California and the San Diego Region's Water Crisis

Water is a precious resource here in San Diego, where more than 80 percent of the water supply is imported from the Colorado River and Northern California. Governor Jerry Brown's executive order issued on April 1, 2015, emphasizes the severity of the situation. Record low snow pack and rain fall totals, limited local water supplies, new environmental protections, and water transport infrastructure deficiencies all combine to put **San Diego County in a severe water shortage.**

Many water districts throughout the county have adopted new water conservation policies in light of the of the State's Water Resources Control Board (SWRCB) on adopted on May 15, 2015. The San Diego County Water Authority (SDCWA) and local water districts have adopted Drought Management Plans which have four emergency stages:

- **Stage One** – 10 percent water conservation requirements (voluntary conservation)

- **Stage Two** – 20 percent water conservation requirements (mandatory conservation)

- **Stage Three** – 40 percent water conservation requirements (mandatory conservation)

- **Stage Four** – 40+ percent water conservation requirements (mandatory conservation)

Each of the stages contain specific conservation requirements, such as water allocation, limited irrigation days/times, or even stopping the issuance of new water meters, which could be detrimental to the rental housing industry. If the drought continues and the region does not meet its water reduction goals, local governments may be forced to stop new development. Such policies would have a devastating effect on the regional economy especially at a time when the region has a critical housing shortage.

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CONSERVATION TIPS

No-Cost Conservation Tips	Estimated Savings
• Learn to read your water meter. Tracking your property's water usage may help you identify if excess water usage may be due to leaks. See page 8 of this packet for instructions on how to do this.	Varies
• It is recommended to water landscaping in the early morning or late evening, 6:00 p.m. – 10:00 a.m. Avoid watering during mid-day to reduce evaporation and interference from wind.	20-25 gallons per day

Avoid over-watering:
  1) San Diego County Water Authority (SDCWA) urges users to limit outdoor watering to **NO MORE than twice a week**.
  2) Water only after the top inch of soil is dry.
  3) DO NOT water for at least 48 hours after a rain event.
  4) Reset irrigation controllers and replace batteries in the spring and fall.
  5) SDCWA recommends limiting watering to 10 minutes per day, or use the landscape calculator (http://apps.sandiego.gov/landcalc/), watering index, or (http://www.bewaterwise.com/).
  6) Regarding the City of San Diego's landscape irrigation rules:
    • Residences with odd-numbered addresses (301 Drought Drive): Water ONLY on Sundays and Thursdays;
    • Residences with even-numbered addresses (500 Conservation Circle): Water ONLY on Wednesdays and Saturdays.
    • **Apartments, condominiums and businesses: Water ONLY on Mondays and Fridays.**
    • Water only after 6 pm and before 10 am (NOTE: This time-of-day schedule applies to ALL irrigation devices and techniques - i.e. drip irrigation, hand watering, etc.)
    • **Water ONLY 5 MINUTES per station** when using a standard sprinkler system.
    • For the City of San Diego, the 5 minute time limit **does not** apply to landscape irrigation systems that use water-efficient devices, including drip and micro-irrigation systems and stream rotor sprinklers. But, these systems still must follow the two-day-per-week schedule.
    • Stop operation of ornamental fountains, except to the extent needed for maintenance purposes.
 	
    For more information on watering restrictions in the City of San Diego, visit: http://www.sandiego.gov/water/conservation/drought/prohibitions.shtml
  6) Please be aware of regulations governing irrigation practices in your area - your water agency may have adopted additional restrictions on the duration and frequency of irrigation events – please contact your local water agency on page 6.
	15-25 gallons for each minute; up to 250 gallons per cycle

• Use a broom or blower instead of a hose to clean driveways and sidewalks. Customers are prohibited from spraying or washing down concrete, patios, driveways, sidewalks, and sewers.	8-18 gallons per minute

Low-Cost Conservation Tips	Estimated Savings
• Adjust sprinklers to prevent overspray and run-off.	15-25 gallons per day

Low-Cost Conservation Tips	Estimated Savings
• Repair leaks and broken sprinkler heads within 72 hours once notified by the City of San Diego.	20 gallons per day per leak
• Add 2" to 3" of mulch around trees and plants to reduce evaporation. 40 gallons per day per valve/hydrozone	20-30 gallons per day per 1,000 sq. ft.

Higher-Cost Conservation Tips	Estimated Savings
• Install water-efficient drip irrigation system for trees, shrubs, and flowers to get water to the plant's roots more efficiently.	20-25 gallons over day per valve/hydrozone
• Upgrade to a "smart irrigation controller" that automatically adjusts watering times for hotter weather, and shuts down the system when it rains.	40 gallons per day
• Replace a portion of lawn with native and Mediterranean plants. These plants do best when planted after winter rains begin. Visit http://www.watersmartsdlandscaping.org/, or WaterSmartSD.org for more tips, rebates, and incentives.	33 to 60 gallons per day per 1,000 sq. ft. depending on climate
• Repair any leaks around pool and spa pumps.	20 gallons per day per leak
• Install covers on pool and spas to reduce evaporation.	30 gallons per day

Conservation Programs & Incentives

SoCal Water Smart Program
Metropolitan Water District's SoCal Water$mart started June 1, 2015 for homes and businesses. Rebate programs are available for turf replacement, and for water efficient outdoor and indoor appliances and fixtures.
http://socalwatersmart.com/

SDCWA Artificial Turf Discount Program
San Diego County Water Authority has a pilot program designed to help bring down the cost of replacing water-intensive grass with artificial turf. The Water Authority and participating artificial turf companies provide customers a 10 percent discount on products and services. The Metropolitan Water District (MWD) of Southern California also offers a $2 per square foot rebate to qualified customers who remove their traditional turf grass and install artificial turf or low-water-use plants. The discount is available whether the installation is performed by the artificial turf company or by a do-it-yourself customer who purchases only materials.
http://www.watersmartsd.org/programs/artificial-turf-discount-program
Joni German, 858-522-6705, jgerman@sdcwa.org

Free Water Smart Checkup
A WaterSmart Checkup is a free, non-obligatory, opportunity to receive site-specific water-saving recommendations for commercial, **multifamily**, industrial, public or single-family properties. Their certified irrigation professionals offer several different Checkup services and will match your property to the best available option. Participation is limited.
https://www.watersmartcheckup.org/
(866) 883-1332, apply@watersmartcheckup.org

Multifamily Large Landscape Audits
Free landscape audits are available to over-watered commercial, multifamily, or public sites. The audit is designed to assess the efficiency of the irrigation system, identify potential leaks, and determine the proper watering schedule for the landscape based on existing plant material. Audits are available to pre-approved customers. To schedule an audit contact (866) 883-1332 unless you are a customer of any of the agencies listed below. Customers of the agencies listed below should contact the number provided for their agency:
City of San Diego (619) 570-1999, watersurvey@sandiego.gov
Helix Water District (619) 667-6261, http://www.hwd.com/conserve/multifam.htm,
conserve@helixwater.org
Vallecitos Water District (760) 744-0460, https://www.watersmartcheckup.org/,

Other Multifamily Tools

City of San Diego Electronic Bill Payment System
The Water Department is now teaming with Kubra, a recognized leader in the Electronic Bill Presentment and Payment industry, to bring you this reliable, fast and user-friendly I-Pay System.
https://secure3.i-doxs.net/cityofsandiego/
(619) 515-3500

City of San Diego Recycled Water
The City of San Diego has built the North City and South Bay Water reclamation plants. These plants treat wastewater to a level that is approved for irrigation, manufacturing and other non-drinking, or non-potable purposes. Recycled water, also referred to as reclaimed water, gives San Diego a dependable, year-round, locally controlled water resource. Using recycled water is cost-effective, reliable and good for the environment.
http://www.sandiego.gov/water/recycled/index.shtml
(619) 533-7479, water@sandiego.gov

Additional Resources

- California's Save Our Water: http://saveourwater.com/
- The Metropolitan Water District of Southern California and The Family of Southern California Water Agencies: http://www.bewaterwise.com
- San Diego County Water Authority: http://www.sdcwa.org or http://www.sdcwa.org/whenindrought, or www.WaterSmartSD.org
- The Water Conservation Garden at Cuyamaca College: http://www.thegarden.org/
- City of San Diego - Waste No Water: http://www.sandiego.gov/water/conservation/drought/

Local Agencies

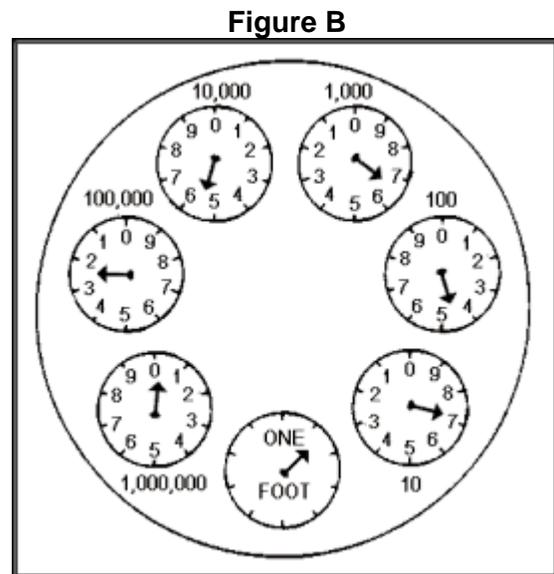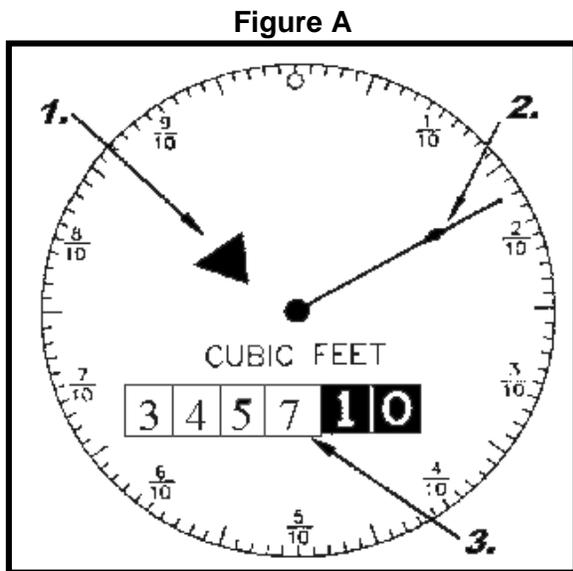|	
Carlsbad Municipal Water District	**Rainbow Municipal Water District**
www.carlsbadca.gov/water/	www.rainbowmwd.com
Del Mar, City of	**Ramona Municipal Water District**
www.delmar.ca.us/business/GeneralInformation/	www.rmwd.org
Escondido, City of	**Rincon Del Diablo Municipal Water District**
www.ci.escondido.ca.us/depts/pw	http://www.rinconwater.org/
Fallbrook Public Utility District	**City of San Diego**
www.fpud.com	www.sandiego.gov/water/
Helix Water District	**San Dieguito Water District**
www.hwd.com	www.ci.encinitas.ca.us/Government/CityD/SanDWD/
Lakeside Water District	**Santa Fe Irrigation District**
www.lakesidewaterdistrict.com	www.sfidwater.org
City of Oceanside	**Sweetwater Authority**
www.ci.oceanside.ca.us	www.sweetwater.org
Olivenhain Municipal Water District	**Vallecitos Water District**
www.olivenhain.com	www.vwd.org
Otay Water District	**Valley Center Municipal Water District**
www.otaywater.gov	www.vcmwd.org
Padre Dam Municipal Water District	**Vista Irrigation District**
www.padredam.org	www.vid-h2o.org
City of Poway	**Yuima Municipal Water District**
www.ci.poway.ca.us/Index.aspx?page=326	http://www.yuimamwd.com/

HELPFUL DOCUMENTS

READ YOUR OWN METER

Take charge of your own water management by learning how to read your meter. It's easy!

1. **Locate the meter** in the concrete box, which is generally in front of your property.

2. Lift the lid and you will see either a **single dial meter** (see Figure A) or a **multiple dial meter** (see Figure B).

Figure A   **Figure B**

3. **Record the reading**
If you have a single dial meter (Figure A), there are numbers in boxes, similar to a car odometer. Read and record these numbers from left to right. The last number, "0," is fixed and not in a box. To find this number, read and record the number that the needle is on (numbered 2 in Figure A). If the needle is between two numbers, record the lower number.

Some dials have a small triangle (numbered 1 in Figure A). This is your leak detector. This triangle will move at the slightest movement of water through the meter. If you have every faucet turned off and you feel there is no water running on your property and this triangle is still moving, you have a leak. Repair the leak as soon as possible to avoid high water usage and cost.

If you have a multiple dial meter (Figure B), find the 1,000,000 dial and record the number that the needle is on. If the needle is between two numbers, record the lower number. Follow this same procedure going clockwise around the meter. You should end at the 10 gallon dial.

4. **Read and record the meter readings again one week later.**

5. **Subtract the first reading from the second reading**. This gives you the number of gallons of water you used during that week.

6. **Divide that number by seven** and you will have your average daily consumption.

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How Much Water Do You Use?

Interior
- Record the date, time and water meter reading (Reading 1).
- 24 hours later record the date, time and water meter reading (Reading 2).
- Subtract Reading 1 from Reading 2. This gives you your interior water usage.

Exterior (Obtain your interior water usage before proceeding.)
- Make sure that the irrigation will run its entire cycle during the tracking period.
- Write down the date, time and reading of your water meter (Reading 3).
- After 24 hours, write down the date, time and reading of the meter (Reading 4).
- Subtract Reading 3 from Reading 4. This will give you your total water usage in the 24-hr. period.
- Subtract your interior water usage from the total water usage. This number is your exterior usage.
Keep in mind that the results may not be exact but a good indicator of water use.

Use the bottom half of this sheet as your worksheet

Read 1	Read 2	Read 2:_____
Date:_____	Date:_____	minus
Time:_____	Time:_____	Read 1:_____
Read:_____	Read:_____	**= Total A**: _____

Read 3	Read 4	Read 4:_____
Date:_____	Date:_____	minus
Time:_____	Time:_____	Read 3:_____
Read:_____	Read:_____	**= Total B**:_____

Total B:_____
minus
Total A:_____
= TOTAL:_____