

**REPORT TO MAYOR AND COUNCIL**

TO THE HONORABLE MAYOR AND COUNCIL:

DATE: May 26, 2015

SUBJECT: CITY OF CONCORD 2015 DROUGHT STRATEGY

Report in Brief

California received a diminutive amount of precipitation and snow pack this winter prompting officials to impose mandatory watering restrictions. For many years the City acted as a good steward of water supplies and has significantly reduced water use. This report provides history on what the City has done, and what it will continue to do, to preserve the regions precious drinking water resources while meeting the Contra Costa Water District's mandatory water reduction targets.

Staff recommends that the City Council hear the report, consider the information and provide direction to staff.

Background

The Contra Costa Water District (CCWD) is almost entirely dependent on the Sacramento-San Joaquin Delta for its water supply. CCWD's primary source is the United States Bureau of Reclamation's Central Valley Project (CVP). CVP water consists of unregulated and regulated flows from storage releases from Shasta, Folsom, and Clair Engle reservoirs into the Sacramento River. Other sources include the San Joaquin River, Mallard Slough, recycled water, a minor amount of local well water, and water transfers.

Following Governor Jerry Brown's Executive Order earlier this year, the Contra Costa Water District was required to reduce potable water use by 28%. The CCWD Board of Directors reacted to the news by adopting a 2015 Drought Program, which called on residential customers to reduce water use by 25% and irrigation customers to reduce water use by 45% from their 2013 amounts. In response, Concord's City Manager's Office and the Public Works and Parks and Recreation Departments assembled the City's Drought Management Team for the purpose of collaboratively and responsibly managing water use in the City's public spaces.

Many years ago the City began instituting responsible water management principles and practices. As an example: inefficient fixtures in public buildings are routinely replaced with efficient ones; landscape irrigation controllers are replaced with ones that automatically adjust to real-time weather data; and water wasting medians and other landscape areas are reconstructed using plantings which have lower water needs. Another good example is the City's golf course, which instituted a management best practice to begin creating "native" landscape areas at the facility. Despite the use of well water for irrigation, these native areas are no longer irrigated and left to grow in a natural state. This significantly reduced well water usage as these native

areas collectively amount to approximately 15 acres of turf space. They also have the added benefit of creating natural habitats for birds and other animal species.

These actions were of great benefit to the community in 2009 when mandatory watering restrictions were last imposed by CCWD. The City's landscape irrigation water at that time was reduced by 45% from the baseline years of 2005-2007 and water for buildings was reduced by 15%. Monetary penalties for exceeding the allocated amounts of water were calculated at 4x the normal rate. It is important to note that water restrictions imposed by CCWD both then and now do not affect areas using non-potable well water for irrigation. (See Attachment A for a listing of public spaces which utilize well water for landscape irrigation.)

Contra Costa Water District's 2015 Drought Program now calls on customers to reduce overall water use by 25% from 2013 use. To meet the goal, irrigation customers are required to reduce watering by 45% over 2013 use and limit irrigation to just twice per week. In effect are prohibitions for watering of outdoor landscapes in a manner that causes excessive runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures. Also prohibited is the watering of ornamental turf on public street medians

To begin formulating a 2015 drought management strategy, staff analyzed current and baseline water use data provided by CCWD. Results showed that the City of Concord's 2013 irrigation water use was at 63% of the amount used in the historical baseline years used by CCWD (2005-2007). The City of Concord conserved remarkably better in its public spaces than the voluntary 15% reduction target that was set by the District last year. In fact, Concord's water use in 2013 was not far from meeting the very aggressive reduction target of 45% which was last made mandatory by CCWD in 2009.

Discussion

Outdoor water use in Concord's public spaces is 37% less than the amount that Contra Costa Water District set as the historical baseline in previous droughts. With CCWD's 2015 Drought Program, however, the City is being required to further reduce irrigation consumption by an additional 45% on top of the 37% reduction already realized in 2013. The City is also required to reduce potable water usage in City facilities by 25%.

The City's Drought Management Team has developed a strategy to work toward achieving the mandatory reduction targets (see Attachment 1). Important to the Team, but not through allowable water waste, is the preservation of existing landscapes and the assurance that sports and athletic fields remain safe and available for team play. The strategy is comprised of fourteen components that demonstrate the City's commitment to meet mandatory targets while acknowledging needs and desires of the community.

Fiscal Impact

To encourage customers to meet the 25% reduction requirement, the CCWD Board will consider temporary conservation pricing adjustments as called for in the Governor's Executive Order. This will occur on June 3 and will include fines for violating water use prohibitions and adjusting baseline use to 2013. For a violation of water use prohibitions, CCWD will first issue a warning and work with customers to educate them about the prohibition and their violation. If after that the customer continues to violate the prohibition,

CCWD will issue a \$250 fine. At a second violation, CCWD will issue a \$500 fine. If the violation continues, the District may suspend the water service and charge a penalty of \$10 per 748 gallons of water used. If approved by the CCWD Board, the fines will become effective on July 4.

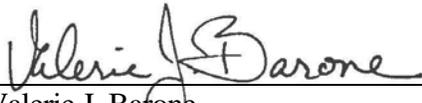
Public Contact

The City Council agenda has been posted.

Recommendation for Action

Staff recommends that the City Council hear the report, consider the information and provide direction to staff.

Prepared by: Steve Voorhies
Parks Manager
steve.voorhies@cityofconcord.org



Valerie J. Barone
City Manager
Valerie.Barone@ci.concord.ca.us

Reviewed by: Justin Ezell
Director of Public Works
Justin.Ezell@ci.concord.ca.us

ATTACHMENT 1
Drought Management Plan Elements
May 26, 2015

1. **Recycled water:** The City has access to a recycled water fill station that is located at the intersection of Meridian Park Boulevard and Willow Way. Equipment utilizing water (e.g. street sweepers, vacators, tree watering truck) will be filled with recycled water at the beginning of work shifts and when feasible throughout the day. Additionally, several medians are irrigated with recycled water and staff continues working with the Central Contra Costa Sanitary District (CCCSD) to expand CCCSD's recycled water distribution system to provide recycled water for irrigation in landscape medians.
2. **Increased Monitoring:** The Concord Police Department has agreed to alert Public Works of water issues at parks, medians and other City facilities. Issues will typically be observed by PD night patrol staff. Examples include broken or missing sprinkler heads, broken lines and overwatering (i.e. stuck irrigation control valves).
3. **Spray Park:** The spray park hours have been reduced. The park will open Memorial Day Weekend instead of the typical first weekend in May. Additionally, the park will open at 12 pm on weekends instead of the previous schedule which opened the park at 10 am.
4. **Reduced watering schedules:** Public Works has reduced median and park irrigation to two times per week in accordance with the mandatory watering restrictions. Certain exceptions have been discussed with the Contra Costa Water District (CCWD) including an allowance to irrigate athletic fields up to four times per week.
5. **Turf in medians:** Ornamental turf grass is located in a limited number of locations throughout the City. Irrigation to these areas has been completely turned off. Staff is drafting a plan and estimating the costs to convert these areas to drought tolerant landscaping. Staff will apply for rebates through CCWD once plans are complete and funding has been identified.
6. **Unplanted medians:** Medians and streetscapes that are not already landscaped will be left unplanted until the drought passes. The only exceptions to this element of the strategy are plantings which are necessary to meet NPDES requirements (e.g. bio swales).
7. **Landscape Water Use Reports:** Staff worked with CCWD to create water budgets for City medians, streetscapes and parks using domestic potable water sources. Water budgets provide the best methodology for identifying and maximizing landscape irrigation efficiency. The budgets are created using site specific characteristics and real time weather conditions. Water budgets will assist the City in ensuring the most efficient use of water in parks and medians.
8. **Water meters:** Park Maintenance staff will read water meters at City parks on a weekly basis. Doing so will assist staff in staying at or below the 45% reduction target. This is not feasible in City medians because of the significantly high volume of median island water meters which are spread throughout the City.
9. **Priority areas:** Staff has identified active and passive turf areas at City parks. Irrigation in passive areas such as turf bordering athletic fields, playgrounds and buildings, and strips of turf grass in planting areas between sidewalk and curb, will be significantly reduced or turned off completely. Active areas which mostly consist of athletic fields but also include areas based on

safety, use, and plant replacement cost, will be given priority watering schedules. Staff will monitor water usage and make adjustments to stay at or below the 45% reduction target.

10. Best management practices: Staff will employ best management practices such as the addition of mulch to medians and shrub areas to preserve soil moisture, and water leaks in the City's public spaces will be identified and repaired as quickly as possible

11. City buildings: Staff will continue installing water efficient fixtures in City buildings to reduce water usage while taking advantage of available rebates through CCWD.

12. Education: Messages highlighting City efforts to conserve water will be communicated from the City Manager's Office via:

- a. Print (City Talk, City News)
- b. Emails to staff and the public
- c. The City website
- d. Public Service Announcements on Concord Cable TV
- e. Placement of signage around City facilities and other public spaces

13. Fountains: The City will continue to keep the recirculating fountains located at Todos Santos Plaza and Civic Center decommissioned.

14. Non-potable Groundwater: Though the new regulations do not specifically mandate the reduction of non-potable water use, the City will reduce watering schedules at public spaces using well water with the goal of achieving a 25% reduction. Continuing to irrigate as if the drought does not exist sends the wrong message, regardless of whether the groundwater supply is potable or non-potable. Reducing groundwater use is a symbol of respect and its sets a leading example for the community to follow. The reduction target includes groundwater use at the Diablo Creek Golf Course.

Public spaces using well water:

- | | |
|----------------------------|-------------------------|
| ○ Baldwin Park | ○ George Krueger Fields |
| ○ BART Linear Park | ○ Hillcrest Park |
| ○ BART Park | ○ PCH Bart Linear Park |
| ○ Brazil Quarry Park | ○ Meadow Homes Park |
| ○ Cambridge Park | ○ Newhall Park |
| ○ Civic Center | ○ Todos Santos Plaza |
| ○ Dave Brubeck Park | ○ Willow Pass Park |
| ○ Diablo Creek Golf Course | ○ YV Park |