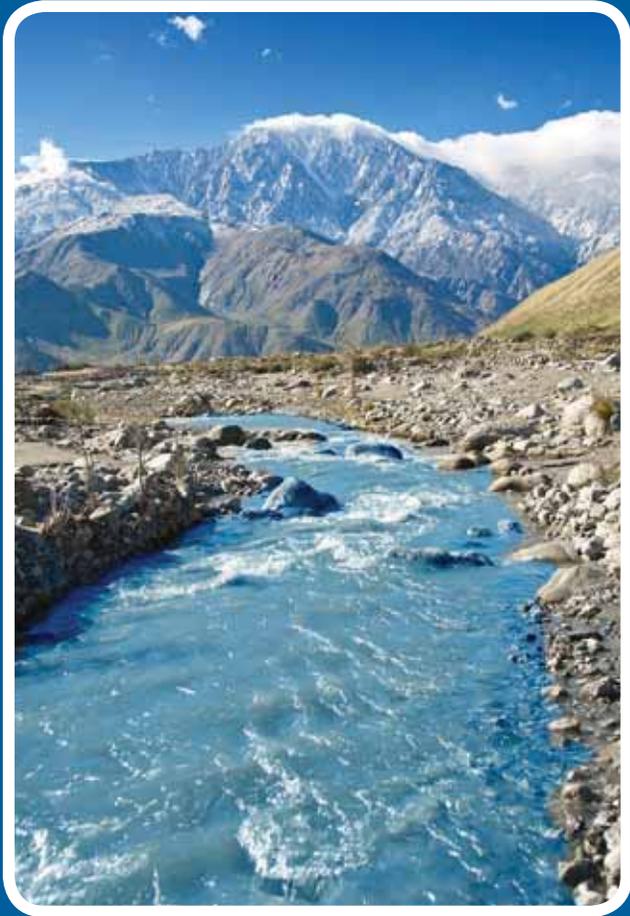


Coachella Valley Water District

2008-09 Annual Review & Water Quality Report



Making every drop count since 1918.

The Coachella Valley Water District is a government agency run by a five-member Board of Directors, elected at-large 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. in Forbes Auditorium, at CVWD's Coachella office.

Board of Directors

Patricia "Corky" Larson
President, Division 2

Peter Nelson
Vice president, Division 4

John "Jack" McFadden
Director, Division 1

Tellis Codekas
Director, Division 3

Russell Kitahara
Director, Division 5

Senior Administration

Steve Robbins
General Manager-Chief Engineer

Dan Parks
Assistant General Manager

Julia Hernandez
Board Secretary

Department Heads

Raul Aguirre
Director of Service

Amy Ammons
Director of Finance

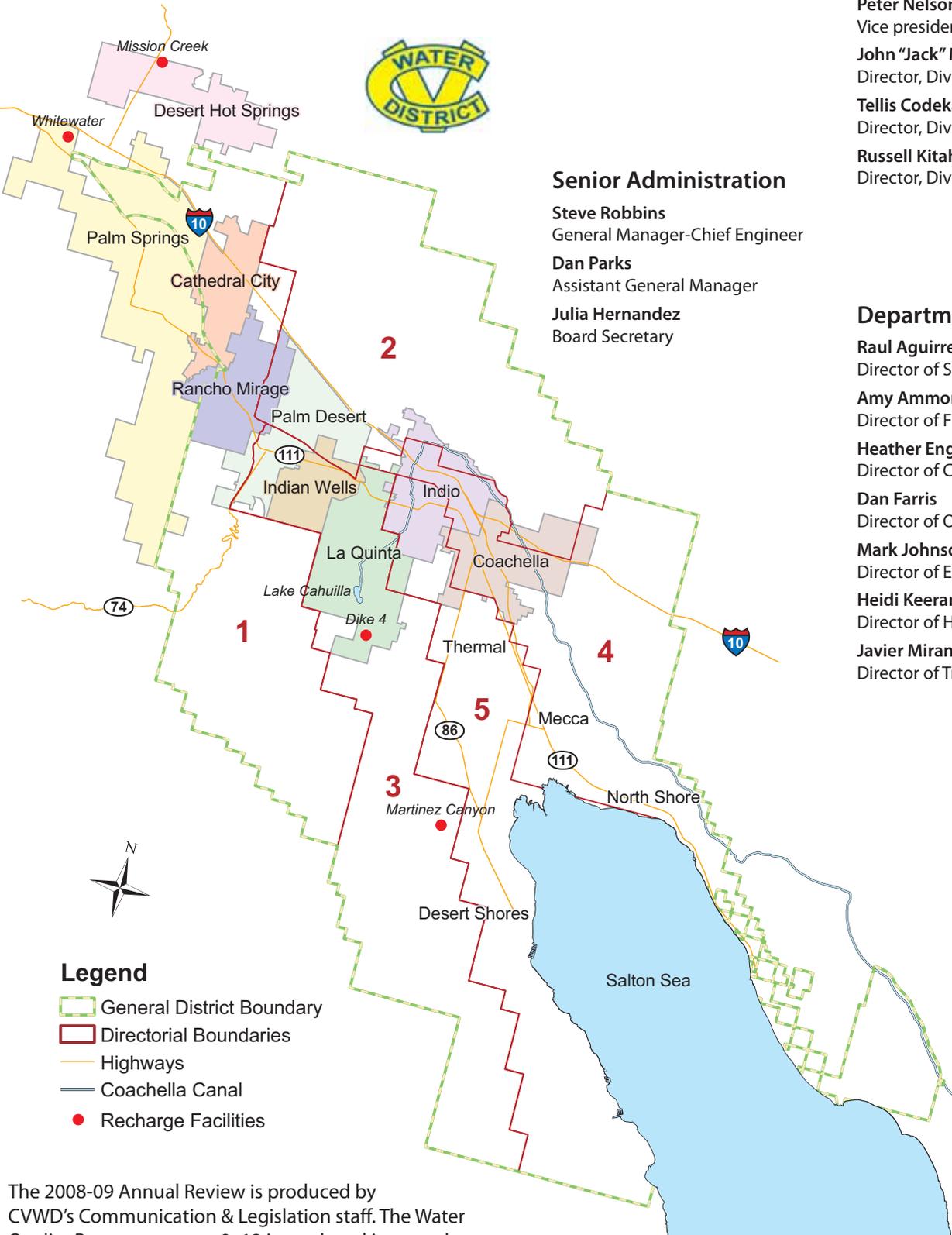
Heather Engel
Director of Communication & Legislation

Dan Farris
Director of Operations

Mark Johnson
Director of Engineering

Heidi Keeran
Director of Human Resources

Javier Miranda
Director of Trades & Support



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Coachella, CA 92236

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Coachella, CA 92236

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Palm Desert
85-995 Avenue 52,
Coachella

Main switchboard
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Job hot line
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Weather hot line
(760) 398-7211

Fax (760) 398-3711

Web site www.cvwd.org

The 2008-09 Annual Review is produced by CVWD's Communication & Legislation staff. The Water Quality Report on pages 9-13 is produced in accordance with state law and mailed to all bill payers and registered voters within the general district boundary. This publication costs approximately 41 cents per issue to print and mail.

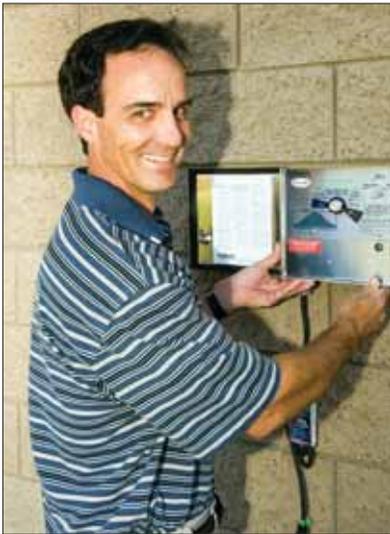
CVWD's 524 employees provide dedicated and friendly service throughout the district's 1,000 square-mile service area.

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

We are proud to serve the Coachella Valley and achieve this mission daily.



Top: David Ochoa, Chris Ellis and Fernando Martinez make up a domestic construction crew.



Above left: Brent Stewart, an 18-year employee, installs a Smart Controller.



Above right: Frank Ferratt, a 35-year employee, is the crew chief for the meter readers.



Right: Ofelia Navarro, a 12-year employee, is one of CVWD's courteous customer service representatives.

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CVWD is a partner in the Environmental Protection Agency's WaterSense program and the Association of California Water Agencies' Save Our Water campaign.

General Manager's Message

The State of California is experiencing a two-pronged drought. In regards to climate, we are feeling the effects of what many are predicting will be the most severe drought in recorded history. On the other hand, we are also affected by a regulatory drought that is severely limiting the amount of water available from the State Water Project.

I'd like to explain how both droughts impact the Coachella Valley and how CVWD is working to combat the negative effects to ensure a long-term, reliable source of water for generations to come.

Challenges

In practicality, the desert is always in a drought. Luckily, unlike many other parts of the state, we don't rely on rain water to naturally fill man-made lakes for drinking water. Our reservoir of drinking water is a massive aquifer. The amount of natural recharge to our aquifer from rain and snow melt is minimal, averaging 62,700 acre-feet per year.

Also unlike most of the state, we are fortunate to have multiple sources of water, including Colorado River water to meet most of our agricultural needs. But the Colorado River Basin is also suffering from several years of drought. So far, we have been able to receive what water we need from that source, but Lake Powell, Lake Mead and other reservoirs on the river are very low.

While we in the Coachella Valley have an excellent groundwater basin to draw from that can sustain us through several years of drought, both Coachella Valley Water District and Desert Water Agency are State Water Project contractors. We actively import water to help offset the amount of water being used by the growing population.

That brings us to the regulatory drought.

Over the years, we've increased our entitlement of imported water with the goal of recharging the same amount or more water than what is taken out of the aquifer each year. Legal entanglements surrounding the Sacramento Bay Delta have resulted in contractors only receiving 40% of their allocation this year.

Without sufficient groundwater replenishment, the Coachella Valley faces potential negative effects of overdraft, including subsidence, diminished water quality and permanently reduced storage space.

Good news

The good news is that CVWD hit a major milestone this past year on two of the most significant groundwater management projects in the district's history.

This spring, we completed the first phase of the Mid-Valley Pipeline. This \$75 million project — slated for completion by 2015 — will expand the availability of non-potable water to up to 50 golf courses that currently use primarily groundwater. This will ultimately save 50,000 acre-feet of groundwater annually. *(More details page 16)*

Our newest full-scale groundwater recharge facility is expected to go into operation this summer, enabling the district to replenish the eastern Coachella Valley's aquifer with up to an additional 40,000 acre-feet annually. This amount of water is equal to what is used each year by about 85,000 residents. *(More details next page)*

In 2009, the district also implemented a tiered rate structure, which has been a proven tool for discouraging water waste. Other water districts that have implemented tiered rate systems have seen water use decline by an average of 20-35%. *(More details page 8)*

I'm confident the new rate structure will be successful here and help us meet the governor's call for 20% voluntary reduction in water use. Meeting the voluntary goal is the best way to avoid mandatory water restrictions or rationing.

Many who visit the Coachella Valley, with our lush green recreational areas, perceive us as water wasters — especially when they see water in streets and gutters. The time to stop wasting water is long overdue. We must do our part to help ourselves and our families, friends and neighbors throughout the state get through these droughts.

With expanded groundwater recharge, recycling and conservation programs, the district is making significant strides. If water users help by embracing voluntary reductions now, the Coachella Valley will be able to avoid mandatory restrictions or rationing and help others in the state get through this crisis.

Sincerely,



Steve Robbins,
General Manager-Chief Engineer
Coachella Valley Water District

Groundwater Management

Newest recharge facility will reduce overdraft

The Coachella Valley Water District's newest full-scale groundwater recharge facility is expected to go into operation in summer 2009.

The facility will allow the district to replenish the eastern Coachella Valley's aquifer with up to an additional 40,000 acre-feet annually. This amount of water is equal to what is used each year by about 35,000 households. The recharge effort will help alleviate the overdraft of groundwater supplies throughout the eastern valley.

"This is a significant milestone in the district's ongoing effort to ensure that a reliable supply of groundwater will continue to be available, across the entire valley, now and for many generations to come," said Director of Engineering Mark Johnson.

Representatives from all levels of government, other water agencies, agriculture and business were among those who attended a ground-breaking

ceremony for the Dike 4 Groundwater Recharge Facility in August 2008.

Construction of 39 recharge basins covering nearly half the project's 163 acres took less than a year to complete.

The facility is located west of Monroe Street in La Quinta. It takes advantage of existing pipes currently used to deliver Colorado River water to farmland from Lake Cahuilla, at the terminus of the Coachella Canal. With a new pumping station, canal water at Lake Cahuilla can be sent to the facility.

Cost of the project is estimated at \$43 million, including construction of the pumping plant and facility, as well as land acquisition.

Replenishment began on a pilot basis in 1997; through last year nearly 29,000 acre-feet had been recharged.

This is one of four facilities used by CVWD to replenish the aquifer.

The Martinez Canyon pilot recharge facility, located further south

near Avenue 72, went into operation in 2005, with replenishment exceeding 3,210 acre-feet in 2008. Long-term plans call for this to become a full-scale facility in approximately 2014.

"Total overdraft of the aquifer east of Washington Street reached 4.4 million acre-feet at the end of 2008, which makes these two facilities all the more important to the future of that end of valley," Johnson said.

In the west valley, CVWD and Desert Water Agency have been jointly recharging at Windy Point for 35 years with their entitlements to State Water Project water. The two agencies began additional replenishment at Mission Creek about seven years ago.

Total overdraft of the aquifer in the west part of the valley is estimated at nearly one million acre-feet.

Since 1973, west valley facilities have replenished more than 2 million acre-feet of imported water.

Groundwater facts

395,207 af — Amount of groundwater used in the Coachella Valley in 2008

62,700 af — Average annual amount of water naturally replenished by rain and snow melt

69,201 af — Average annual amount of imported water replenished by CVWD and DWA

2.2 million af — Water replenished by CVWD and DWA since 1973

5,462,261 af — Estimated cumulative overdraft

39 million af — Estimated capacity of Coachella Valley's groundwater basin

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



General Manager-Chief Engineer Steve Robbins is interviewed by the media following the ground-breaking ceremony for the Dike 4 Groundwater Recharge Facility. The pilot facility is in the background.

These groundwater maps show the anticipated benefit of recharge at the new Groundwater Recharge Facility.

By the year 2040, groundwater levels in La Quinta will be 30-105 feet higher than they would have been without recharge at the facility. In Indio, groundwater levels will be 25-55 feet higher than they would have been without recharge.

CVWD conducted extensive scientific studies before concluding that the facility would prove a suitable location for effective aquifer recharge.

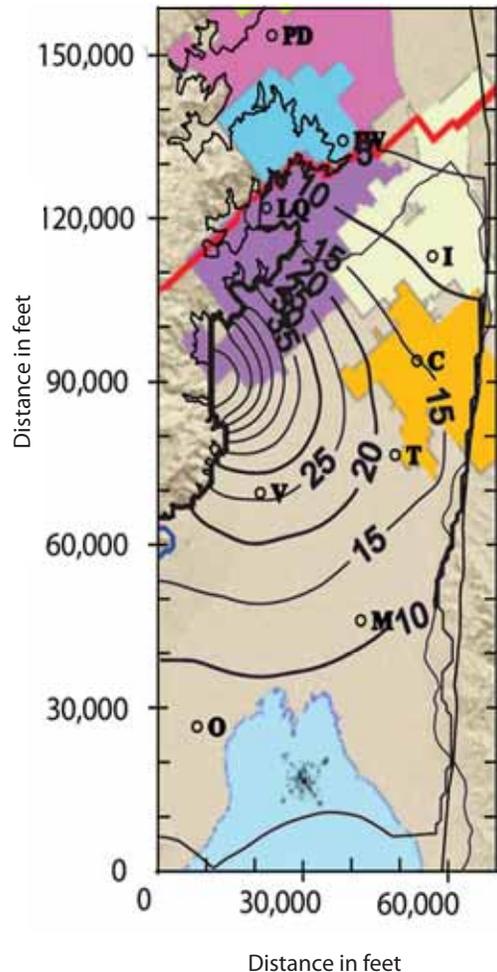
Legend

— Approximate boundary between upper and lower portions of the aquifer

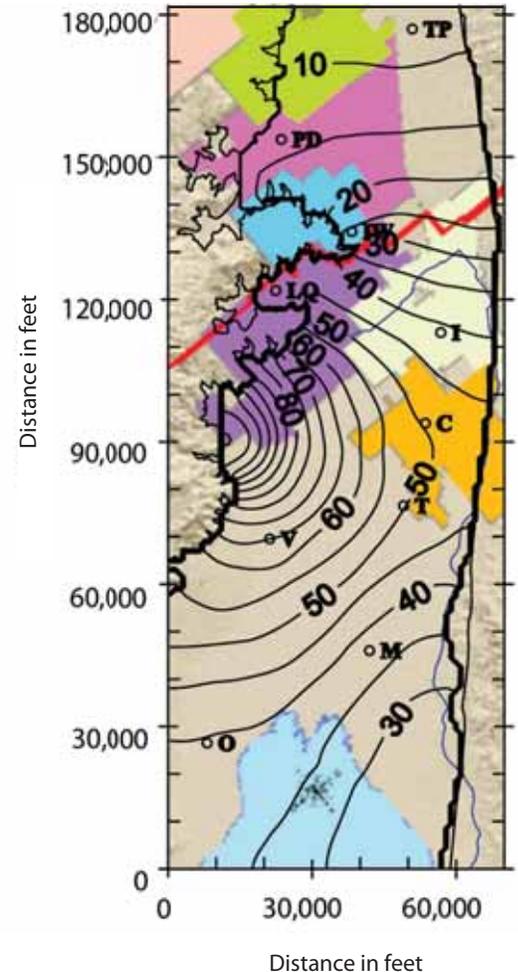
Cities

- Coachella
- Indian Wells
- Indio
- La Quinta
- Palm Desert
- Rancho Mirage

Projected benefit to groundwater elevation (in feet) due to recharge at Dike 4 year 2015



Projected benefit to groundwater elevation (in feet) due to recharge at Dike 4 year 2040



Plan will offer blueprint for wise water management

CVWD is in the process of updating its *Coachella Valley Water Management Plan*, a 35-year blueprint for wise water management. First adopted in 2002, the plan must be updated periodically to reflect new population figures, conservation programs and changes in the planning environment.

The plan is the basis for all of the water district's efforts to preserve the valley's water resources. It calls for a multifaceted approach including: water conservation by all users; increased imported water supply from the Coachella Canal and State Water Project; groundwater recharge; and increased use of recycled water and other nonpotable sources for irrigation instead of groundwater.

Uncertainty surrounding CVWD's imported water supply from the State Water Project delayed the plan's update process. It is now being finalized and expected to go through the environmental review process this fall. It could

be completed as early as spring 2010.

The updated plan will include projected groundwater levels, water demands and supplies through 2040.

Separate from that process, the Coachella Valley's five public, domestic water purveyors joined forces in 2008 to create the Coachella Valley Regional Water Management Group with the intended purpose of creating an *Integrated Regional Water Management Plan*. Such a plan is required to receive state grant funding.

The group is comprised of CVWD, Desert Water Agency, Mission Springs Water District, Indio Water Authority and City of Coachella. After more than a year of collaboration, the group submitted a draft document to the California Department of Water Resources that outlines the group's structure and planning area boundaries.

Next, stakeholder input will be solicited before starting work on the *Integrated Regional Water Management Plan*.

Judge restricts imported water supply; hinders valley's recharge efforts

The region's tremendous residential and recreational growth in recent decades has made the Coachella Valley increasingly dependent upon imported water. While the district's entitlement to Colorado River water appears safe even during a sustained drought, recent court decisions have seriously reduced the reliability of water from the State Water Project (SWP).

The district's entitlement to SWP has grown substantially in recent years with the district and Desert Water Agency jointly taking advantage of opportunities to acquire surplus water rights. A significant portion of the acquisition costs are funded by new development fees.

"The two agencies have increased their SWP entitlements from a combined 61,200 acre-feet a year to today's entitlement of 171,100 acre-feet a year," said General Manager-Chief Engineer Steve Robbins.

In 2010, that combined entitlement will increase to 194,100 under existing agreements.

Long-term planning calls for additional acquisitions until the amount of imported water delivered annually is equal to groundwater pumping.

Prolonged drought, along with legal and political battles surrounding the Sacramento-San Joaquin River Delta and the endangered Delta smelt resulted in SWP deliveries originally being limited to 15 percent of entitlements. Anticipated deliveries crept up to 40 percent in May, thanks to late season snow pack conditions. That means the valley's only two water districts with entitlement to this imported water will likely receive only 68,000 acre-feet of water for recharge this year.

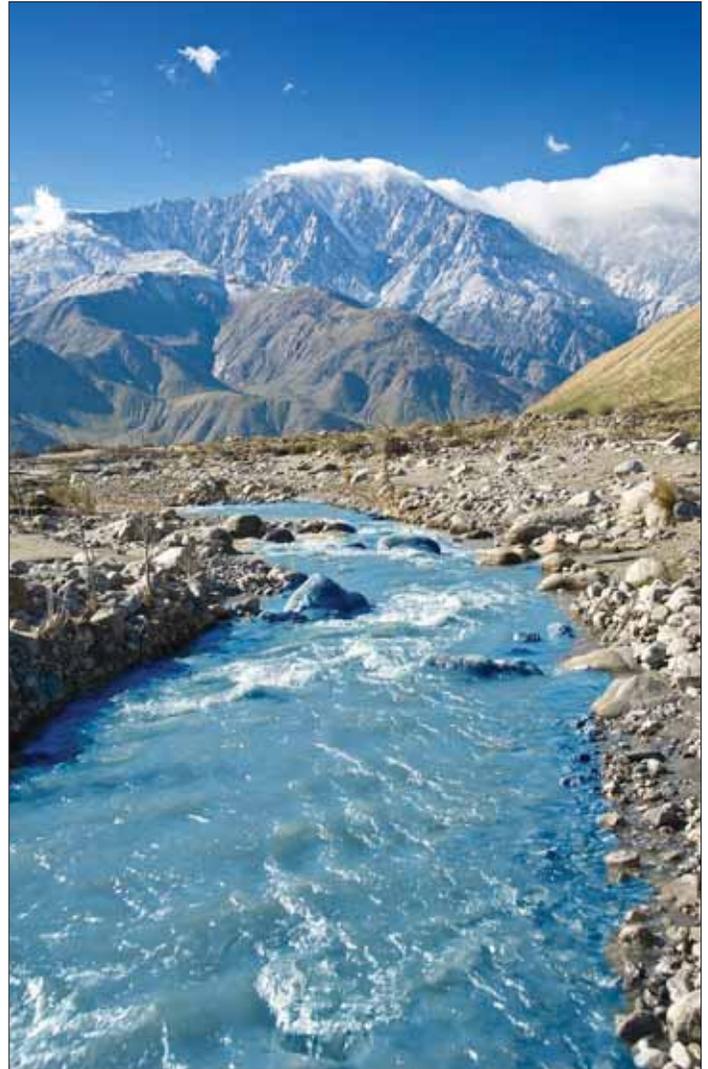
Short-term reductions in imported water are buffered by the valley's underground water reserves. However, it is of significant concern with respect to long-term planning and effective groundwater management in the Coachella Valley.

In the west end of the Coachella Valley (in general, west of Washington Avenue), district activities to encourage natural aquifer recharge has been taking place since 1919 and since 1973 with imported water. From 1973-2008, slightly more than two million acre feet (680 billion gallons) of imported water has been recharged there.

This portion of the aquifer, referred to as the Upper Whitewater River Groundwater Sub-basin, is still "in the red" to the tune of 880,721 acre-feet.

"The annual overdraft in this basin is nearly 113,000 acre-feet without recharge of imported water, which underscores the importance of the district's groundwater recharge program," Robbins said. "Without the recharge program, this aquifer overdraft would be nearly three million acre-feet."

Overdraft in the Mission Creek Sub-basin went up in 2008 by a little more than 7,000 acre-feet. Since recharge of imported water started in 2002, the commutative overdraft in



A combination of imported water and natural mountain run off flows down the Whitewater River north of Palm Springs to the Whitewater Groundwater Recharge Facility to help replenish the aquifer. Because there is no physical connection from the Coachella Valley to the State Water Project, CVWD and DWA must trade their entitlement for an equal amount of water released from the Metropolitan Water District of Southern California aqueduct north of Palm Springs.

this subbasin has improved slightly.

"Aquifer overdraft must be reversed if the Coachella Valley is to minimize the potential for permanently diminished groundwater storage capacity, address related water quality issues and reduce or eliminate subsidence that can be linked to overdraft," Robbins said. "With imported supplies being threatened, the district is working hard to find other ways to reduce overdraft, such as promoting conservation and the use of non-potable water for irrigation purposes."

Conservation

Restaurants encouraged to serve water only upon request

Coachella Valley restaurants are being encouraged to assist with water conservation efforts by suggesting that their customers ask for glasses of water only if they request them.

To make the “Want Water? Just Ask!” campaign easier and more effective, the district is offering attractive table tents (free-standing, two-sided signs) and posters free to restaurants who ask for them. The district is also promoting their use through local chambers of commerce, visits to the



eating establishments and other means.

“Restaurants automatically serve water to every customer, and often it goes untouched,” said Director of Communication & Legislation Heather Engel.

“We want everyone to have water when and if they want it. However, when people are reminded that we are in a serious drought and facing a statewide water crisis, they often realize they either didn’t want the water, or can do without it,” she said.

When calculating water savings, restaurants can consider not only the water not served, but the water and energy saved by not having to clean the glass.

Traditionally, the water district has focused its conservation efforts on outdoor water consumption, since 80% of the domestic water consumed in the Coachella Valley is used for landscape irrigation. However, statewide drought and the looming potential for state-mandated water restrictions have increased the importance of getting all types of water users to do what they can to help reduce the overall water consumption.

Restaurant owners and managers who want tents/posters, can call CVWD at (760) 398-2651 or stop by the Coachella or Palm Desert office to pick them up.



Homeowner Irrigation Guide

This table shows the approximate amount of water that different types of landscaping typically need each month. Individual watering times may vary due to soil and other conditions. Gradually reduce the amount of water you’re using to find an adequate amount for your situation without being wasteful. When there’s measurable rain, turn your sprinkler system off and keep it off until the surface of the ground has dried.

	Water-efficient shrubs	Water-efficient trees	Non-desert trees	Turf grass
January	.7 gal./day 2 days/week	14 gal./day 2 days/week	45 gal./day 2 days/week	Spray system: 4 min./day; 7 days/week Rotor system: 9 min./day; 7 days/week
March	.9 gal./day 4 days/week	16 gal./day 4 days/week	53 gal./day 4 days/week	Spray system: 9 min./day; 7 days/week Rotor system: 21 min./day; 7 days/week
May	.9 gal./day 6 days/week	18 gal./day 6 days/week	60 gal./day 6 days/week	Spray system: 15 min./day; 7 days/week Rotor system: 33 min./day; 7 days/week
July	.9 gal./day 7 days/week	18 gal./day 7 days/week	59 gal./day 7 days/week	Spray system: 16 min./day; 7 days/week Rotor system: 38 min./day; 7 days/week
September	1 gal./day 5 days/week	18 gal./day 5 days/week	63 gal./day 5 days/week	Spray system: 12 min./day; 7 days/week Rotor system: 28 min./day; 7 days/week
November	.7 gal./day 3 days/week	14 gal./day 3 days/week	44 gal./day 3 days/week	Spray system: 5 min./day; 7 days/week Rotor system: 13 min./day; 7 days/week

Use this irrigation guide to help find the amount of water you need to maintain a healthy and lush landscape without overwatering. Residents living in high wind areas may need more water than shown here, while those in coves may need less. Call CVWD to receive a free, 12-month, adhesive irrigation guide that you can stick to your controller.

La Quinta pilot program allows residents to report water waste

The City of La Quinta joined forces with the Coachella Valley Water District in spring 2009 to launch a new pilot program to help eliminate water waste. The new Water Waste Help Line is a phone number established for residents of the city to recognize water waste, such as broken sprinklers that cause water to overflow onto sidewalks and streets.

Water district and city staff will investigate the reports, notify the responsible party of the waste and help them to solve the problem. Yellow flags will be used to mark specific problem locations and green door hangers will be used to help explain the problem.

“The goal of the program is to give residents a means to help identify unintentional water waste problems and to help people solve those problems,” said David Koller, CVWD’s conservation coordinator. “Many water users, who irrigate in the early morning or evening hours to avoid losing water to evaporation, won’t realize there’s a problem unless someone tells them.”

The help line is an extension of the pilot program with the city to reimburse residents who convert grass lawns to desert landscaping. As of spring 2009, 70 homeowners have taken advantage of the conversion program. An application to participate, as well as sample landscape designs and plant palette suggestions, are available on our web site at www.cvwd.org/conservation/conversion.php.

If the pilot program is successful, CVWD will consider extending the help line to customers in other cities.

CVWD serves domestic water to more than 106,000 homes and businesses in Cathedral City, Rancho Mirage, Palm Desert, Thousand Palms, Indian Wells, La Quinta, Thermal and the Salton Sea communities.

To report water waste in La Quinta, call the Water Waste Help Line at (888) 398-5008.

Water conservation facts

60 gallons — Water an average person uses inside the home each day

1,370 gallons in the summer; 550 gallons in the winter — Water an average Coachella Valley home uses outside each day

200-800 gallons per day — Water saved by fixing a leaky toilet

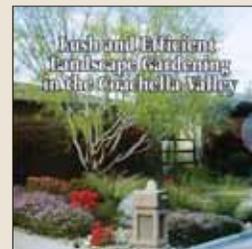
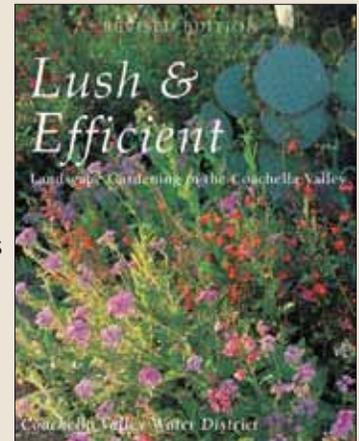
2 gallons per sprinkler head (70-90 gallons per day for typical home with grass lawn) — Water saved by cutting sprinkler time by only one minute

12 gallons — Water saved by reducing shower time from 10 to 5 minutes

We want to help you convert to water-efficient landscaping

Most water being used by average Coachella Valley homeowners is used outdoors, therefore a major aspect of the district’s conservation efforts focuses on water-efficient landscaping. Here are some resources:

1. At 160 pages, *Lush & Efficient Landscape Gardening in the Coachella Valley* is the authoritative source for photos and information on hundreds of water-efficient plants and trees. Cost is \$15 and includes the CD-ROM below.



2. The new interactive CD-ROM offers additional help with converting and designing a landscape and selecting the perfect plants, shrubs and trees.

- Each fall, the district hosts its Landscape

Workshop with outdoor and classroom-style instruction for creating and maintaining a desert landscape. Look for registration information in your bill.

3. The district maintains a demonstration garden at its Coachella office, open to the public 7:30 a.m. to 4:30 p.m. on weekdays (excluding holidays).

4. Experts in water-efficient landscaping are available for scheduled tours of the garden or as guest speakers for your group or organization.

To obtain copies of these and other district publications, or to schedule a tour, either complete the postcard order form inside this book or call the district’s Communication & Legislation staff at (760) 398-2661, ext. 2549.

A *Lush & Efficient* order form is also available online at www.cvwd.org.

Tiered rates promote efficient water use

The Coachella Valley Water District adopted tiered rates in January 2009, as a means to promote water conservation and efficient irrigation practices. Tiered rates have been used by water districts throughout the country, especially in the southwest, to successfully reduce water use by approximately 20%–37%.

The new structure went into effect for single-family residents with their June bills. Dedicated landscape customers (such as cities, schools and homeowner associations) will start paying tiered rates at the end of summer. Businesses and other types of customers will be phased in later.

The new rate structure was approved following an extensive public outreach campaign that included educational fliers with bills, public meetings, presentations to community groups, media interviews and the formation of a Tiered Rate Advisory Committee, representing various interests throughout the Coachella Valley.

“The community has been overwhelmingly supportive of the new rate structure,” said CVWD Director of Service Raul Aguirre, who was the tiered rate project manager. “I think people understand that water conservation now is more important than ever and they recognize that this

program is a fair and logical way to encourage more efficient water use.”

Under the new structure, every customer is given an individualized “water budget,” representing a reasonable water allocation for indoor and outdoor needs. Only water use that exceeds the water budget is charged at a higher rate. Water budgets are scientifically calculated based on:

1. Lot size and percentage of lot irrigated (allowing larger properties with larger landscaped areas to receive a higher water budget).
2. Daily observed weather (allowing higher water budgets during the hotter months).

3. Number of people in the home (all customers are given a default of four people per home, unless they choose to appeal).

Because Coachella Valley residents typically use 75%–80% of their water outside the home, those factors have the greatest impact on the overall water budget for anyone with landscaping.

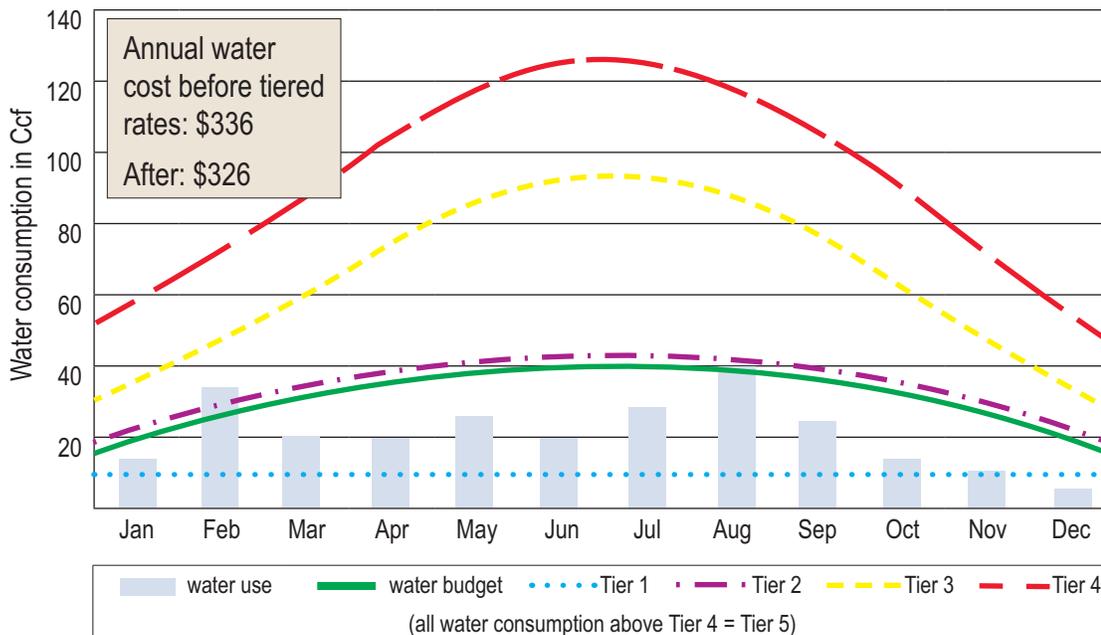
Water budgets change monthly due to the weather factor and are listed at the top of the left column of information on your water bill.

For more information, call our Tiered Rate Help Line at (888) 388-3255, or visit our web site at www.cvwd.org.

Tier	Water use	Cost
Tier 1 — <i>Excellent</i>	Up to 10 Ccf*	90% base rate
Tier 2 — <i>Efficient</i>	Up to 105% water budget	base rate**
Tier 3 — <i>Inefficient</i>	105% up to 150%	1.5x base rate
Tier 4 — <i>Excessive</i>	150% up to 250%	2x base rate
Tier 5 — <i>Wasteful</i>	250% or more	4x base rate

* 1 Ccf = 100 cubic feet or 748 gallons; monthly bills indicate water use in measurements of Ccf.

** Most CVWD customers will pay a base rate of \$1.03 starting July 1. For complete rates, see the Base Rate Summary chart on page 18. Higher rates are due to increased costs of providing service to outlying areas.



How does it work?

Here is a sample of an average customer's 2008 water use. Note, this customer met his water budget 11 months out of the year for an annual water bill savings of \$10.

Construction of a new pool in February resulted in the only month when he exceeded the budget.

However, that was offset by rain in December that allowed him to turn his sprinklers off most of the month and keep his water use within the first tier.



At Coachella Valley Water District, delivering high quality water is our top priority. We analyze more than 22,000 water samples annually to ensure that your drinking water meets all water quality standards.

Commitment to high quality water unwavering

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 and federal drinking water quality standards.

The district's Water Quality staff is tasked with ensuring that CVWD drinking water meets these standards. These 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 12-13, CVWD's water quality staff monitors for more than 100 other regulated and unregulated chemicals. All of these are below detection levels in CVWD's domestic water.

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 at the district's Coachella office at Avenue 52 & Highway 111.

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.

To receive a summary of the district's source water assessments, or for additional water quality data or clarification, readers are encouraged to 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 office, 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.

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

Continued on next page

Continued from previous page

other health effects such as skin damage and circulatory problems.

With respect to the presence of arsenic in drinking water in excess of 10 micrograms per liter but less than 50 ug/L — the state Department of Public Health warns that some people who drink water containing arsenic in excess of the maximum contaminant level (MCL) over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

All drinking water delivered by CVWD last year meets the 10 ug/L MCL.

Radon is a naturally occurring, radioactive gas — a by-product 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 maximum contaminant level 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 advice from your health care provider.

Groundwater nitrate is the most closely monitored chemical in drinking water and nitrate levels do not change quickly in the district's deep wells used to supply drinking water. If the nitrate level in a well begins to increase, CVWD



Craig Richardson, water quality analyst, and Mike Stenzel, chemist, test water samples at CVWD's water quality laboratory in Coachella. The lab implemented a new, computerized Laboratory Information Management System in March 2009 to streamline the water quality reporting and monitoring programs.

increases its monitoring frequency and, if necessary, wells are taken out of service before they exceed the standard.

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

Continued on next page

"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 and other microbial contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791 or www.epa.gov/safewater."

—California Department of Public Health

Continued from previous page

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 runoff 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 state 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).”

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 and on existing wells approximately every five years. 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.

Is my tap water hard?

Hardness in tap water is caused by calcium and magnesium, which are common minerals found in Coachella Valley groundwater supplies. Most CVWD customers receive drinking water with low to moderate levels of hardness.

Do I need a water softener?

No. Regardless of your hardness level, your tap water meets all drinking water standards and does not need to be conditioned. CVWD does not prohibit the use of water softeners, but district ordinance does prohibit the discharge of excess salt down the drain.

The discharged salt can harm the groundwater and may require additional treatment, which would increase future costs of providing sewer and water services. If you choose to soften your water, please check with your local water conditioning expert or the Pacific Water Quality Association to avoid installing a system that discharges excess salt down the drain.

Where can I find more information?

For more information about water hardness levels throughout the valley, read the water quality table on Pages 12-13. Questions may be directed to CVWD’s Water Quality Section at (760) 398-2651.

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.

MRDLG or Maximum Residual Disinfectant Level — Level of a contaminant in drinking water below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

mg/L — Milligrams per liter (parts per million)

MRDLG or Maximum Residual Disinfectant Level — The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG or Maximum Residual Disinfectant Level Goal — The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

M/A — Not applicable

NA — Not analyzed

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.

None — The government has not set a Public Health Goal or Maximum Contaminant Level for this substance.

NTU — Nephelometric turbidity units (measurement of suspended material)

pCi/L — picocuries per liter

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)

uS/cm — Microsiemens per centimeter

CVWD 2008 Domestic Water Quality Summary

CVWD analyzes more than 22,000 water samples annually to ensure that your drinking water meets state and federal standards. Every year, the district is required to analyze a select number of these samples for more than 100 regulated and unregulated substances.

This chart lists those substances that were detected in the district's six service areas. Shaded 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 2000 and 2008, shows that CVWD continues to deliver drinking water that meets state and federal water quality standards.

To read this chart: First, determine in which service area you live (columns 4-9). Then move down the column, comparing the detection level of each chemical or other contaminant with the Public Health Goal, Maximum Contaminant Level Goal and Maximum Contaminant Level (columns 2-3). For example, if you live in La Quinta

and want to know the level of fluoride detected in your service area, you would look down the Cove Communities column and stop at the fluoride row. The average fluoride level in that service area is 0.5 mg/L with the range of results varying between no detection and 1.0 mg/L. Compare these values to the MCL in Column 3. Fluoride levels in this water comply with the MCL of 2.0 [mg/L]. The range can show a level above the MCL and still comply with the drinking water standard when compliance is based on average levels found in each water source.

1	2	3	4	5	6	7	8	9	10
Detected parameter, units	PHG or (MCLG)	Primary or (secondary) MCL	Cove Communities ⁽¹⁾ Range (Average)	Indio Hills, Sky Valley & areas around Desert Hot Springs Range (Average)	Mecca, Bombay Beach, North Shore & Hot Mineral Spa Range (Average)	Desert Shores, Salton Sea Beach & Salton City Range (Average)	Valerie Jean Range (Average)	Thermal Range (Average)	Major Source(s)
Arsenic, ug/L	0.004	10	ND-4.7 (ND)				ND-9.9 (ND)	2.5-2.8 (2.7)	Erosion of natural deposits
Boron, mg/L ⁽²⁾	None	NL=1.0				0.3-0.4 (0.4)			Erosion of natural deposits
Chloride, mg/L	None	(500)	6.7-115 (15)	12-22 (17)	40-55 (46)	180-270 (240)	31-43 (37)	7.8-20 (14)	Leaching from natural deposits
Chlorine (as Cl ₂), mg/L ⁽³⁾	MRDLG 4.0	MRDL 4.0	ND-1.4 (0.2)	0.1-0.6 (0.3)	ND-0.9 (0.3)	ND-1.9 (0.3)	ND-0.6 (0.2)	0.1-0.4 (0.3)	Result of drinking water chlorination
Chromium, ug/L	(100)	50	ND-22 (ND)	15-20 (18)				21-24 (22)	Erosion of natural deposits
Chromium VI, ug/L ⁽²⁾	None	None	6.2-18 (11)						Erosion of natural deposits
Copper, mg/L ⁽⁴⁾ [homes tested/ sites exceeding AL]	0.17	AL=1.3	0.12 [55/0]	0.96 [20/0]			0.13 [22/0]		Internal corrosion of household plumbing
Copper, mg/L	None	(1.0)	ND-0.1 (ND)						Leaching from natural deposits
Fluoride, mg/L	1	2.0	ND-1.0 (0.5)	0.4-0.7 (0.6)	0.9-1.2 (1.0)	0.6-1.6 (1.2)	0.7-0.9 (0.8)	0.6-0.9 (0.8)	Erosion of natural deposits
Gross alpha particle activity, pCi/L	(Zero)	15	ND-11 (3.7)	3.5-14 (7.5)	ND-3.0 (ND)	ND-3.9 (ND)	ND-4.2 (ND)	ND-4.8 (ND)	Erosion of natural deposits
Hardness (as CaCO ₃), mg/L	None	None	27-300 (120)	120-200 (170)	15-17 (16)	170-230 (200)	11-15 (13)	46-57 (52)	Erosion of natural deposits
Iron, ug/L	None	(300)	ND-480 (ND)			ND-120 (ND)			Leaching from natural deposits
Lead, ug/L ⁽⁴⁾ [homes tested/ sites exceeding AL]	2	AL=15	1.6 [55/ 0]						Internal corrosion of household plumbing
Nitrate (as NO ₃), mg/L	45	45	ND-40 (7.0)	ND-5.7 (3.8)		5.4-6.5 (5.8)	ND-2.0 (ND)	2.2-3.5 (2.9)	Leaching of fertilizer, animal waste, natural deposits
Odor threshold, units	None	(3)	ND-1.0 (ND)						Naturally occurring organic materials
pH, units	None	None	7.2-8.2 (7.8)	7.7-8.0 (7.8)	7.0-8.9(7.7)	7.8-8.0 (7.9)	6.9-7.5 (7.2)	7.5-7.8 (7.6)	Physical characteristic
Selenium	(50)	50				ND-6.0 (ND)			Erosion of natural deposits
Sodium, mg/L	None	None	17-86 (28)	58-80 (66)	46-53 (48)	210-230 (220)	44-45 (45)	36-42 (39)	Erosion of natural deposits
Specific conductance, uS/cm	None	(1,600)	240-920 (370)	570-780 (660)	270-290 (280)	850-1,800 (1,400)	240-260 (250)	260-340 (300)	Substances that form ions when in water
Sulfate, mg/L	None	(500)	11-190 (38)	150-220 (170)	ND-1.9 (0.6)	200-240 (220)	1.4-1.5 (1.4)	22-43 (33)	Leaching from natural deposits
Tetrachloroethylene (PCE), ug/L	0.06	5	ND-0.6 (ND)						Discharge from dry cleaners and auto shops
Total Coliform bacteria, positive samples/month	(0)	more than 5% ⁽⁵⁾ more than 1 ⁽⁶⁾			ND-1(ND)				Naturally present in the environment
Total dissolved solids, mg/L	None	(1,000)	130-550 (220)	370-520 (430)	120-180 (150)	850-1,100 (930)	130-140 (130)	140-210 (170)	Leaching from natural deposits
Total trihalomethanes, ug/L ⁽⁷⁾	None	80	1.5-3.2 (2.3)	5.6	1.2	5.3		0.7	By-product of drinking water chlorination
Turbidity, NTU	None	(5)	ND-2.4 (ND)		ND-0.5 (ND)	ND-1.3 (0.4)	ND-0.5 (ND)	ND-0.3 (ND)	Leaching from natural deposits
Uranium, pCi/L	0.43	20	ND-12 (4.5)	5.4-11 (7.5)	2.0	2.4-4.2 (3.0)	2.6-5.0 (3.8)	3.8	Erosion of natural deposits
Vanadium, ug/L ⁽²⁾	None	NL=50	6.2-39 (14)	9.8-26 (15)		6-24 (17)		25-29 (27)	Erosion of natural deposits

Footnotes

⁽¹⁾ Includes the communities of Rancho Mirage, Thousand Palms, Palm Desert, Indian Wells, La Quinta and portions of Bermuda Dunes, Cathedral City and Riverside County.

⁽²⁾ Unregulated contaminants are those for which EPA and the California Department of Public Health have not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist both

regulatory agencies in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

⁽³⁾ The reported average represents the highest running annual average based on distribution system monitoring.

⁽⁴⁾ Reported values are 90th percentile levels for samples collected from faucets in water user homes. No sample exceeded the regulatory action level.

⁽⁵⁾ Systems that collect more than 39 samples per month; ⁽⁶⁾ Systems that collect less than 40 samples per month.

Domestic Construction



Above: The 43-foot high cylindrical reservoir while under construction. Below: The finished facility went into operation in January 2009. It can store up to 12 million gallons of water.

District's newest reservoir serves growing area

Cahuilla II, the newest and largest domestic water reservoir in the CVWD water storage system, began operation in January 2009.

Located inside the Cahuilla Pressure Zone, approximately a half mile north of Lake Cahuilla in La Quinta, the reservoir connects to six groundwater wells, can store up to 12 million gallons of water and serves

communities in south La Quinta.

The construction of the new reservoir and its adjoining transmission pipeline was a joint project between CVWD and the developers of Trilogy and Andalusia Country Clubs.

Site grading for the reservoir and installation of the 36-inch transmission pipeline began in the summer of 2007 after several years of planning and coordination with state and federal agencies. The 43-foot high steel cylindrical reservoir has a diameter of 266 feet.

At a cost of \$13 million, it is the district's 60th domestic water reservoir.

The reservoir sits on district property, adjacent to protected habitat area for the endangered Peninsular big horn sheep. CVWD, along with participating developers, implemented an environmental mitigation plan during construction.

Steps taken included scheduling construction after lambing season, designing a reservoir that blends in with natural surroundings, and working with U.S. Fish & Wildlife Service and California Department of Fish and Game to reduce impacts on the sheep.



Emergency Preparedness

Statewide drill prepares agencies for 'big one'

CVWD employees joined more than 4.2 million others throughout Southern California to participate in the ShakeOut earthquake drill in November 2008.

The massive exercise was created to prepare public agency personnel to deal with a devastating earthquake. The drill's scenario called for a 7.8 temblor to hit the San Andreas fault near

Bombay Beach.

The district opened its Emergency Operation Center (EOC) and instructed field employees to respond to a mock breach in the Coachella Canal, broken water lines, a sewage spill and a chlorine leak. Office employees practiced "drop, cover and hold on."

The drill helped the district better identify potential problems that could

be caused following a real emergency and take steps now to minimize those problems.

"This was a valuable drill in that it not only let us practice our own response to an emergency, but allowed us to test communications with other government agencies," said Director of Operations Dan Farris, who served as the EOC director.

Emergency Preparedness & Drinking Water

In the event of a natural disaster, such as an earthquake or flooding, Coachella Valley Water District's water delivery system could be compromised and you could be advised not to drink the water. Keep the following information available to help guide you through such an emergency.

How do I know if my tap water becomes unsafe to drink?

In the event of an emergency, CVWD may issue a boil water notice as a precautionary measure if water quality is in doubt. CVWD will test the water for contaminants. If the water is deemed unhealthful, a boil water notice will be issued until the problem is located and solved, and the water is tested again and shown to meet specific state and federal quality standards. Notification will be made through the media, the district's web site (www.cvwd.org), posted fliers in public spaces and other means.

If my drinking water becomes unsafe, what do I do?

1. You're first choice for replacing tap water for drinking and cooking should be commercially bottled water. Everyone should include in their emergency supply kit a 3- to 5-day supply of bottled water (at least 1 gallon of water per person per day, plus extra water for pets). If you use your own storage containers, place a date on the outside, store in a cool, dark place and replace every six months. Bottled water can keep longer, but check the expiration date and replace as needed.

2. 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.

3. If you're unable to boil water, you're 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.

Do not use scented, powdered or swimming pool bleach. These products may contain dangerous chemicals. A faint chlorine smell is normal.



Turn off sprinkler systems

If an emergency situation leaves the water supply limited, don't forget to turn off sprinkler system to preserve as much of the available water as possible for fire protection and other essential uses.

Recycling & Sanitation

Mid-Valley Pipeline's initial phase complete

Coachella Valley Water District celebrated the completion of the first phase of the Mid-Valley Pipeline in April 2009.

The new pipeline helps ensure a reliable, year-round supply of non-potable water for golf course landscaping irrigation. Eventually, it will more than triple the number of golf courses and other customers who can irrigate with nonpotable water in lieu of precious groundwater.

"Overdraft of the aquifer is expected to decrease by at least 25 percent as a result of golf courses connecting to the Mid-Valley Pipeline," said Patti Reyes, project manager and CVWD's assistant director of engineering.

"Reducing overdraft is a key component of CVWD's 35-year *Water Management Plan*," Reyes said. "Developing alternate sources of water, especially during a statewide water

crisis, is critical for the continued success of the Coachella Valley's tourism and recreation industries."

Ten golf courses in the mid-valley area with proximity to the new pipeline immediately received delivery of blended water for irrigation. The blended water is a combination of Colorado River water brought to the desert via the Coachella Canal and recycled water from the district's Wastewater Reclamation Plant in Palm Desert.

The Mid-Valley Pipeline delivers canal water to a large receiving reservoir at the plant. The water is blended with recycled water before being delivered to golf courses through the recycled water distribution system.

The 54-inch pipeline begins at Madison Street in Indio, next to the Coachella Canal, at a new, 91 acre-feet per day pumping station. It travels nearly seven miles along the

Whitewater River/Coachella Valley Stormwater Channel.

Laying pipe 20 feet below surface within the stormwater channel was the least disruptive alternative because it did not affect traffic. However, it did require a great amount of support and cooperation from cities and golf courses within the channel.

The second phase of the \$75 million pipeline project will expand the existing distribution system to serve approximately 35-40 additional golf courses. That phase is expected to be complete by 2015.

CVWD delivers recycled water from two other Wastewater Reclamation Plants in east Palm Desert and north Indio. As more golf courses irrigate with nonpotable water instead of groundwater, they reduce overdraft of the aquifer and help preserve the desert's pristine groundwater for drinking.

Recycled water facts

CVWD customers using recycled or blended water —

13 golf courses, 5 homeowner associations and 1 high school

CVWD customers using canal water (not blended) for irrigation — 19 golf courses

Mid-Valley Pipeline facts

Cost — \$75 million

Length — 6.7 miles

Diameter of pipe — 54 inches

Size of receiving reservoir — capacity to hold 90 acre-feet of water

Amount of groundwater saved each year — 50,000 acre-feet



Water from the Coachella Canal travels nearly seven miles to CVWD's Wastewater Reclamation Plant in Palm Desert to a receiving reservoir (above). It is blended with the recycled water in another large reservoir before being delivered to golf courses and other customers for irrigation purposes.



From left: The Desert Sun's Golf Writer Larry Bohannon, California Alliance for Golf's Executive Director Robert Bouchier, Building Industry Association's Executive Director Fred Bell and Landmark Golf's President and CEO Andy Vossler speak to the audience about golf's impact on the Coachella Valley's economy.

Golf course representatives discuss water conservation at symposium

In October 2008, the California State Club Association, California Alliance for Golf and Coachella Valley Water District co-sponsored the first Golf and Water Symposium in Palm Desert to discuss how the golf industry will continue to thrive in these times of competing demands for water.

The 150 attendees who flooded the symposium included stakeholders, developers, golf course designers, golf course representatives, landscape architects and water agencies.

A combination of dry conditions, low reservoirs and court rulings has put a squeeze on California's precious water supplies and triggered the first statewide drought declaration in 16 years. This affects all types of water users.

"The golf industry wants to make sure, especially in times of drought, that we continue to be leaders in water-efficient irrigation techniques and smart management of water resources," said Bob Bouchier, executive director of California Alliance for Golf and president of the California State Club Association.

Keynote speaker Ron Davis, state legislative director for the Association of California Water Agencies, provided

an insightful statewide perspective on water issues and how they relate to the golf industry.

Local insights were offered by then-CVWD Board President Peter Nelson, who complimented many of the valley's golf course superintendents for encouraging efficient irrigation practices, such as scientifically based watering times and the use of desert landscaping in non-playable areas of the course.

The symposium also offered a diverse list of speakers from community leaders to representatives from the golf industry discussing topics such as: *Las Vegas' experience with golf and water*, *Golf's impact on the Coachella Valley's economy* and *How golf courses are dealing with water and other environmental issues*.

In an era where water shortages are a constant concern, leaders in the golf industry said they realize they must keep up to date with ways to stretch available supplies as far as necessary to keep courses attractive and playable.

Sponsors from the golf industry said they hoped to make the symposium an annual event to alternate among locations across the state.

Sewer plant expansion complete

Work was completed in summer 2008 on a multi-phased expansion and upgrade project at the district's second largest wastewater reclamation plant.

Wastewater Reclamation Plant 4, located in Thermal, provides sanitation service to customers in portions of La Quinta, Thermal, Mecca and surrounding communities. The area served is mostly rural and agricultural, but the \$25 million expansion was required to help the district meet the anticipated growth in the eastern Coachella Valley.

The project, which started construction in 2004, included expanding the current lagoon-style treatment process to the more efficient activated sludge process used at the district's other plants.

Construction projects included aeration ponds, clarifiers, sludge processing and disinfection, all of which will upgrade the plant's treatment capacity from 7 million gallons per day to 9.9 million.

The district has set a goal of zero wastewater discharge at the plant. As more development comes to the area, so will the need for recycled water.

CVWD collects wastewater from more than 100,000 homes and businesses within the district's boundaries and treats it at six different wastewater reclamation plants. At three of those plants, the wastewater is put through an extensive tertiary treatment process for landscape irrigation use.

Financial Statements

Base Rate Summary

As of July 1, 2009 ⁽¹⁾

Domestic Water

Area of service	Monthly charge per 100 cubic feet	Monthly service charge 3/4" meter
Majority of the district, except areas noted below	\$1.03	\$7.00
Service Area 26 (includes Sky Valley & Indio Hills)	\$1.26	\$7.50
Service Area 23 (includes east Salton Sea areas of North Shore and Bombay Beach)	\$1.55	\$7.50
Improvement District 11 (includes Salton City, Desert Beach and Desert Shores)	\$1.33	\$7.50
Areas outside boundaries of the district or an improvement district, but served by the improvement district	\$1.60	\$17.50

Residential Sanitation

Area of service	Monthly charge per dwelling unit
Service Area 41 (bounded generally by Jackson, Calhoun and Avenues 52 and 56)	\$26.05
Improvement District 80 (includes ID 53, 54, 57, Palm Desert Country Club and City of Indian Wells)	\$22.50
Improvement District 81 (includes area along I-10 from Thousand Palms to Indio)	\$25.65
North Shore Beach	\$30.40
Bombay Beach	\$29.85
La Quinta and Mecca	\$27.05

Irrigation Water

User category	Charge per acre-foot
Farmers	\$24.05
Golf courses & other non-agriculture	\$28.05
Groundwater recharge	\$82.20
Construction	\$120.00
Quagga mussel mitigation surcharge	\$5.00
Gate charge, per day	\$11.50

Coachella Valley Water District strives to keep water consumer rates low through fiscal responsibility and sensible financial management policies. In June 2009, the Board of Directors considered a \$218 million Operating Budget and \$63 million Capital Improvement Budget for the 2009-10 fiscal year.

Paying your bill

- Water users can now pay their bills using convenient drop boxes available at both the Palm Desert and Coachella offices (75-525 Hovley Lane East in Palm Desert and 85-995 Avenue 52 in Coachella).

- The district also now 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 web site at www.cvwd.org/service/payment.php.

- A recent upgrade to our computer systems also now allows us to receive payments electronically from customers using online or telephone banking systems. Payments can't be made through CVWD's website, but can be made through separate online banking sites.

For customers using this method to pay their monthly water bill, it is important that your water account number appears in your online banking provider's system in the same format as it appears on your recent water statement. The account number should be 11 or 12 digits in length, with no commas, periods, spaces, dashes or alpha characters. An account number in an incorrect format may result in notification from your bank or payment service that they were unable to process your payment request due to an invalid account number.

For more information, contact customer service at (760) 391-9600.

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

⁽¹⁾ This table represents proposed water rates for the 2009-10 fiscal year. At the time this publication was printed, the water district's Board of Directors had not yet approved the rate structure, pending a public hearing. For confirmation of the most up-to-date rates, call CVWD at (760) 398-2651 or go online to www.cvwd.org/service/rates.php.

Comparative Condensed Balance Sheet

Assets	June 30, 2008	June 30, 2007
Current assets:		
Cash and investments	\$192,792,322	\$159,571,080
(1) Accounts receivable, inventory, prepaid expenses & other	35,192,802	35,027,771
	<u>227,985,124</u>	<u>194,598,851</u>
Property, plant & equipment:		
All-American Canal & distribution system (participating equity)	34,874,505	34,874,505
State Water Project (participating equity)	117,838,963	111,041,496
Land, facilities & equipment	1,129,327,578	914,647,590
	<u>1,282,041,046</u>	<u>1,060,563,591</u>
Accumulated amortization & depreciation	(370,251,140)	(342,071,159)
Construction work in progress	92,075,801	140,345,154
	<u>1,003,865,707</u>	<u>858,837,586</u>
Assets restricted for development & other purposes	109,615,410	184,010,707
Total Assets	\$1,341,466,241	\$1,237,447,144
Liabilities & Equity		
Current liabilities:		
Accounts payable	\$6,501,202	\$7,416,732
Customer advances & deposits	3,511,288	8,814,663
Accrued salaries, interest, deferral & other expenses	10,579,663	12,062,953
	<u>20,592,153</u>	<u>28,294,348</u>
Long-term liabilities:		
State Water Project & other	1,157,761	1,348,771
Bonds payable & certificates of participation	14,425,000	16,495,000
	<u>15,582,761</u>	<u>17,843,771</u>
Total liabilities	36,174,914	46,138,119
(2) Taxpayers' equity in assets	1,305,291,327	1,191,309,025
Total Liabilities & Equity	\$1,341,466,241	\$1,237,447,144

(1) Prior period results have been restated to conform to current period presentation.

(2) Includes the taxpayers' equity in canal and irrigation distribution facilities, wells and reservoirs, treatment plants and stormwater facilities. This value includes facilities paid for by others and donated to the district. The value has been reduced by any outstanding debt (liabilities).

(3) Majority is groundwater replenishment assessment fees — well owners' proportionate shares of the cost of importing water to replenish the groundwater basin.

(4) The district utilized reserves for a variety of capital projects primarily related to maintaining and increasing levels of drinking water, including bringing non-potable water to the central valley for irrigation purposes and establishing a groundwater recharge facility in the east valley.

Condensed Statement of Revenues & Expenditures

Fiscal year ended June 30, 2008						
	Irrigation	Domestic	Sanitation	Stormwater	General	Total
Revenues						
Water sales	\$6,060,649	\$54,606,217	\$0	\$0	\$0	\$60,666,866
Service charges	1,146,832	1,012,665	32,401,794	0	0	34,561,291
Availability charges	928,870	660,998	131,078	0	0	1,720,946
Taxes	2,136,862	264,871	3,531,584	16,775,804	38,294,861	61,003,982
Interest	948,831	996,698	1,584,342	2,154,990	4,087,448	9,772,309
Other revenues	12,705,449	63,360	94,498	1,022,574	(3) 17,085,525	30,971,406
Total	\$23,927,493	\$57,604,809	\$37,743,296	\$19,953,368	\$59,467,834	\$198,696,800
Expenses						
Operation & maintenance	\$7,546,286	\$43,519,768	\$18,692,664	\$3,720,407	\$0	\$73,479,125
General & administration	3,532,136	13,379,018	6,269,085	1,427,431	3,280,106	27,887,776
Contract & bond payments	0	0	1,404,584	1,437,943	46,017,960	48,860,487
New construction	997,402	12,382,015	9,338,593	713,686	6,749,083	30,180,779
Reserves	11,851,669	(4) (11,675,992)	2,038,370	12,653,901	3,420,685	18,288,634
Total	\$23,927,493	\$57,604,809	\$37,743,296	\$19,953,368	\$59,467,834	\$198,696,800

Public Outreach

Television ads, billboards help spread message

Thousands of Coachella Valley residents looking for local news or seeking a couple hours of entertainment also have been receiving gentle reminders regarding the importance of water conservation.

The water district expanded its public education efforts on local news programs and in several movie theaters in summer 2008. Two 15-second videos were produced in-house, promoting the planting of native and other drought-tolerant plants in home landscaping and the installation of weather-based Smart Controllers.

The videos “book-end” segments of local newscasts on CBS-2, KMIR-6



Through a cooperative partnership with neighboring water agencies, this billboard will be on display for the next year.

and KESQ-3/Fox, appearing mornings, evenings and weekends on two of the three network affiliates in any given week. They are scheduled to continue running at least through August.

The same conservation messages also began appearing in September in

movie theaters in Rancho Mirage, Cathedral City and Palm Springs prior to the showing of films. These, too, are scheduled to run through August or later.

For the second year in a row, water agencies from across the Coachella Valley joined forces to use a billboard to reinforce a common water conservation message. CVWD, Mission Springs Water District and Indio Water Authority co-

sponsored the billboard. It will rotate among six different locations in the valley during the course of a year. A second billboard, sponsored solely by CVWD, is located outside the district office in Coachella.

Workshop leaves teachers all W.E.T.

In summer 2008, CVWD hosted a Project W.E.T. Workshop to showcase standards-based, hands-on activities that help teach students about important water issues.

Twenty-two teachers participated in the day-long event, which was jointly hosted by CVWD, the U.S. Geological Survey and the non-profit Water Education for Teachers (W.E.T.)

“The workshop was a perfect opportunity to give local educators useful information they can take back to their classrooms,” said Kevin Hemp, CVWD education specialist. “Water affects all of us everyday and these teachers acquired new tools to aid them in educating the valley’s youth about water in the valley.”

Participating teachers all received a workbook, which contains more than 90 activities suitable for students in grades kindergarten through 12th grade. California State University, San Bernardino also offered one continuing educational unit. The workshop was such a great success, CVWD plans to host another in summer 2010.

Throughout the year, the district’s two credentialed teachers give standards-based presentations to nearly 15,000 students at public and private schools across the Coachella



At the Project W.E.T. workshop, teachers test hands-on activities they can use in their classrooms.

Valley. The presentations are tailored to the grade level, focusing on canal safety, conservation and water resources.

To request a CVWD teacher visit your classroom, call the district at (760) 398-2651.

We're coming to an event near you

Coachella Valley Water District actively participates in community events, both large and small, to educate residents about important water issues and ways to conserve.

The biggest event the district participates in each year is the Riverside County Fair and National Date Festival in Indio. A large display, brochures, kids activity books and computers with interactive programs bring in large numbers of festival goers wanting to learn more about water.

The district promotes water conservation at additional community events, such as The Living Desert's Party for the Planet, an Earth Day celebration focusing on education, preservation and conservation of all the earth's natural resources, and the Bright Idea Expo, an energy efficiency awareness event in Palm Desert.

In April 2009, Coachella Valley Association of Governments held its first Energy Summit at Palm Springs' Convention Center, which was attended by elected officials and representatives



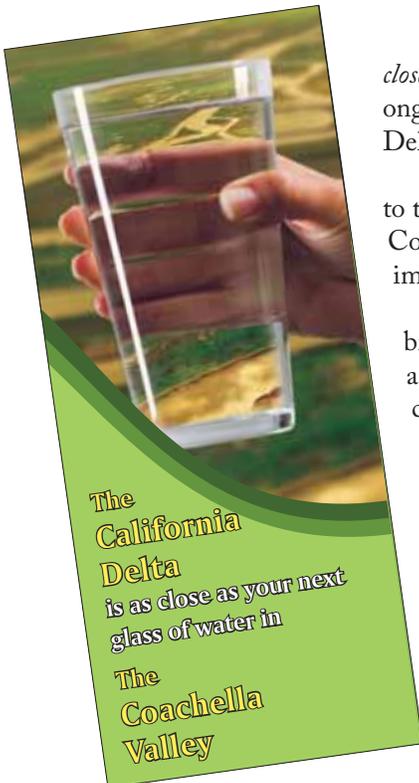
CVWD staff attend several community events each year to educate residents about important water issues, conservation programs and other topics.

from various utilities throughout the Coachella Valley. General Manager-Chief Engineer Steve Robbins was among the panel speakers and the district was one of the exhibitors.

Smaller events include responding to invitations to speak to service clubs or homeowner associations.

To invite CVWD to attend your event, please call (760) 398-2651.

New brochure explains Delta's effect on Coachella Valley



The district's newest brochure, *The California Delta is as close as your next glass of water in the Coachella Valley*, explains the ongoing debate surrounding the Sacramento-San Joaquin River Delta.

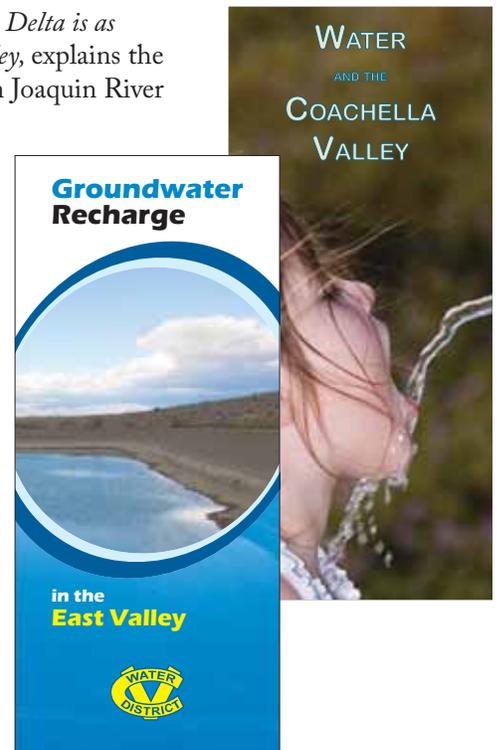
Although 450 miles away, what happens to the Delta has a tremendous impact on the Coachella Valley. The brochure explains those impacts and possible solutions.

Download a pdf version of this and other brochures from CVWD's web site, or request a free, mailed copy by using the enclosed post card order form.

Large quantities of CVWD brochures are available for distribution to your civic organization, classroom or other group.

CVWD is also always looking for public locations to display brochures for easy pick up by interested parties.

For more information, call (760) 398-2651.



Agricultural Irrigation



An estimated 274 acres of strawberries were grown in the Coachella Valley in 2008 for a total value of \$2.33 million. Table grapes, dates, citrus and bell peppers remain the most popular crops grown here.

Valley growers utilizing state-of-the-art techniques

As California wrestles with a myriad of threats to its supplies, water used to irrigate farms is a frequent target. A recent report by a Northern California think tank contends that agriculture can and should use less water.

Many of the Pacific Institute's findings have been criticized by farming interests and water entities as misleading and inaccurate. However, some of the institute's recommendations mirror the irrigation practices utilized by growers in the Coachella Valley, in some cases for half a century or longer.

The report: *More with Less: Agricultural Water Conservation and Efficiency in California*, suggests that scientific irrigation scheduling would result in a saving of 3.4 million acre-feet if used throughout California. Use of drip and sprinklers instead of flood irrigation can save an additional 600,000 acre-feet, the document concludes.

Both practices have been employed in the Coachella Valley for a considerable amount of time, especially drip and other micro irrigation, which has been in use for several decades.

More than two-thirds of all local crops are irrigated this way, a significant contributor to the region's extremely high gross return per acre.

When a district-sponsored program enabled local growers to learn about scientific irrigation and salinity control programs in recent years, those participating reduced their water use by 14 percent, twice what has been called for in the *Coachella Valley Water Management Plan*.

Reuse or elimination of tailwater (water in excess of what crops need that in flood irrigation flows off of fields and onto other farmland or into drainage facilities) is encouraged by the report.

The irrigation system in the Coachella Valley was designed to prohibit any tailwater. Farmers have

been ordering only the amount of water they need for about 60 years.

The institute's report also advocates a "modest" shift from field crops such as alfalfa, grain, cotton and sugar beets (even corn and beans) to "higher value, water-efficient crops" such as vegetables and fruits and nuts because they use less water and offer higher production value.

This is how agriculture in the valley has operated for more than a century, with local farmers compensating for a comparably small amount of acreage by growing niche and early season crops.

"Our valley's growers have been very successful by employing many of report's recommendations, but these are not new ideas," said the district's Assistant General Manager Dan Parks.

"There probably are some areas where farmers can become more efficient in their water use, but given the current crisis I'm certain most growers already are doing everything they can to conserve what little water is available."

2007 Crop Report

Total crop production on Coachella Valley land irrigated with Colorado River water from January to December 2008

Value of year's production: \$491,517,362

Total acreage irrigated (includes double cropping): 61,551

Average gross value per acre: \$7,986

Crop	Acreage	Yield in tons	Value per acre	Total value
Fruit	26,078	163,021	\$7,830	\$204,199,850
Cantaloupes	20	293	\$3,718	\$74,360
Dates	7,613	30,833	\$6,278	\$47,794,414
Figs	126	270	\$2,842	\$358,092
Grapes (table)	8,791	53,361	\$10,289	\$90,450,599
Grapefruit	1,062	16,036	\$6,756	\$7,174,872
Lemons & limes	4,330	26,413	\$5,856	\$25,356,480
Mangos	99	4,237	\$2,842	\$281,358
Olives	98	210	\$2,842	\$278,516
Oranges & tangerines	2,788	1,185	\$8,908	\$24,835,504
Peaches	54	3,525	\$4,781	\$258,174
Tomatoes	246	1,375	\$8,888	\$2,186,448
Strawberries	274	1,627	\$8,525	\$2,335,850
Watermelons	577	23,657	\$4,879	\$2,815,183
Vegetables	24,263	298,383	\$6,828	\$165,664,416
Beans	1055	6,099	\$7,177	\$7,571,735
Broccoli	1,205	7,313	\$4,155	\$5,006,775
Cabbage	67	759	\$2,392	\$160,264
Carrots	2,689	75,292	\$3,640	\$9,787,960
Cauliflower	1,287	11,272	\$7,643	\$9,836,541
Celery	254	11,111	\$13,805	\$3,506,470
Corn (sweet)	2,404	857	\$2,408	\$5,788,832
Cucumbers	47	508	\$5,227	\$245,669
Greens	2,546	26,026	\$7,518	\$19,140,828
Lettuce	3,824	41,896	\$8,386	\$32,068,064
Misc. vegetables*	2,967	35,252	\$5,863	\$17,396,989
Onions (dry)	195	6,094	\$7,813	\$1,523,535
Peppers	4,448	57,437	\$10,751	\$47,820,448
Potatoes	978	14,768	\$4,536	\$4,436,208
Squash	133	1,929	\$3,886	\$516,838
Sugar beets	164	1,771	\$5,227	\$857,260
Forage	2,536	21,422	\$614	\$1,557,156
Alfalfa hay	685	5,823	\$1,411	\$966,535
Sudan hay	844	4,220	\$565	\$476,860
Pasture (irrigated)**	1007	11,379	\$113	\$113,761
Nursery	1,438	—	\$25,737	\$37,009,806
Fish Farms	196	849	\$37,497	\$7,349,412
Golf Courses	5,106	409,961	\$10,758	\$54,930,640
Polo Fields	485	38,941	\$10,758	\$5,217,658
Turf Grass	1,449	116,340	\$10,758	\$15,588,425

All financial figures rounded off to the nearest dollar.

* Miscellaneous vegetables include artichokes, asparagus, eggplant, okra, radishes and spices.

**Yield is in animal units per month.

Coachella Canal

Preventive efforts keep mussels out of Coachella Canal and irrigation system

No news continues to be good news with respect to the water district's efforts to prevent the invasive quagga mussel from colonizing the 123-mile Coachella Canal and — perhaps more importantly — the nearly 500 miles of pipeline that brings irrigation water to most of the region's agriculture.

The tip of a finger-sized, non-native mussels were discovered at Lake Mead (Hoover Dam) in early 2007 and have since migrated into several lakes, aqueducts and other water conveyance facilities throughout Southern California. It's believed the quagga spread by attaching to boats, where they can live for several weeks.

Quagga have also been discovered at Imperial Dam, which is a few miles upstream from where Colorado River water is diverted from the All-American Canal into the Coachella branch of the waterway. This is the closest to the Coachella Valley that live, adult quaggas have been discovered in a water conveyance system.

If the quaggas are able to set up colonies in the enclosed concrete laterals or pipes, they have the ability to congregate at such densities that they can slow water to a trickle or stop the flow completely. There is concern CVWD's pipes — many of which date to the late 1940s and early 1950s — would not withstand the type of cleaning necessary for their removal since even dead quaggas cling to surfaces as if glued there permanently.

Microscopic evidence of the free-floating mollusk larvae, veligers, has been discovered in the canal and Lake Cahuilla, but there is no easy way to determine whether this material is living or dead. Routine inspections of these water facilities have not revealed any adult quagga.

Boats are no longer allowed at Lake

Cahuilla unless they are used exclusively on that water. This is an important measure to prevent an infestation in the Coachella Valley.

Since July 2008, the water district has been pouring liquid chlorine into the canal a few miles from where the waterway begins. In low doses, the chemical has been effective in combating veligers. The chlorine dissipates long before it reaches any consumers.

Through January this year, close to half a million gallons had been released into the canal, at a cost of \$570,000. The cost is funded through a mitigation charge paid by all canal water users. That charge of \$3 per acre-foot of water is expected to increase to \$5 as part of the 2009-2010 budget.

Summer appears to be an ally in preventative measures. The quaggas' metabolism is adversely affected when water temperature exceeds 86 degrees Fahrenheit and they basically starve to death.

Quagga mussel facts



Size — About the size of a fingernail

Lifespan — Adult mussels typically survive 3-5 days out of water, but can last up to 30 days in cold climates.

Reproduction — Can release 10,000 eggs in a single spawning season; 1 million in a lifetime.

Potential effects — The quagga will attach themselves to virtually any surface and can completely clog pipes used to deliver irrigation water to area farms and golf courses.

Even after death, the quagga remains attached. As a non-native species, there are also environmental concerns.



In addition to microscopic testing for quagga larvae, employees routinely monitor the canal system using cinder blocks at six different stations. To date, no adult quagga have been found.

By the Numbers

As of Dec. 31, 2008

General Information

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

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

Service area: 639,857 acres; stormwater unit 377,776 acres

Employees: 539

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 2008 of \$58,143,060,478 as fixed by Riverside and Imperial County assessors and state officials. This figure is used to determine property tax funding for the district.

Domestic Water

Service information

Population served	282,426
Active meters	106,576
Average daily demand	112 mgd
Total water delivered	125,283 af

System information

Active wells	104
Total well capacity	253 mgd
Distribution reservoirs	59
Storage capacity	120 mg
Distribution piping system	1,965 miles

Irrigation Water

Service information

Total irrigable acres	78,530
Active accounts	1,109
Total water delivered	263,763 af
Average daily demand	723 af
Maximum daily demand	1,207 af

System information

Reservoirs	2
Storage capacity	1,301 af
Distribution system:	485 miles
Pumping plants	19
Length of canal	122 miles

Agriculture Drainage

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

mgd = million gallons per day.

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.

Stormwater Protection

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

Wastewater Collection

Service information

Population served	265,337
Active accounts	100,127
Average daily flow	18.3 mgd

System information

Wastewater reclamation plants	6
Total daily capacity	33.5 mgd
Collection piping system	1,079 miles

Recycled Water

Service information

Active accounts	16
Average daily flow	7.4 mgd

System information

Wastewater reclamation plants producing recycled water	3
Total daily capacity	18 mgd
Distribution piping system	15 miles

Groundwater Management

(In cooperation with Desert Water Agency)

Recharge facilities	4
Recharge from imported water	15,984 af
Imported supply since 1973	2,180,850 af

Coachella Valley Water District
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