmental Protection Agency (USEPA) has determined that breathing radon gas increases an individual's chances of developing lung cancer, and has proposed a MCL of 300 picoCuries per liter (pCi/L) for radon in

drinking water. This proposed standard is far less than the 4,000 pCi/L in water that is equivalent to the radon level found in outdoor air. The radon level in district wells ranges from none detected to 460 pCi/L, significantly lower than that found in the air you breathe.

Nitrate in drinking water at levels above 45 milligrams per liter (mg/L) is a health risk for infants younger than six months old. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask for advice from your health care provider.

Nitrate levels in district wells range from no detection to 39 mg/L, which is below the maximum contaminant level.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

Coachella Valley Water District is responsible for providing high quality drinking water, but cannot control the

variety of materials used in customer plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds before using water for drinking or cooking. You can capture this flushed water in a container and use it for watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

As noted, all drinking water served by CVWD comes from wells. The California Department of Public Health requires water agencies to state, however, “the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.”

“Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater run off and septic systems.

- Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water

is safe to drink, USEPA and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.”

Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. “Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA’s Safe Drinking Water Hotline (1-800-426-4791) or the National Safety Council Radon Hotline (1-800-SOS-RADON).”

Drinking Water Source Water Assessments:

The district has conducted source water assessments that provide information about the vulnerability of district wells to contamination. In 2002, CVWD completed a comprehensive source water assessment that evaluated all groundwater wells supplying the district’s six public water systems. An assessment is performed on each new well added to CVWD’s system.

Groundwater from these district wells are considered vulnerable to activities associated with urban and agricultural uses.

Urban land uses include the following activities: known contaminant plumes, dry cleaners, underground storage tanks, septic systems, automobile gas stations (including historic), automobile repair shops, historic waste dumps/landfills, illegal/unauthorized dumping, sewer collection systems and utility stations’ maintenance areas.

Agricultural land uses include the following activities: irrigation/agricultural wells, irrigated crops, pesticide/fertilizer/petroleum and transfer areas.

The following activities have been associated with detected contaminants: known contaminant plumes, dry cleaners and irrigated crops.

Drinking water supplied by CVWD’s wells to our communities complies with state and federal drinking water quality standards.

## What can I do about warm water coming out of my faucet?

If you experience warm water coming out of your faucet, try running the tap for a short time to clear the warm water within your home. Tip: Use a container to capture the warm water for other uses such as watering plants.

If the temperature does not drop within one minute, it is doubtful that continual flushing will improve the situation.

The best solution is to place a pitcher of tap water in the refrigerator for a ready supply of cold drinking water.

In some rare cases, during extreme conditions, water can come out of the cold water tap as high as 100 degrees.

## Definitions & Abbreviations

**AL or Regulatory Action Level** — The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MCL or Maximum Contaminant Level** — The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to public health goals or maximum contaminant level goals as economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

**MCLG or Maximum Contaminant Level Goal** — Level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

**mg/L** — Milligrams per liter (parts per million). One mg/L is equivalent to 1 second in 11.6 days.

**MRDL or Maximum Residual Disinfectant Level** — The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG or Maximum Residual Disinfectant Level Goal** — The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**N/A** — Not applicable. The government has not set a Public Health Goal, Maximum Contaminant Level Goal or Maximum Contaminant Level for this substance.

**ND** — None detected

**NL or Notification Level** — Health based advisory level established by the California Department of Public Health for chemicals in drinking water that lack maximum contaminant levels (MCLs) as stated by CDPH.

**NTU** — Nephelometric turbidity units (measurement of suspended material)

**pCi/L** — picoCuries per liter. For uranium, one pCi/L is equivalent to one second in 21.1 years.

**PDWS or Primary Drinking Water Standard** — MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirement.

**PHG or Public Health Goal** — Level of a contaminant in drinking water below which there is no known or expected risk to health. Public Health Goals are set by the California Environmental Protection Agency.

**Secondary Drinking Water Standard** — Based on aesthetics, these secondary maximum contaminant levels have monitoring and reporting requirements specified in regulations.

**ug/L** — Micrograms per liter (parts per billion). One ug/L is equivalent to 1 second in 31.7 years.

**uS/cm** — Microsiemens per centimeter

# CVWD 2014 Domestic Water Quality Summary

(Covering the reporting period January - December 2013)

CVWD analyzed more than 16,000 water samples last year to ensure that your drinking water meets the federal and state standards. Every year, the district is required to analyze a select number of these samples for more than 100 regulated and unregulated substances.

This table lists those substances that were detected in the district's three service areas. Gray boxes indicate no substance was detected or existing data is no longer reportable. The data on the chart, which summarizes results of the most recent monitoring completed between 2005 and 2013, shows that CVWD continues to deliver

drinking water that meets the federal and state standards. To read this table, you can compare the detected levels to the Maximum Contaminant Level (MCL) or Maximum Contaminant Level Goal (MCLG). For example, if the detected level is 0.004 mg/L and the MCL is 0.01 mg/L, you would look down

	1	2	3	4
Detected parameter, units	PHG or (MCLG)	Primary or secondary (MCL)	Cove Communities <sup>(1,2)</sup> Range (Average)	
Arsenic, ug/L	0.004	10	ND-16 <sup>(3)</sup> (ND)	
Chloride, mg/L	N/A	(500, 600) <sup>(4)</sup>	7.2-120 (19)	
Chlorine (as Cl <sub>2</sub> ), mg/L <sup>(5)</sup>	MRDLG 4	MRDL 4.0	ND-3.0 (0.3)	
Chromium, ug/L	(100)	50	ND-25 (ND)	
Chromium-6, ug/L <sup>(6)</sup>	0.02	N/A	ND-21 (8.7)	
Copper, mg/L <sup>(7)</sup> [homes tested/ sites exceeding AL]	0.3	AL=1.3	0.11 [51/0]	
Copper, mg/L	N/A	(1.0)	ND-0.2 (ND)	
Fluoride, mg/L	1	2.0	0.2-1.5 (0.6)	
Gross alpha particle activity, pCi/L	(Zero)	15	ND-14 (3.2)	
Haloacetic Acids, ug/L <sup>(5)</sup>	N/A	60	(ND-3.1) ND	
Hardness (as CaCO <sub>3</sub> ), mg/L	N/A	N/A	17-300 (110)	
Iron, ug/L	None	(300)	ND-230 (ND)	
Foaming Agents (MBAS), mg/L	N/A	(0.5)	ND-0.09 (ND)	
Nitrate (as NO <sub>3</sub> ), mg/L	45	45	ND-39 (6.7)	
Odor as threshold, units	None	(3)	ND-1.0 (ND)	
pH, units	N/A	N/A	7.0-9.0 (7.9)	
Sodium, mg/L	N/A	N/A	17-130 (31)	
Specific conductance, uS/cm	N/A	(1,600, 2,200) <sup>(4)</sup>	240-1,100 (380)	
Sulfate, mg/L	N/A	(500, 600) <sup>(4)</sup>	ND-280 (44)	
Total Coliform bacteria, positive samples/month	(0)	more than 5% <sup>(8)</sup> or more than 1 <sup>(9)</sup>	ND-1% (ND)	
Total dissolved solids, mg/L	N/A	(1,000, 1,500) <sup>(4)</sup>	140-700 (240)	
Total trihalomethanes, ug/L <sup>(5)</sup>	N/A	80	ND-11 (8.1)	
Turbidity, NTU	N/A	(5)	ND-0.8 (ND)	
Uranium, pCi/L	0.43	20	ND-14 (4.3)	
Vanadium, ug/L <sup>(6)</sup>	N/A	NL=50	ND-39 (14)	

**Footnotes** (1) Includes the communities of Rancho Mirage, Thousand Palms, Palm Desert, Indian Wells, La Quinta, Mecca, Bombay Beach, North Shore, Hot Mineral Spa, portions of Bermuda Dunes, Cathedral City, Indio, Oasis, Riverside County, Thermal and Valerie Jean.

(2) In 2013, the Mecca, Bombay Beach, North Shore & Hot Mineral Spa service area was consolidated with the Cove Communities service area.

(3) Although an individual sample may exceed the MCL, compliance is based on a running annual average.

(4) Values listed are the upper and short-term consumer acceptance contaminant levels.

(5) The reported average represents the highest running annual average based on distribution system monitoring.

(6) Unregulated contaminant monitoring is required for this substance.

(7) The reported value is the highest value detected.

(8) Systems that do not have a public health goal.

(9) Systems that do not have a public health goal.

at meets state and federal water quality standards.

ole: First, determine in which service area you live (columns 4-7). Then move down the column, detection level of each chemical or other contaminant with the Public Health Goal, Maximum el Goal and Maximum Contaminant Level (columns 2-3).

f you live in La Quinta and want to know the level of fluoride detected in your service area, you the Cove Communities column and stop at the fluoride row. The average fluoride level in that

service area is 0.6 mg/L with the range of results varying between 0.2 mg/L and 1.5 mg/L.

Compare these values to the Maximum Contaminant Level in Column 3. Fluoride levels in this water comply with the Maximum Contaminant Level of 2.0 mg/L. The range can show a level above the Maximum Contaminant Level and still comply with the drinking water standard when compliance is based on average levels found in each water source.

5	6	7
<b>Indio Hills, Sky Valley &amp; areas adjacent to Desert Hot Springs Range (Average)</b>	<b>Desert Shores, Salton Sea Beach &amp; Salton City Range (Average)</b>	<b>Major source(s)</b>
		Erosion of natural deposits
10-26 (16)	250-460 (330)	Leaching from natural deposits
ND-0.8 (0.4)	ND-1.3 (0.3)	Result of drinking water chlorination
17-23 (20)		Erosion of natural deposits
9.1-22 (16)		Erosion of natural deposits
0.14 [22/0]	0.18 [21/0]	Internal corrosion of household plumbing
		Leaching from natural deposits
0.5-0.7 (0.6)	0.6-1.5 (1.1)	Erosion of natural deposits
ND-14 (6.8)	ND-3.9 (ND)	Erosion of natural deposits
2.0		By-product of drinking water chlorination
66-210 (140)	220-400 (300)	Erosion of natural deposits
		Leaching from natural deposits
		Municipal and industrial waste discharges
ND-8.2 (4.6)	4.5-13 (9.8)	Leaching of fertilizer, animal wastes or natural deposits
		Naturally occurring organic materials
8.0-8.2 (8.2)	7.3-8.0 (7.6)	Physical characteristic
57-89 (73)	230-290 (250)	Erosion of natural deposits
530-830 (650)	1,600-2,400 (1,900)	Substances that form ions when in water
160-240 (180)	210-330 (290)	Leaching from natural deposits
		Naturally present in the environment
330-540 (410)	900-1,500 (1,100)	Leaching from natural deposits
14	10	By-product of drinking water chlorination
ND-0.3 (ND)		Leaching from natural deposits
1.9-11 (5.1)	2.4-4.2 (3.0)	Erosion of natural deposits
9.8-28 (18)	24	Erosion of natural deposits

“Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* (a microbial pathogen found in surface water throughout the United States) and other microbial contaminants are available from the **Safe Drinking Water Hotline 1-800-426-4791 or [www.epa.gov/drink/](http://www.epa.gov/drink/)**”

— California Department of Public Health

contaminants are those for which EPA and the California Department of Public Health have not established drinking water standards. The purpose of unregulated contaminants to assist both regulatory agencies in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

values are 90th percentile levels for samples collected from faucets in water user homes.

Collect 40 or more samples per month.

Collect less than 40 samples per month.

## District receives transparency award

In 2014, The Special Districts Leadership Foundation awarded the Coachella Valley Water District its prestigious District Transparency of Excellence.

The certificate is presented to special districts in California that complete all of the foundation's stringent program requirements, in of themselves "designed to promote transparency in (the recipient's) operations and governance to the public and other stakeholders."

To be eligible for certification, a special district must demonstrate the completion of eight essential governance transparency requirements, including completion of ethics training for all board members, properly conducting open and public meetings and the timely filing of documents, such as financial transactions and compensation reports to the State Controller.

In addition, the district's website ([www.cvwd.org](http://www.cvwd.org)) played a big role in CVWD's eligibility since it includes all of the SDLF's mandatory requirements and most of the optional criteria. The district also had to meet outreach and best practice requirements, which included a thorough review by local community leaders of the application and support documentation.

SDLF is an independent, non-profit organization formed to promote good governance and best practices among California's special districts through certification, accreditation and other recognition programs.

The certificate is good for two years, after which time CVWD must reapply to remain current.

## Domestic, sewer improvements remain key focus for district

The Coachella Valley Water District (CVWD) continues to expand and improve domestic water and sewer infrastructure, working with state and federal partners to provide service to rural areas of the county.

One project involved the construction of a drinking water reservoir in Sky Valley. The site contains an existing 21,000-gallon welded steel reservoir, a booster station, and had two 10,000-gallon temporary plastic tanks. The new reservoir was constructed to replace the two 10,000-gallon temporary plastic tanks.

The older reservoir, constructed in 1962, was inspected to identify deficiencies and will be repaired appropriately.

The new reservoir will provide essential emergency, and fire flow storage for the Sky Valley and Indio Hills areas and will allow for future development in these areas.

CVWD also is working with other area water districts to secure funding for projects that the agencies share.

Most recently, the California Department of Water Resources announced an award of \$5.24 million to the Coachella Valley Regional Water Management Group (CVRWVG) for five projects that protect groundwater quality, combat overdraft, and increase access to wastewater sanitation service for

disadvantaged communities (DACs).

The award will fund the following projects and programs:

- Desert Hot Springs DAC Groundwater Quality Protection Project will extend sewer facilities to about 500 parcels.
- Non-Potable Water Use Expansion Program will extend access to non-potable water to numerous golf courses in the central and eastern Coachella Valley.
- Salt and Nutrient Management Plan (SNMP) to comply with the State's Recycled Water Policy.
- San Antonio del Desierto DAC Sewer Extension Project which will extend sewer infrastructure to about 400 residents to a mobile home community in Mecca.
- Torres-Martinez DAC Avenue 64 Water Supply Connection Project which provides funding for engineering to develop a new potable water supply connection.

The CVRWVG is a collaboration of the five public water purveyors in the region: Coachella Valley Water District, Coachella Water Authority, Desert Water Agency, Indio Water Authority, and Mission Springs Water District, that work with stakeholders to identify and prioritize regional water-related needs.



The new reservoir in Sky Valley increases water storage for the area.



Work is underway on a new headworks for one of the district's wastewater reclamation plants. Here, concrete is poured to create the floor of the pumping room. The work was done in the early morning to take advantage of the cooler temperatures.

## Sewer improvements include new headworks projects

Headworks improvements projects at two wastewater reclamation plants at Coachella Valley Water District (CVWD) will improve the efficiency of wastewater treatment.

The purpose of the headworks facility is to remove primarily inorganic material including grit from the incoming wastewater. W. M. Lyles Co. is constructing both projects, in Thermal and North Indio. Each facility will be virtually identical in terms of materials and equipment. The result will be more efficient operations and maintenance.

Another important project this year, was the replacement of 1,400 feet of sewer pipe along Cook Street in Palm Desert.

The project was in response to the discovery of extensive deterioration of a sewer line. CDM Smith Inc., designed

and constructed this project.

Representative samples of the pipe were removed during construction and sent to a laboratory in Pennsylvania to be tested to assist in determining the cause of the deterioration.

In addition, a comprehensive radar study and video survey was conducted along the entire 3.5 miles of the sewer pipeline to determine the extent of damage.

The next phase of the project is scheduled to begin in summer 2014. It will involve refurbishing approximately 3 miles of sewer pipe on Monterey Avenue, Hovley Lane West, Portola Ave, Hovley Lane East, Corporate Way and 42<sup>nd</sup> Avenue. Lane closures on these streets are expected. Updates will be posted at [www.cvwd.org/pdsewer](http://www.cvwd.org/pdsewer).

### Keep medications out of the water system

Everything CVWD customers flush down their toilets and rinse down drains travels to a wastewater treatment plant and, in some cases, is reclaimed and sent to golf courses for irrigation use. Not all compounds and drugs are removed with this treatment process and trace amounts can still be detected.

While there is no evidence that trace amounts from medications pose a risk to human health, it's prudent to control what we put into the wastewater system. Limiting what you put down the drain is the easiest way to start!

### What you can do to help

Throw medicines in the trash after grinding them up and mixing with an undesirable substance, such as coffee grounds or kitty litter, so they are unrecognizable to children or anyone intentionally searching your trash.

### Keep fats, oils and grease out of your pipes

Improperly disposed fats, oils and grease are a common cause of sewer overflows and backups both in the home and throughout the sewer system.

Additionally, they cause expensive damage to CVWD's wastewater reclamation facilities.

### What you can do to help

- Never put grease down sink drains or garbage disposals.
- Scrape hardened grease into the trash can for proper disposal.

## Paying your bill

### Pay online with a credit card

Customers can now view bills and pay them online using a credit card. Visit the Manage My Account section of the website at [www.cvwd.org/service/payment.php](http://www.cvwd.org/service/payment.php).

### Automatic electronic payment

The district also offers the convenience of having your monthly payment automatically deducted from your checking account. Simply complete an Automatic Payment Service Form, available at either office or on our website at [www.cvwd.org/service/payment.php](http://www.cvwd.org/service/payment.php).

### Electronic notification when bill is due

Save paper by enrolling in our electronic notification program and be notified by e-mail when your new bill is available to view online.

### Pay by phone

Using what is known as an interactive voice response (IVR) system, you can make a payment and review account information over the phone. You will need your 12-digit account number, located in the upper right-hand corner of your paper billing statement. Call (760) 391-9600

### Pay by mail

Mailed payments should be sent to P.O. Box 5000, Coachella, CA 92236.

### Pay in person

Drop boxes are available at offices in Palm Desert (75-525 Hovley Lane East) and Coachella (85-995 Avenue 52). The Palm Desert drop box is open 24 hours a day.

## Rate Summary

As of July 1, 2013<sup>(1)</sup>

### Domestic Water Base Rate

Area of service	Monthly charge per 100 cubic feet	Monthly charge 3/4" meter
Rate Area 1 — Majority of the district, except areas noted below	\$1.12	\$7.00
Rate Area 2 — Includes Sky Valley & Indio Hills	\$1.35	\$7.50
Rate Area 3 — Includes east Salton Sea areas of North Shore and Bombay Beach	\$1.64	\$7.50
Rate Area 4 — Includes Salton City, Desert Beach and Desert Shores	\$1.42	\$7.50
Rate Area 5 — Areas outside boundaries of the district, but served by the improvement district	\$1.69	\$17.50

### Tiers

Tier 1: Excellent	90% Base Rate	Customers pay the tier rate for all water used within that tier.
Tier 2: Efficient	Base Rate	
Tier 3: Inefficient	Base Rate x 1.5	
Tier 4: Wasteful	Base Rate x 2	
Tier 5: Excessive	Base Rate x 4	

### Residential Sanitation

Area of service	Monthly charge per dwelling unit
Service Area 80 (includes ID 53, 54, 57, the cities of Palm Desert, Cathedral City, Rancho Mirage and City of Indian Wells)	\$24.50
Service Area 81 (includes area along I-10 from Thousand Palms to Indio)	\$27.65
Service Area 41 (bounded generally by Jackson, Calhoun and Avenues 52 and 56)	\$28.05
La Quinta, PGA West and Mecca	\$29.05
Bombay Beach	\$31.85
North Shore Beach	\$32.40

### Irrigation Water

User category	Charge per acre-foot
Agriculture	\$28.95
Golf courses & other non-agriculture	\$42.15
Groundwater recharge	\$86.25
Construction	\$140.00
Quagga mussel mitigation surcharge	\$5.00
Gate charge, per day	\$11.50

<sup>(1)</sup> This table represents water rates for the 2013-14 fiscal year. At the time this publication was printed, the water district's Board of Directors had not yet approved the 2014-15 budget. However, no rate increases were being proposed. For confirmation of the most up-to-date rates, call CVWD at (760) 398-2651 or visit [www.cvwd.org/service/rates.php](http://www.cvwd.org/service/rates.php).



A project to bring more Colorado River water to the Oasis area will enable farmers to convert from groundwater to imported water to irrigate their crops, thereby reducing demand on the aquifer and helping to meet CVWD's goals to eliminate overdraft.

## Oasis project provides new irrigation options for area farmers

Progress continues on the planned Oasis Area Irrigation System Expansion Project, which is expected to save 30,000 acre-feet per of groundwater annually.

The Coachella Valley Water District (CVWD) has already initiated the steps necessary for the design and environmental documentation to move forward with the project.

Once complete, the expanded irrigation system will provide up to 30,000 acre-feet of Colorado River water to farmers in Oasis who currently rely on groundwater.

In addition, some farmers already using canal water will benefit from the project because it will help provide more efficient and reliable year-round deliveries.

Features of the project designed to reduce aquifer overdraft, include:

- Additional operational reservoir storage.
- Replacement of several

inefficient pump stations.

- Elimination of the Oasis Tower, which has operational restrictions.

Converting irrigation from groundwater to canal water pumping has the same effect as groundwater replenishment since every gallon of Colorado River water used saves a gallon of water from being pumped from the aquifer.

Cost of the Oasis project is estimated to be approximately \$40 million.

A land-based assessment will be used to fund capital infrastructure for the project such as the construction of pump stations, reservoirs, and over 20 miles of new pipeline.

The operation and maintenance costs of the facilities may be recovered through the establishment of a rate to be charged for the water on a per acre-foot basis.

The rate structure will be comparable to the existing cost to pump groundwater.

### New online ap aides canal water orders

A new canal water web application, available at [www.cvwd.org](http://www.cvwd.org), enables customers to place orders and monitor consumptive history from the field.

The application is designed to provide customers with greater flexibility in ordering, with instant access to a history of water consumption, detailed transaction data and other information.

An instructional video walks the view through the use of the app step-by-step.

To place an order online, visit [www.cvwd.org](http://www.cvwd.org) and use the Customer Service menu at the top of the page to access "Canal Water Orders System."

### CVWD recognized for budget presentation

The Government Finance Officers Association of the United States and Canada recently announced that Coachella Valley Water District has received the association's Distinguished Budget Presentation award for its 2013–2014 Coachella Valley Water District Operating Budget.

In order to qualify for the award, CVWD had to satisfy nationally recognized guidelines for effective budget presentation. These guidelines are designed to assess how well an entity's budget serves as a policy document, financial plan, operations guide and communication device.

A copy of the budget document is available for review online at [www.cvwd.org/news/publicinfo.php](http://www.cvwd.org/news/publicinfo.php).



## California agriculture

California's 80,500 farms and ranches received \$42.6 billion for their output in 2012. Once again, California was the highest-ranking state in terms of cash farm receipts.

California accounted for 15 percent of national receipts for crops and 7.1 percent of the US revenue for livestock and livestock products. Exports totaled \$18.18 billion in value. That was an 8 percent increase over the previous year.

California produces nearly half of US-grown fruits, nuts and vegetables.

Here are California's top-ten valued commodities for 2012:

Milk — \$6.9 billion

Grapes — \$4.449 billion

Almonds — \$4.347 billion

Lettuce — \$1.448 billion

Walnuts — \$1.349 billion

Hay — \$1.237 billion

Tomatoes — \$1.170 billion

Strawberries — \$1.939 billion

Cattle, Calves — \$3.299 billion

Nursery plants — \$3.543 billion

Source: California Department of Food & Agriculture

# Crop Report

(Covering the reporting period January - December 2013)

Crop production on Coachella Valley land irrigated with Colorado River water

**Value of year's production: \$668,745,364**

**Total acreage irrigated (includes double cropping & planted but non-bearing: 65,745**

**Average gross value per acre: \$10,172**

Crop	Acreage	Yield in tons	Value per acre	Total value
<b>Fruit</b>	<b>24,477</b>	<b>230,630</b>	<b>\$12,255</b>	<b>\$299,959,399</b>
Dates	7,600	23,940	\$5,985	\$45,486,000
Figs	159	1,336	\$7,700	\$1,224,300
Grapes (table)	7,992	63,009	\$16,302	\$130,288,461
Grapefruit	894	13,481	\$8,427	\$7,533,291
Lemons & Limes	4,014	60,326	\$14,080	\$56,516,317
Mangos	118	902	\$13,966	\$1,647,979
Olives	83	500	\$15,144	\$1,256,990
Oranges & Tangerines	2,096	14,525	\$6,631	\$13,899,240
Peaches	106	532	\$18,240	\$1,933,440
Strawberries	580	12,705	\$47,463	\$27,528,540
Watermelon	819	39,312	\$15,312	\$12,540,528
Misc. fruit	16	62	\$6,520	\$104,313
<b>Vegetables</b>	<b>26,764</b>	<b>547,706</b>	<b>\$9,487</b>	<b>\$253,904,897</b>
Artichokes	579	4,341	\$9,617	\$5,568,243
Basil	219	4,440	\$5,691	\$1,246,250
Green Beans	1,075	7,359	\$8,822	\$9,483,177
Bok Choy	391	4,193	\$6,825	\$2,668,575
Broccoli	993	6,749	\$5,289	\$5,252,424
Cabbage	14	239	\$5,041	\$70,568
Carrots	3,141	118,416	\$3,741	\$11,750,390
Cauliflower	1,125	10,298	\$8,549	\$9,617,670
Celery	574	20,836	\$15,645	\$8,980,402
Corn (sweet)	1,995	19,122	\$4,511	\$9,000,123
Eggplant	396	6,490	\$28,945	\$11,462,117
Greens (includes kale)	168	2,079	\$8,018	\$1,347,004
Lettuce	3,823	62,554	\$10,855	\$41,500,003
Okra	1,006	4,024	\$3,800	\$3,822,800
Onions (green)	247	12,310	\$5,696	\$1,406,912
Oriental Vegetables	2,306	25,149	\$9,379	\$21,628,343
Peppers (bell & chili)	4,642	82,721	\$17,357	\$80,569,708
Potatoes	1,402	10,445	\$2,384	\$3,342,368
Radishes	334	5,892	\$5,685	\$1,898,830
Spices	1,135	23,009	\$5,691	\$6,458,876
Spinach	725	12,485	\$14,384	\$10,428,719
Squash	252	100,548	\$7,609	\$1,917,450
Tomatoes	222	4,007	\$20,198	\$4,483,945
<b>Forage</b>	<b>2,546</b>	<b>9,071</b>	<b>\$648</b>	<b>\$1,649,399</b>
Alfalfa hay	620	4,340	\$1,820	\$1,128,400
Irrigated pasture <sup>(1)</sup>	1,586	--	\$140	\$222,040
Sudan grass	260	1,300	\$750	\$195,000
Corn	80	3,431	\$1,299	\$103,959
<b>Nursery</b>	<b>1,487</b>	<b>--</b>	<b>\$22,195</b>	<b>\$33,003,935</b>
<b>Duck Ponds</b>	<b>757</b>	<b>2</b>	<b>\$48</b>	<b>\$36,639</b>
<b>Fish Farms</b>	<b>157</b>	<b>799</b>	<b>\$28,282</b>	<b>\$4,440,198</b>
<b>Golf Courses</b>	<b>5,637</b>	<b>591,885</b>	<b>\$10,734</b>	<b>\$60,508,404</b>
<b>Polo Fields</b>	<b>460</b>	<b>48,300</b>	<b>\$10,734</b>	<b>\$4,937,709</b>
<b>Turf Grass</b>	<b>960</b>	<b>100,800</b>	<b>\$10,734</b>	<b>\$10,304,784</b>

All financial figures are rounded off to the nearest dollar. Crop categories are as established by the Bureau of Reclamation.

<sup>(1)</sup>Yield is in animal units per month (AUM)

# Stormwater improvements continue to protect valley infrastructure

The Coachella Valley Water District (CVWD) is in the final development stages of a series of Stormwater Master Plans. The plans provide guidance to CVWD, Riverside County and affected cities for flood management needs in the future. The studies include:

**Thousand Palms Flood Control Project (TPFCP)** — When constructed, the TPFCP will intercept floods from Indio Hills and Thousand Palms Canyon and convey them through a series of levees and channels to the southern entrance of the existing the Sun City Palm Desert flood control system.

**North Indio Regional Flood Control Channel and the East Side Dike** — This project is currently in the design phase and will collect flood flows from the outlets of the Sun City Palm Desert flood channels and convey them to the Sun City Shadow Hills flood control system and ultimately to the Coachella Valley Stormwater Channel.

CVWD has also started the second phase of flood protection for North Indio which consists of certifying the Eastside Dike through the Federal Emergency Management Agency as a regional flood control facility.

**Oasis Area Stormwater Master Plan** — The Oasis area is exposed to flooding from alluvial fans in the Santa Rosa Mountains, the stormwater channel and valley floor drainage.

CVWD's master plan recommends three regional stormwater facilities that will intercept and convey floods from the

fans to the Salton Sea or the Coachella Valley Stormwater Channel.

## **Mecca/North Shore Area**

**Stormwater Master Plan** — Mecca/North Shore is exposed to flooding from the stormwater channel and local flooding from valley floor drainage downstream of the Eastside Dike. The master plan recommends improvements to the stormwater and upgrades to existing stormwater facilities to convey flood flows to the channel or the Salton Sea.

**North Cathedral City Stormwater Master Plan** — Flood flows from Morongo Wash and Long and Wide canyons combine near north Cathedral City and then flow southeast along the Interstate 10 and Union Pacific Railroad corridor. CVWD's master plan addresses severe flooding by collecting the combined flood waters from Morongo Wash and Long and Wide canyons and diverting them to the Whitewater River Stormwater Channel with a new bridge under I-10 and other flood control facilities.

**FEMA Levee Certification/Accreditation Efforts** — Due to changes in FEMA's mapping procedures, some of CVWD's flood conveyance facilities were identified as "Provisionally Accredited Levees."

To maintain the flood protection benefits of these facilities under the National Flood Insurance Program, CVWD has completed the hydraulic studies to comply with FEMA certification requirements.



## **Did you know?**

For much of its history, protection of life and property through regional stormwater facilities has been an important part of the Coachella Valley Water District.

A stormwater district predated CVWD by about five years but was assimilated by the water district in the mid-1930s.

CVWD's stormwater system is composed of 134 miles of flood protection facilities throughout the Coachella Valley.

The backbone of CVWD's flood protection is the 49-mile stormwater channel that conveys rain and snow melt from Whitewater to the Salton Sea. This channel, often referred to as "the wash," is actually the Whitewater River's riverbed. It isn't often thought of as a riverbed, because it's dry most days of the year.

This channel is named the Whitewater River Stormwater Channel to the west of Washington Street and the Coachella Valley Stormwater Channel to the east.

Occasionally, golf courses or roads, may be built within storm protection facilities. However, developers and cities do so knowing that they are building in a river bed and that the facility's main purpose is to protect life and property from flood flows.



Tropical storm Ivo brought a deluge of rain to the Coachella Valley in August 2013, another reminder of the importance of stormwater protection in the desert.

## Responding to a boil order notice:

### Bottled water

In the unlikely event that CVWD's water system is compromised, you could be advised to not use tap water. Your first choice for replacing tap water for drinking and cooking should be bottled water. Everyone should include in their emergency supply kit a 7-day supply of bottled water (at least 1 gallon of water per person per day, plus extra water for pets). You can purchase commercially bottled water or store your own.

### Boiled water

If you don't have bottled water, you should use boiled tap water. Boiling water will kill most types of disease-causing organisms. If the water is unusually cloudy, murky or colored, filter it first through a clean cloth or allow it to settle and draw off the clear water for boiling. Then, bring to a rolling boil and leave for one minute.

### Bleached water

If you are unable to boil water, your next best choice is to disinfect it with household bleach. Bleach will kill some (but not all) types of disease-causing organisms.

If the water is unusually cloudy, murky or colored, filter it first through a clean cloth or allow it to settle and draw off the clear water for disinfection.

Then, add 1/8 teaspoon (or 8 drops) of regular, unscented liquid household bleach for each gallon of water, stir well and let it stand for 30 minutes before using. Store disinfected water in clean containers with covers.

**Never use** scented, powdered or swimming pool bleach. These products may contain dangerous amounts of chemicals not intended for consumption. A faint chlorine smell is normal.

# Emergency Preparedness & Drinking Water

## How do I know if my tap water can be used for drinking and cooking?

In the event of a disaster, CVWD may issue a boil water notice as a precautionary measure if water quality is in doubt. CVWD will inspect and test the water system. If the test results are unacceptable, a boil water notice will be issued and remain in place until the problem is located and solved, and the water system tests are acceptable. Notification will be made through the media or direct contact and door hangers. CVWD's web site ([www.cvwd.org](http://www.cvwd.org)) and posted fliers in public spaces may also be used.

## Is boiled tap water always safe to use?

It is possible that following a natural disaster, you will be notified that the tap water will need to be boiled before use for drinking and cooking. However, it is possible for tap water to be contaminated with a chemical that is not safe to consume even after boiling and may even be a risk during bathing. In this unlikely event, you will receive specific notification to not use the tap water for any purpose.

Your first choice for replacing tap water for drinking and cooking should be bottled water. Everyone should include in their emergency supply kit a 7-day supply of bottled water (at least 1 gallon of water per person per day, plus extra water for pets). Your next best choice is to disinfect the tap water with household bleach.

## Can I use the water inside my water heater?

While bottled water is preferred, the water in your water heater can be used for drinking and cooking, provided that the water heater remains upright and you turn off the main water valve to your home immediately after the disaster occurs. To access this water, turn off the heating element and open the drain faucet at the bottom of the water heater. To start the water flowing, close the water intake valve at the top of the tank and open a hot water faucet in the home.

When CVWD announces that you can resume normal use of your tap water, don't forget to refill the water heater before turning on the heating element.

## Turn off sprinklers

A disaster may result in reduced water pressure and limited water supply, caused by leaks in the distribution system or by wells temporarily out of service. If this happens, it will be important to restrict water use to drinking, cooking and other emergency purposes, such as fire suppression.

Please turn off your irrigation sprinklers so you aren't wasting what may be a limited supply on non-essential uses.



CVWD's brochure, *Emergency Preparedness & Drinking Water*, is an excellent reference for preparing and responding to an emergency. It is printed in both English and Spanish.

A free copy can be printed from the website at [www.cvwd.org/news/publications.php](http://www.cvwd.org/news/publications.php). You also can order a copy by using the postcard inside this *Annual Review*.

In the event of a natural disaster, such as an earthquake or severe flooding, Coachella Valley Water District's water delivery system could be compromised and you could be advised to not use tap water for any purpose or to boil the water before using it for drinking and cooking. Store this brochure with your emergency preparedness supplies to help guide you during such an event.

# By the Numbers

(covering the reporting period January - December 2013)

**Coachella Valley Water District** is a local government agency formed in 1918 by the registered voters within the district.

**Governing board:** Five directors, representing five divisions and elected to four-year terms.

**Fields of service:** Domestic water supply, treatment and distribution; wastewater collection and treatment; recycled water distribution; regional stormwater/flood protection; irrigation water importation and distribution; irrigation drainage collection; groundwater management and promotion of water conservation.

**Property valuation:** Property within CVWD boundaries had a total combined assessed value in 2013 of \$51,440,726,417 as fixed by Riverside and Imperial County assessors and state officials. This figure is used to determine property tax funding for the district.

## General Information

Employees	493
Total service area	639,857 acres

## Domestic Water

### Service information

Population served	304,701
Active accounts	108,050
Average daily demand	92.4 mgd
Total water delivered	103,552 af

### System information

Active wells	96
Total well capacity	240 mgd
Distribution reservoirs	60
Storage capacity	135 mg
Distribution piping system	1,993 miles

## Canal Water

### Service information

Irrigable acres for service	75,144
Active accounts	1,224
Total water delivered	274,399 af
Average daily demand	760 af
Maximum daily demand	1,361 af

### System information

Reservoirs	2
Storage capacity	1,301 af
Distribution system	485 miles
Pumping plants	16
Length of canal	123 miles

## Agricultural Drainage

Total on-farm drains	2,298 miles
Acreage with farm drains	37,425
District open drains	21 miles
District pipe drains	166 miles

## Wastewater

### Service information

Population served	270,686
Active accounts	92,774
Average daily flow	17.466 mgd

### System information

Wastewater reclamation plants	6
Total daily plant capacity	33.5 mgd
Collection piping system	1,095 miles

## Recycled Water

### Service information

Active accounts	18
Average daily flow	8.14 mgd

### System information

Wastewater reclamation plants producing recycled water	3
Total daily capacity	18 mgd
Distribution piping system	26.5 miles

## Groundwater Management

(In cooperation with Desert Water Agency)

Replenishment facilities	4
Replenishment from imported water	64,190 af
Imported supply since 1973	3,227,298 af

## Stormwater Protection

**Service area** 381,479 acres

### System information

Number of stormwater channels	16
Length of Whitewater River/ Coachella Stormwater Channel	49 miles
Length of all regional flood protection facilities	134 miles

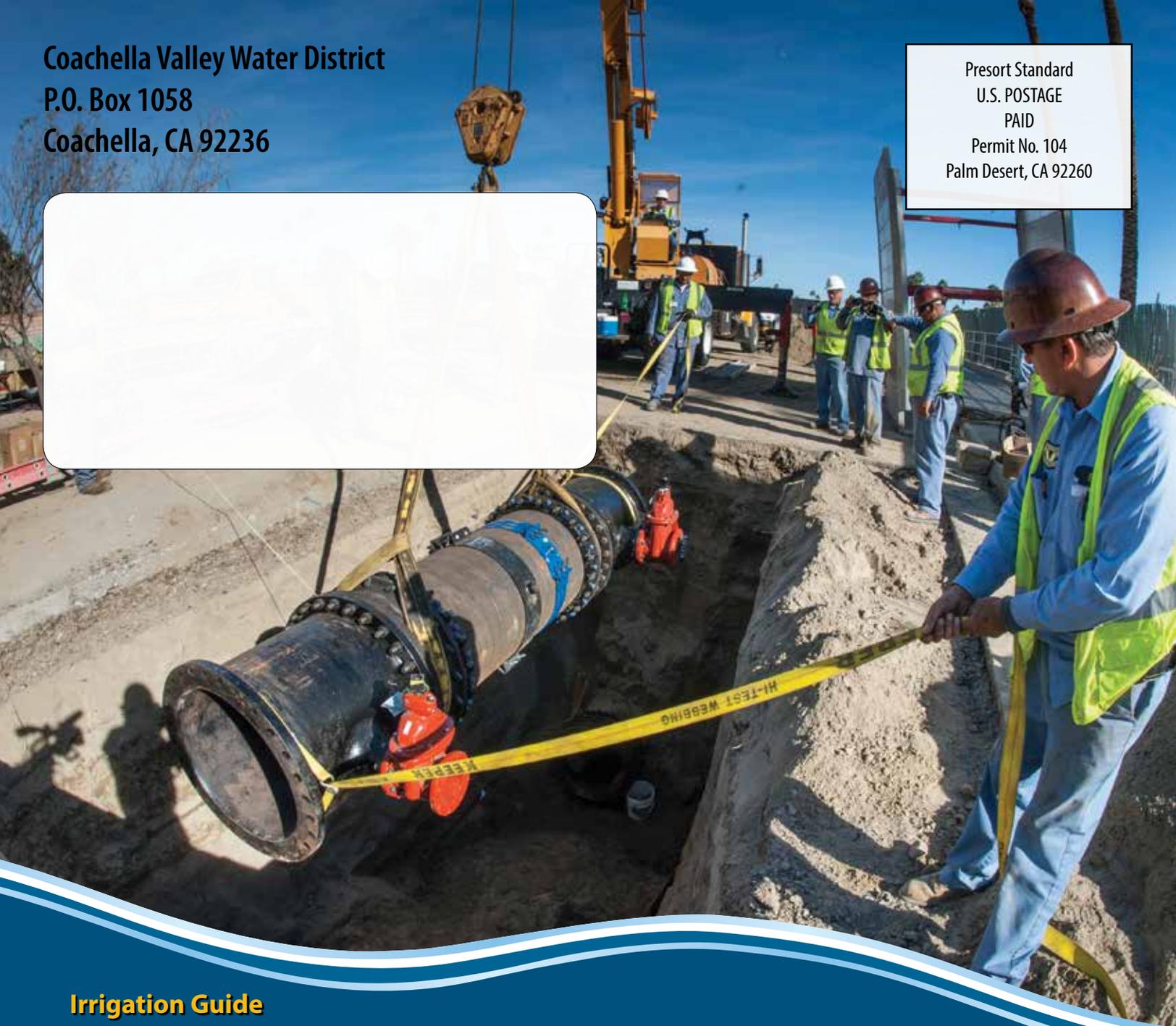
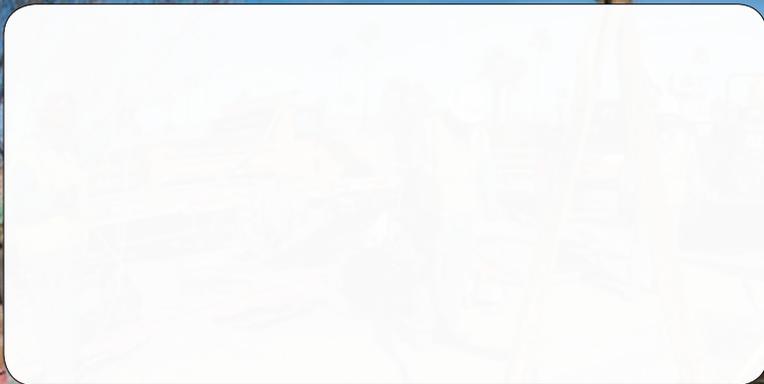
**af** = acre-feet. An acre-foot of water is equal to 325,851 gallons, or enough water to cover one acre of land one foot deep.

**mgd** = million gallons per day.



Coachella Valley Water District  
P.O. Box 1058  
Coachella, CA 92236

Presort Standard  
U.S. POSTAGE  
PAID  
Permit No. 104  
Palm Desert, CA 92260



## Irrigation Guide

If you don't have a self-adjusting irrigation timer, use this guide to determine the approximate amount of water your turf grass needs each month. Gradually reduce the amount of water to find an adequate amount for your situation without being wasteful.

This guide has been adjusted for California's current drought conditions:

### January

3 min/day spray heads & 7 min/day rotary

### February

5 min/day spray heads & 13 min/day rotary

### March

7 min/day spray heads & 18 min/day rotary

### April

10 min/day spray heads & 22 min/day rotary

### May

12 min/day spray heads & 27 min/day rotary

### June

14 min/day spray heads & 30 min/day rotary

### July

13 min/day spray heads & 30 min/day rotary

### August

12 min/day spray heads & 27 min/day rotary

### September

10 min/day spray heads & 22 min/day rotary

### October

7 min/day spray heads & 14 min/day rotary

### November

4 min/day spray heads & 10 min/day rotary

### December

3 min/day spray heads & 6 min/day rotary

When there's measurable rain, turn your sprinkler system off and keep it off until the surface of the ground has dried!