



City of Sunnyvale

Agenda Item-No Attachments (PDF)

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REPORT TO COUNCIL

SUBJECT

Introduce an Ordinance to Amend Section 12.34.020 (Water Conservation Restrictions) of the Sunnyvale Municipal Code; Adopt a Resolution to be in Effect from July 1, 2016 through June 30, 2017 declaring a Continued Drought Condition, Setting Stage 1 Water Reduction Target at 15%, Restricting Use of Potable Water for Landscape and Turf Irrigation, and Approve Budget Modification No. 37 to Add \$125,000 for the Turf Rebate Program; Find the Action Exempt from CEQA pursuant to Guideline 15307

BACKGROUND

On May 9, 2016, Governor Brown issued Executive Order B-37-16 directing actions aimed to using water wisely, reducing water waste, and improving water use efficiency for the years and decades ahead. The Executive Order, in part, directed the State Water Resources Control Board (Water Board) to extend the emergency regulations for urban water conservation through the end of January 2017. Staff is requesting Council approve the water reduction target through June 30, 2017. Should we experience an above average winter precipitation and water conditions do improve to normal levels, then Council will be asked to suspend this resolution at an earlier date. However, should drought conditions persist or even worsen, then the 15% target will continue through June 2017 or additional restrictions will be imposed.

On May 18, 2016 in response to the Governor's directive, the Water Board adopted a statewide water conservation approach that replaces the prior "percentage reduction" based water conservation standard with a localized "stress test" approach that mandates urban water suppliers act now to ensure at least a three year supply of water to their customers under drought conditions. The newly adopted regulation, which will be in effect through January 2017, requires locally developed conservation standards based upon each agency's specific circumstances.

The new standards requires local water agencies such as the City Sunnyvale to ensure a three-year supply assuming three more dry years like the ones we recently experienced between 2012 and 2015. Should Sunnyvale be facing shortages under the additional three-year scenario, the City will be then required to meet a conservation standard equal to the amount of shortage. For example, if Sunnyvale projects it would be facing a 15% supply shortfall, then the water conservation target would be 15%.

Since the Council set the reduction target at 30% on May 12, 2015, Sunnyvale's residents and businesses have achieved a 28% reduction compared to 2013 water use. This does not take into account growth in population and economic activity that has taken place over the previous three years.

EXISTING POLICY

General Plan- Environmental Management Chapter

Goal EM-2 Water Conservation

Promote more efficient use of the City's water resources to reduce the demands placed on the City's water supplies.

Policy EM-2.1 Lower overall water demand through the effective use of water conservation programs in the residential, commercial, industrial and landscaping arenas.

The proposed Action is also consistent with the requirements of Section 10632 of the California Water Code, and Section 8 of the City's 2015 Urban Water Management Plan (UWMP) being considered by Council this evening.

ENVIRONMENTAL REVIEW

The proposed action is categorically exempt from environmental review under California Environmental Quality Act (CEQA) Guidelines, Section 15307 (actions by regulatory agencies for protection of natural resources). A reduction in water usage will reduce potential environmental effects associated with water use, by reducing surface water import, as well as reducing energy consumption and other impacts associated with water production, distribution, and treatment.

DISCUSSION

Overview of the City's Water Supplies

The Environmental Services Department operates and maintains the City of Sunnyvale's potable water supply system. The City purchases approximately half of its potable water from the Santa Clara Valley Water District (SCVWD), which imports its water from the State Water Project in the Sacramento Delta and the Federal Central Project San Luis Reservoir located on Hwy 152 southeast of Gilroy, and half from the San Francisco Public Utilities Commission's (SFPUC) Hetch Hetchy Reservoir located in Yosemite National Park. The City also has seven active wells and one stand-by well that can produce seven million gallons per day (mgd), and the wastewater plant can produce recycled water for irrigation applications. Due to production limitations and increased chemical requirements, the City has had to scale back its recycled water production. The project to improve production reliability and allow continuous full-scale recycled water production is scheduled to be completed in the summer of 2017. There are approximately 30,000 connections to the City's potable water system. In 2015, potable water use averaged 14.2 mgd, while in 2013 water use averaged 19.3 mgd. Residential water use accounts for 61 percent of the total system demand, with the remainder used by commercial, industrial, institutional, and large landscape irrigation accounts.

Water Wholesalers Actions

SFPUC

The Hetch Hetchy reservoir, which is the primary source of water for the SFPUC system, experienced improved hydrologic conditions during this past winter. However, it is still recovering from the residual impact of the last several years of drought. Following the self-certification procedures outlined in the State Water Board's proposed emergency regulations dated May 18, 2016, SFPUC staff determined that potable water supplies would be sufficient even in the event of continued drought to meet wholesale water demands which include Sunnyvale over the next three years. On June 9, 2016, SFPUC informed Sunnyvale (Attachment 3) that it can provide it with 9,643 acre feet (AF) in the event of three consecutive three dry years. This amount represents 11.5% less

than what Sunnyvale was supplied in 2013 (10,895 AF) and 14.5% more than it received in 2014 (8,391 AF). If the SFPUC were to adopt the State Water Boards regulations as proposed, the new water conservation target for its customers will be zero percent. Despite these findings, and to continue to “promote and encourage conservation,” the SFPUC intends to maintain its call for a voluntary 10% system-wide reduction in water use over the 2013 baseline.

SCVWD

The current SCVWD request to reduce water usage by 30% is expected to expire on June 30, 2016. SCVWD staff determined that based on groundwater levels that have not recovered to normal levels as a result of the drought, and in the event of three years of consecutive drought they would require to set a conservation level of 20%. On June 14, 2016 the SCVWD Board of Directors voted to request that all water retailers in Santa Clara County reduce water demand to a level 20% below that of 2013 water use.

As required under the Water Board regulation, SCVWD informed Sunnyvale (Attachment 4) that in the event of three consecutive years of drought it can provide 9,200 AF per year for the next three years. This amount is 12.8% less than of the total water supplied from SCVWD including groundwater which was 10,540 AF in 2013 and 10,554 AF in 2014.

Sunnyvale's Actions

Staff is recommending a 15% water use reduction goal and a series of actions including adding permanent water use restrictions as outlined below. Establishing a goal in Sunnyvale is complicated by the fact that our two wholesalers are expected to face different levels of water shortage in the event of a three year drought as explained above. The SCVWD is mostly concerned about its groundwater levels. The City which has a capacity to produce 7,800 acre feet (AF) per year from its wells, but has only pumped 150 AF over the last twelve months since the demand can be met without using the wells. Even at the height of the drought, the City only pumped 1,200 AF over a twelve month period to supplement SCVWD's treated water supply. Well pumping was increased for a short period at the request of the District since they were having difficulties producing enough treated water to meet regional demands. Since the City is expected to use treated surface water from SCVWD and with the SFPUC facing a zero percent shortage but calling for a 10% voluntary reduction, a 15% reduction in water use by Sunnyvale's residents and businesses over the next year will meet the requirements as set by the State Water Board and is consistent with the SFPUC's and SCVWD call for 10% and 20% respectively. Should the winter of 2017 be dry, the Council can revisit the reduction target and set a higher reduction level.

Mandatory Watering Schedule

In support of a countywide effort to standardize mandatory watering schedules during the drought, staff is recommending the following mandatory water schedule in the Council Resolution to ensure that the City complies with Water Board regulations and to allow consistent messaging in Santa Clara County.

This mandatory schedule will limit irrigation to three days per week as follows:

- Landscape and turf irrigation at properties with addresses ending in odd numbers, (i.e., 1,3,5,7, and 9) shall be irrigated only on Monday, Thursday and Saturday.
- Landscape and turf irrigation at properties with addresses ending in even numbers, (i.e., 0,2,4,6

and 8) shall be irrigated only on Tuesday, Friday, and Sunday.

- Landscape and turf irrigation at properties with no addresses shall be irrigated only on Monday, Thursday and Saturday.

On their designated irrigating days, customers are still prohibited from irrigating between 9:00 AM and 6:00 PM during daylight savings time per Municipal Code 12.34.020. Sunnyvale will be working with SCVWD to coordinate consistent messaging and information

Existing City of Sunnyvale Ordinance

Sunnyvale Municipal Code (SMC) Section 12.34.020 currently defines several nonessential water uses that are prohibited at all times, including:

- (a) Allowing or maintaining broken or defective plumbing, sprinklers, watering or irrigation systems which permit the escape or leakage of potable water.
- (b) Using potable water in any manner which causes allows or permits the flooding of any premises, or any portion thereof, or which causes, allows or permits water to escape from any premises or any portion thereof and flow into gutters, streets, or any surface water drainage system.
- (c) Using any hose or similar device using potable water for washing automobiles, trucks, buses, boats, trailers, equipment, recreational vehicles, mobile homes or other vehicles or machinery, unless the hose or device is equipped with a positive automatic shutoff valve.
- (d) Using potable water to wash sidewalks, driveways, filling station aprons, patios, parking lots, porches or other paved or hard surfaced areas, unless there is a positive automatic shutoff valve on the outlet end of the hose.
- (e) The service of water by any restaurant or other eating or refreshment establishment to any patron, except upon the specific request by a patron for such services.
- (f) Installation of any single pass cooling process in new construction.
- (g) Any use of non-potable water not in compliance with all federal, state and local laws, rules and regulations.
- (h) During the period of time when daylight savings is in effect, no person shall use, permit or allow the use of potable water to irrigate any outdoor landscaping at any time between the hours of 9:00 a.m. and 6:00 p.m., unless the person using, permitting or allowing the use of the water is using a bucket, hand-carried container, or a hose equipped with an automatic positive self-closing valve.
- (i) No person shall use, permit or allow the use of potable water to irrigate any outdoor landscaping or other vegetated area more than fifteen minutes per day per station when using a landscape irrigation system or a watering device that is not continuously attended, except for landscape irrigation systems that exclusively use very low-flow drip-type irrigation systems when no emitter produces more than two gallons of water per hour, and weather-based controllers or stream rotor sprinklers that meet a seventy-one percent efficiency standard.

Proposed Additional Permanent Restrictions to be added to SMC Section 12.34.020

To comply with the Water Board's directives, staff is recommending the following permanent restrictions be added to SMC Section 12.34.020:

- (j) Irrigating with potable water during and within 48 hours after measurable (0.20 inches) rainfall is prohibited.
- (k) Use of decorative fountains without recirculation.
- (l) The irrigation with potable water of ornamental turf on public street medians.
- (m) Operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily.

Staff is proposing non-substantive amendments to the text of SMC Section 12.34.020 for consistency with state law. In addition, staff recommends deleting Section 12.34.020(g) related to the use of nonpotable water because it is unnecessary. If a resident or business uses nonpotable water in violation of applicable law or regulations, appropriate enforcement action can be taken under those laws. Information about legally harvesting rainwater and greywater for landscape irrigation is available at:

<http://sunnyvale.ca.gov/Departments/EnvironmentalServices/Water/WaterConservation/ForResidents.aspx>.

By declaring that a Stage 1 Drought Condition continues to exist, and as detailed in the Water Shortage Contingency Plan included in the 2015 Urban Water Management Plan scheduled for approval by Council this evening, the following actions/prohibitions will be added:

- Staff to continue public informational outreach
- Enforcement of permanent use restriction Ordinance (SMC Section 12.34.020)
- No hydrant flushing (unless for public health and safety)

The Council could also decide to impose a higher reduction target such as 20% or 25%. In this case, a Stage 2 Water Shortage Emergency will be declared and the following additional actions and restrictions would be in effect:

- A stepped up outreach effort
- Irrigation of ornamental landscapes with potable water more than two days per week will be prohibited.

Staff does not recommend this alternative for three reasons. First, it is important to be consistent with the region, most of which is likely going to three days per week. Second, the 15% reduction is more in line with the average of our two wholesale water providers. Third, staff feels that some relief based on a more normal 2016 winter precipitation will reduce the effect of "drought fatigue."

Conservation Program

Additional funding of \$125,000 is requested for turf replacement rebates.

Bay Area Water Supply and Conservation Agency (BAWSCA) and SCVWD offer additional conservation programs to help Sunnyvale continue with its water conservation efforts. Last year

Council approved cost sharing with SCVWD on its Landscape Rebate program which was overwhelming successful. The purpose was to help reduce potable water use by increasing incentives for City residents and businesses to replace water demanding turf with drought tolerant landscaping. By cost sharing \$1 per square foot to SCVWD's \$2 rebate, the City will help remove more than 275,000 square feet of turf. To date the City issued 118 rebates for a total of \$154,756. Sunnyvale residents responded to the call to conserve by replacing turf beyond our budget estimates. Therefore, additional funding is required to issue more rebates and satisfy those Sunnyvale customers who have been issued a notice to proceed by SCVWD to replace their turf. Staff estimates that an additional \$125,000 is needed to be issued as rebates for the turf replacement program. Turf replacement is especially valuable since it permanently decreases water demand. SCVWD has run out of funding for the program and the City has also stopped accepting new rebate applications due to funding concerns.

Enforcement Actions

Customers who waste water are normally observed during patrol by City staff or reported by concerned citizens via e-mail or a phone call. To inform these customers of the need to conserve water, letters are sent to remind them about the drought citing also the City ordinance in an effort to obtain their cooperation. Door hangers that provide drought related information to customers, have also been prepared and are being utilized by ESD staff should they observe water being wasted while they are on duty in the field and meter readers leave door hangers when they observe high usage or water being wasted as they read meters throughout the City.

Enforcement mechanisms such as installing flow restrictors are available as described in SMC Section 12.34.040.

FISCAL IMPACT

The FY 2016/17 Recommended Budget includes a projected overall 25% increase in revenue from water sales and water service fees. A public hearing will be held on water rates on June 21, 2016, with Proposition 218 compliant rate notices mailed in April. A larger reduction would result in lower revenue, as well as lower expense. Both the SFPUC and the SCVWD have agreed to lower contractual minimums which will help control expenses.

Budget Modification No. 37 has been prepared to appropriate \$125,000 from the Water Supply and Distribution Fund Rate Stabilization Reserve to project 831480 - Water Conservation and Drought Response. With approval of the budget modification, the total available funding for the project will be \$341,946.

Funding Source

The recommended funding source is the Water Supply and Distribution Fund - Rate Stabilization Reserve. Use of this reserve and accounting for this initiative in a special project ensures that the funding is segregated from the funding of core water supply and distribution operations. As this is a one-time expense, it can be absorbed by the Rate Stabilization Reserve and adjusted for in the FY 2017/18 budget and water rate setting cycle.

Budget Modification No. 37 FY 2015/16

	<u>Current</u>	<u>Increase/ (Decrease)</u>	<u>Revised</u>
Water Supply and Distribution Fund			
<u>Expenditures:</u>			
831480 - Water Conservation and Drought Response	\$216,946	\$125,000	\$341,946
<u>Reserves:</u> Rate Stabilization Reserve	\$ 2,794,692	\$(125,000)	\$2,669,692

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Senior Center, Community Center and Department of Public Safety; and by making the agenda and report available at the Sunnyvale Public Library, the Office of the City Clerk and on the City's website.

ALTERNATIVES

1. Introduce an Ordinance (Attachment 1) to Amend Section 12.34.020 (Water Conservation Restrictions) of the Sunnyvale Municipal Code.
2. Adopt a Resolution (Attachment 2), to be in effect July 1, 2016 through June 30, 2017, adding additional water use restriction to the Sunnyvale Municipal Code Chapter 12.34.020, continuing the implementing of Stage 1 Water Use Prohibitions as outlined in the City of Sunnyvale Water Shortage Contingency Plan and declaring a water shortage of 15% city wide, limiting use of potable water for landscape and turf irrigation to three scheduled days per week, except when watering by hand or by drip irrigation, or for maintenance of public parks, playing fields, golf course greens, and school grounds , provided such irrigation is done in a water efficient manner, or for fire protection, soil erosion, and environmental mitigation projects.
3. Approve Budget Modification 37 providing \$125,000 for turf rebates.
4. Adopt a Resolution to be in effect from July 1, 2016 through June 30, 2017 declaring a Continued Drought Condition, Setting Stage 2 Water Reduction Target at 20%, limiting use of potable water for landscape and turf irrigation to two scheduled days per week, except when watering by hand or by drip irrigation, or for maintenance of public parks, playing fields, golf course greens, and school grounds, provided such irrigation is done in a water efficient manner, or for fire protection, soil erosion, and environmental mitigation projects.
5. Provide other direction to staff.

STAFF RECOMMENDATION

Alternatives 1, 2 and 3: 1) Introduce an Ordinance (Attachment 1 to the report) to Amend Section 12.34.020 (Water Conservation Restrictions) of the Sunnyvale Municipal Code; 2) Adopt a Resolution (Attachment 2 to the report), to be in effect from July 1, 2016 through June 30, 2017 declaring a Continued Drought Condition, Setting Stage 1 Water Reduction Target at 15%, limiting use of potable water for landscape and turf irrigation to three scheduled days per week, except when watering by hand or by drip irrigation, or for maintenance of public parks, playing fields, golf course greens, and school grounds, provided such irrigation is done in a water efficient manner, or for fire protection, soil erosion, and environmental mitigation projects; and 3) Approve Budget Modification 37 providing \$125,000 for water conservation including rebates.

Prepared by: Mansour Nasser, Water and Sewer Division Manager
Reviewed by: John Stufflebean, Director, Environmental Services

Reviewed by Tim Kirby, Director, Finance Department
Approved by: Kent Steffens, Assistant City Manager
for: Deanna J. Santana, City Manager

ATTACHMENTS

1. Proposed Ordinance
2. Proposed Resolution
3. SFPUC Letter and Calculations
4. SCVWD Water Supply Calculations